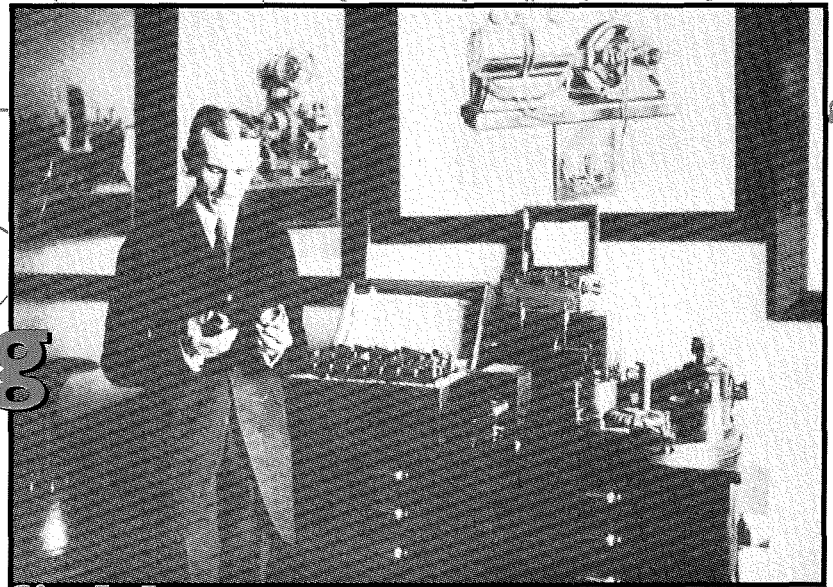


BORDERLANDS

A Quarterly Journal of Borderland Research

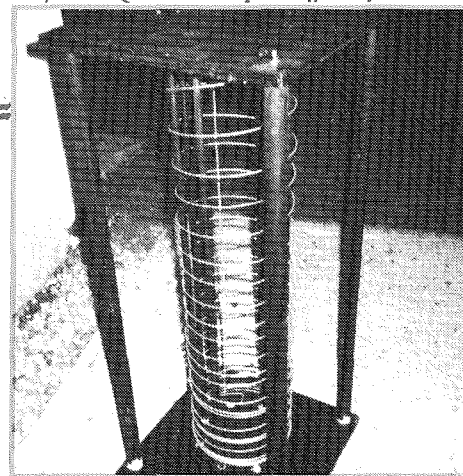
**Tesla's
Self-Acting
Engine**



**Nathan Stubblefield
& Earth Energies**

**Mystery Stone
of New Mexico**

**Earthquakes
and Astrology**

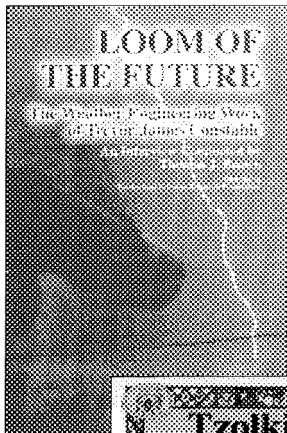


US	\$6.95
CAN	\$7.95
UK	£4.50
NZ	\$7.95
AUS	\$7.95
JAPAN	¥695

The Rediscovery of Vril

Page 33

ADVANCED KNOWLEDGE FROM BORDERLANDS



LOOM OF THE FUTURE

The Weather Engineering Work of
Trevor James Constable

An interview conducted by Thomas J. Brown

Groundbreaking exposé of Constable's pioneering work in Etheric Weather Engineering and Smog Reduction. Interview/photo album format, with 150 photos describing the evolution of Trevor's biogeometric instruments. This book will fill you with awe at the tremendous potential of a humanity capable of comprehending the purpose and function of the Etheric Life Energy.

#B0316, 148pp, paperback, illustrated w/color photos ... **\$18.95**



TZOLKIN

VISIONARY PERSPECTIVES & CALENDAR STUDIES

John Major Jenkins

A visionary journey into the heart of an ancient oracle. Both the academic and mystical view-points of the Mayan *Tzolkin* Calendar are explored. The Sacred Calendar of Meso-america is more than a calendar — *more than we may ever realize!* Prepare for a voyage to the heart of the Sacred Tree... Our path to the stars. Prepare to enter the mysterious borderland between night and day.

#B0312, 346pp, paperback ... **\$13.95**

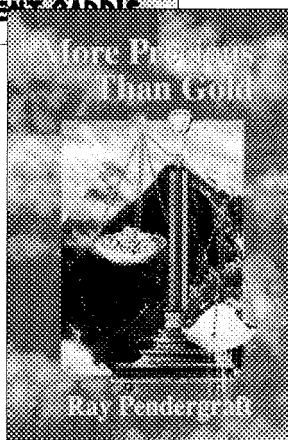


MYSTERIOUS FIRES & LIGHTS

Vincent Gaddis

Strange conflagrations that have destroyed entire cities... The antics of lethal lightning and intelligent fireballs... Living UFOs, shining fish of the atmospheric sea... Will-o'-the-wisps and ghost lights... Houses that set themselves on fire... Fiery poltergeists, firewalkers and salamanders... Spontaneous human combustion and supernatural arson... The extraordinary electrodynamic nature of human beings... & many more amazing facts...

#B0252, 178pp, paperback ... **\$11.95**



MORE PRECIOUS THAN GOLD

Ray Pendergraft

This is the fascinating history of a unique clay with life-positive properties. Native Americans named it **EE-WAH-KEE** — *The Earth That Heals*. Found only in Wyoming's Big Horn Mountains, Pascalite is super rich in organically assimilable minerals and trace elements. It has many uses in promoting health in plants, animals & humans. A compelling story, relating the adventures of the Pendergrafts, whose eventful lives have become totally intertwined with the continuing saga of Pascalite.

#B0313, 352pp, paperback . . . **\$13.95**

BORDERLANDS, PO Box 220 BAYSIDE, CALIFORNIA 95524 USA

PHONE ORDERS: (707) 825-7733 FAX: (707) 825-7779

Volume LI, Number 3

Third Quarter 1995

BORDERLANDS

A Quarterly Journal of Borderland Research

Michael Theroux
Editor in Chief

Consulting Editors

Trevor James Constable, Alison Davidson,
Vincent Gaddis, Peter Lindemann,
Jorge Resines, Gerry Vassilatos

Thomas J. Brown
Editor Emeritus



page 6

FEATURES

TESLA'S "SELF-ACTING" ENGINE • 6

by Peter Lindemann

EARTH ENERGY AND VOCAL RADIO: • 10

NATHAN STUBBLEFIELD

by Gerry Vassilatos

MYSTERY STONE OF NEW MEXICO • 23

by William Peavy, Ph.D.

EARTHQUAKES AND ASTROLOGY • 25

THE REGIONAL FACTOR IN PLANETARY SEISMIC CORRELATION

by Judith A. Hill

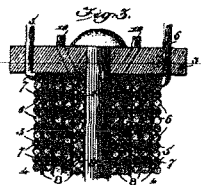
THE REDISCOVERY OF VRIL • 33

AN INTERVIEW WITH GERRY VASSILATOS

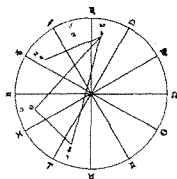
Conducted by Michael Theroux

AQUALITHIA REVISITED • 45

by Haroldine



page 10



page 25

COLUMNS

IMPROVING SEX THROUGH QIGONG • 44

by Dr. G. K. Knowlton

DEPARTMENTS

VIEW FROM THE BORDERLANDS • 2

CLIPS, QUOTES, AND COMMENTS • 3

BORDERLANDS

*A Quarterly Journal of
Borderland Research*

BORDERLANDS is the quarterly research publication of Borderland Sciences Research Foundation. Contents © 1995 by BSRF. Individual articles are © 1995 by the authors. All Rights Reserved. No part of this book may be reproduced in any manner whatsoever without written permission from the publisher, except by writers who may quote brief passages to be reprinted for review or reference. Please write to the publisher concerning requests to make use of any of the materials published in this journal, or contact the authors directly.

Borderland Sciences Research Foundation was founded by Meade Layne in 1945 for the purpose of investigating into realms normally beyond the range of basic human perception and physical measurement.

BORDERLANDS originated as Meade Layne's **Round Robin** in 1945 and was changed to **The Journal of Borderland Research** in 1959, finally becoming BORDERLANDS in 1992. BORDERLANDS is an information nexus for thinkers and doers on the frontiers of science and awareness.

BORDERLANDS is available by subscription for \$25 a year, worldwide. Single issue newsstand price: **US\$6.95** unless otherwise marked.

Subscription inquiries and address changes should be sent to our business office: BORDERLANDS, P.O. Box 220, Bayside, California 95524 USA. Phone: (707) 825-7733 or FAX: (707) 825-7779.

All article submissions and correspondence should be sent to: The Editor, BORDERLANDS, P. O. Box 220, Bayside, California 95524 USA.

For display or classified advertising write to the Advertising Manager at the above address for current rates.

BORDERLANDS can be reached on the Internet: Send E-mail to bsrf@northcoast.com = <ftp://northcoast.com> — or by modem, call the BORDERLANDS BBS at (707) 825-7739.

All published materials are presented for Informational and Research purposes only. Authors are solely responsible for the information and opinions they present. This material is not to be construed as expert opinion or medical advice, it is research into the **Borderlands...**



VIEW FROM THE BORDERLANDS

Not Subtle

I have noticed in several publications of recent date (not excluding our own) the liberal usage of the words “subtle,” and “vibrational” used as adjectives to describe new (commonly referred to as alternative) energies in the fields of our “borderland” investigations. While it is not my intent to disturb the reader with what might appear to be mere semantic gesticulations, I feel that the “View from the Borderlands,” being editorial in nature, affords me a place to rant.

So, let us begin with the word “subtle”. By its very usage it implies a sort of elusiveness and obscurity — abstruse, tenuous, and indefinable. When we speak of “subtle energies”, “subtle vibrations”, or the “subtle energy field”, we are at once confining the very fabric of our research to the imperceptible. When in our investigations, are we not dealing with something wholly enlivening and quite powerful to us? If it were not so, then why engage in such an opaque endeavor? Some may argue that the spiritual realm of the experiment necessitates the understanding and experience of the “sensitive”. Now we have not only made our inquiries unsubstantial, but have limited them to a select few. It may well be time to find another way to describe the nature of our study.

We move on to the word “vibration”. Not much to discuss here as vibration suggests frequency of motion (“frequency” and “resonance” are often carelessly used as well), and if we say *vibration* someone will most certainly want to measure it. Here, it may be appropriate to note that the usage of these terms has been with us for quite some time. Many early researchers, lacking an experimental foundation from which to qualify their findings, relied on the technical terminology of the day to explain the workings of their discoveries. This mistake certainly does not belittle the profoundness of their discoveries — they simply ventured to gain the endorsement of *accepted* science.

Now, this accepted science (which we will herein refer to as *quantitative* science) seeks only that which it can count, measure, and weigh. This brings us to the present and often-seen quantitative dissension, “Good Science vs. Bad Science”. When the quantitative scientist says, “...this is good science”, they are referring to that which fits their model, or what is considered the accepted model of science. “Bad Science” is that which does not adhere to the their established quantitative dogmas. Our science has been labeled this “bad science” or even “pseudo-science” far too long. That our scientific model relies on the *qualitative* rather than the quantitative should not hinder its propagation towards acceptance. Qualitative experiment, too, may follow the only accepted criterion of that which defines an art as science — that the results may be reproducible. We need only look to the researches of Lily Kolisko with her metal/planet chromatographs; to Theodor Schwenk with his water drop tests; to Ruth Drown for the Radiovision; or Trevor Constable and his weather engineering experiments, to name but a few. These avant-couriers of qualitative inquiry have proven their methods. Their experiments reveal to us that a far more profound science exists than merely the statistical ejaculations of quantitative theorists. Theirs IS “Good Science”, and is the path of our endeavors.

Before I finish, I might mention (in speaking of poor terms) that it has been suggested that we change the name Borderlands as well, as it may continue to cultivate the idea that we are only about “fringe” science. To me, Borderlands has never meant the “fringe” or the “other” side of science at all. It simply expresses the idea of being on the edge of new frontiers — and exploring all that may be there. We’re keeping it.

Michael Theroux
Editor

Clips, Quotes, & Comments

Elena's Tomb and Early BSRF Remembered

Commenting on Charles Swiecionis's letter in the Second Quarter, 1995 *Borderlands*, I recall that issue.

It was presented by Ray Palmer as a true account as far as he knew.

This article took one whole issue of *Fantastic Adventures*. The story was, (as I remember it), Karl was in love with the girl in question, and was about to marry her, but she died for some reason. He had to resort to some extra-legal maneuvers to get the body, and take it back to his laboratory. He put the body into a vat or tub covering it with a nutrient solution, and hooked it up to electricity from machinery that he designed.

He thought that he could bring it back to life. He tried first one thing and then another, getting everything working. At one point the body moved and tried to sit up, and/or move an arm.

I don't recall the ending exactly. It seems that the authorities got wind of (no pun intended) the experiment, and dragged him off to jail, and put the body back where it came from. He was certain that if they had just given him a little more time, he could bring her back to life.

And on another subject, in 1950 I joined the Navy, and they sent me to San Diego for boot camp. I met Meade Layne there, and spent all the spare time I could get while I was in San Diego at the office of the BSRA. I read his books, copied out some of his mailing list, helped with some of the issues of Round Robin — just manual labor — and met some people who dropped in. I am still impressed by meeting Verne Cameron there and watching some of his demonstrations with his aurameter. We shook hands. He had enormous hands. His little fingers were bigger than my thumbs.

Meade took me over to meet Mark and Irene Probert. I attended one meeting with Meade that the BSRF still publishes, I believe, where the letter from Gerald Light about the landing and foot-print that he drew was discussed with Mark's Inner Circle.

Mark held regular meetings on Thursday evenings, and there were about 5 or 6 regulars, and sometimes 10 to 12 non-regulars crowding into Mark's tiny basement studio (zero-bedroom) apartment.

When I got out of the Navy in 1954, I stayed at Mark's apartment for a couple of months while he went on his first cross-country USA tour. I listened to the reel-to-reel tape recordings of Mark's lectures till the voices were echoing through my mind for 2 days and night afterwards.

Now, my favorite reading materials are the Alice A. Bailey books because they present the same material that I learned from Mark's Teachers, and from Meade.

Meade was a corresponding member of Dion Fortune's organization, and sold me a couple of books by her. I don't think he ever got to England to take the formal initiation, though.

I would like to commend you & Mr. Brown for the look of *BORDERLANDS*, and for the material that you present. It is a very professional looking journal now.

In case you are unaware, in the *Borderland Sciences* logo, between the letters "L" and "A" there is a symbol in a circle. The origin of that is a painting or caste marking on the forehead of Mark's Teacher, the Chairman of The Inner Circle, The Yada De Shi'ite'. I took some 35mm slides of Mark's paintings of The Teachers, and had color prints made of them that Mark sold. Probably there exists in your Archives some of these.

— Dennis Kier, Carson, California

Black Helicopter Mind Games

If you will permit me a comment on Eugenia Macer-Story's hypothesis (*UFO Mind Games*, 2nd Quarter 1995, *Borderlands*).

Not everything one sees in the skies is inexplicable, anomalous or the result of some extraterrestrial incursion. Now mind you I have the utmost contempt for hardcore materialists and debunkers like the Committee for the Scientific Investigation of the

Claims of the Paranormal (CSICOP) and in particular I am quite vexed with Arthur C. Clarke, who is apparently subsidized by CSICOP. Thanks to William Bramley (*The Gods of Eden*) we discover that the editors of *Discover Magazine*, *Aviation Week & Space Technology* and I suspect *Archaeology Magazine* as well are all members of CSICOP.

As a retired Air Force Officer (26 years enlisted and commissioned service) I find myself totally vexed by civilians who try and put a UFO twist on everything they see in the skies, such wild speculation detracts from valid observations. In particular there are two "phenomena" which have valid explanations, and this information is in the public domain for anyone who will bother to read or watch just a little TV (even if the editors are members of CSICOP).

First, black helicopters are not anything sinister (except that the military itself is sinister), mysterious or extra terrestrial. In fact said helicopters are standard issue camouflage, radar avoiding paint jobs. The armed forces has gone to this paint scheme in practically all of their aircraft. The process started with plain camouflage and was used extensively in Viet Nam for cargo and fighter bomber aircraft, then they painted the B52. Finally they developed a radar absorbing paint. The design group of the F117 wanted to paint the F117 a pastel color scheme, such a scheme would be more efficacious than the black, but the Air Force would not have it. The typical military jock is after all a sexually insecure male and seeks such occupation as a means of "proving" his manhood. As a consequence, he wouldn't be caught dead in pastel, so the Air Force and Army opted for the more sinister "black camouflage" scheme. Actually most craft are not all black, but appear that way at a distance or at night.

As regards registration numbers. Well, FAA rules don't apply to military or paramilitary government agencies, said craft do have serial numbers and insignia stenciled on them to comply with the rules of War (Geneva Convention) but they are in small black stencils.

As concerns silent rotor blades. If Eugenia would spend some time watching *Beyond 2000* or *The Next Step* on the Discovery Channel (CSICOP again) or better yet writing a letter to the San Jose police depart-

ment in California, she would have discovered that a new rotor blade has been developed and put in use that doesn't make that infamous noise or produce a serious down draft.

As regards the Triangular UFO's, well, anyone with any common sense and who bothered to peruse the literature or who has ever watched *Weekday Wings, Beyond 2000* or *The Next Step* or have read the April 9, 1992 issue of *Aviation Week* and *Space Technology* magazine might have been able to put together the fact that these triangular UFO's were nothing less than the B-2 Bomber.

Evidently the B-2 Bomber (and probably the F117) as well are propelled by an electrogravitic drive propulsion system. I won't go into it for brevity's sake but will mention that Thomas Valone, Integrity Research Institute has covered this quite well in his booklet **Electrogravitics - Report on a New Propulsion Technology**, and see also **Ether Technology**, by Rho Sigma. From those two books, plus the never ending supply of information on the Discovery Channel one finds (or can piece together) the fact that the Defense Advanced Research Projects Agency has actually achieved electrogravitic propulsion. Characteristics of which are force fields (invincibility), matter snatch (the cookie cutter holes found in turf around the world), and invisibility (at least to radar).

It also appears that this system can be retrofitted, or at least some aspects of it can be, onto existing aircraft as the CIA LearJet (Phoenix Air) that crashed in Fresno on Dec 14, 1994 is testimony to.

The craft bent a metal signal pole and cut down two telephone poles without losing a wing, its wheels never made contact with the ground, yet it moved so slow one witness thought it a car. It moved a couple of 1 ton rocks used for landscaping while simultaneously stripping the shingles off the roof of the building. The craft crashed, because it obviously could not shut off its shielding device thus could not execute the low speed maneuvers necessary for turning base to final and continued on base leg down Olive Street until it grounded out or the system failed. (I have a copy of KSEE

TV 24's presentation "Mayday over Fresno" as well as a report in the Dec 15, 1995 *San Jose Mercury News*).

I am aware that all that I have said can be put down to speculation, but it is speculation based on known or revealed information and really nothing more than some detective work. I will never know for sure until a public confession is made, but in some regards such confessions have already been made vis a vis *Beyond 2000, Week Day Wings* and *Aviation Week* and *Space Technology*.

There is, I am sure, much of the mysterious in the skunk works of the Defense Advanced Research Projects Agency. There is I am also sure, much of the inexplicable (and possibly to be feared) in the universe and skies around us, but I am not sure that much is gained or credibility is insured by equating camouflaged helicopters with flying saucers. I would suggest that Eugenia and others who see the sinister in everything take some time and visit National Guard bases or better yet actually visit her nearest Air Base during the next air show.

I bet the DoD just loves promoting wild eyed UFO claims for all of their top secret projects, ultimately such claims work to discredit serious researchers and ensure that UFO's are considered flights of fantasy by deranged minds.

— Jennifer L. Farrar, Santa Cruz, California

Thank You

Thought you might like to know why you go to all of that trouble. Last week a friend phoned from London. The papers there were all proclaiming a cure for cancer, a medication based on yam juice, now manufactured in northern England.

You and Jeanne Manning presented that idea to the world in the pages of your *Borderlands*. Yours is the only publication in the whole world to review my book **Origin of Cells**. The world and I say Thank You.

— Betty Zoratovich

Bar Code Questions

1) Can't one clear oneself by putting a witness (hair, nails) in the center circle? If so, how long?

2) Do these energies permanently knock out (and make useless) homeopathic and other energy-based substances?

3) What about negativity in clothes, writing paper, and everything else?

— Vivian Adams, Temple, Texas

Answers:

1. We have not had great success with this but you are welcome to try.
2. No...but they may interfere with these.
3. Sensitives may need to clear all objects in their environment.

MWO Research Continues

I am very excited about the results from my latest M.W.O. after making a major change in the power source. The three inch spark is very intermittent and you can hold your finger to it without burning. I am extremely energized and need much less sleep than usual with no side effects like I used to get with other setups.

What I did was to rectify the 120 Volt AC current with a full wave rectifier and the feed it to a mechanical break made from plexiglass in the form of a eight sided disc nine inches wide with a piece of aluminum flashing 3 1/2 inches wide wrapped and bolted around on edge (also balanced).

The motor that turns it is 1120 rpm. Two large bolts for electrodes one on each side of the disc make contact with the spinning disc. The adjustable electrodes make contact on half the width of the aluminum for about 3/1000ths of a second and the current goes to transformers - five 110VA for a total of 550VA at 4,000 volts. I use a stationary spark gap and the special oil filled capacitors total .015 mfd. The Tesla coil is 450 feet of #24 wire. The antenna is made from different size copper tubing — the largest ring ϵ , being 37 inches across and 78 wide and the second is 30 1/2 inches across and 3/4 wide.

I have tried the monopolar hookup to the outside ring with no sparking to the others with and without a second ground antenna and also a bipolar set up to the two outer rings like in Lakhovsky's patent. They both work equally well. In the bipolar set up a two inch spark jumps between the two outside rings intermittently with a sound of

BORDERLANDS CQC

4 to 10 bursts a second. The secret is in increasing the strength of the magnetic field without heating the tissues by making the field more intermittent.

— *John Andrews, Akron, Ohio*

Energy Awakened

I do the "Five Rites" everyday and a certain energy is definitely awakening which can be felt very strongly when doing "Rite #3". It comes up on occasion with so much force that if I don't lean forward and hold the ground, the twitching/jerking may cause physical injury to the body (as one might fall down). Also, if the mudra is held too long — one might pass out!

I would like to know if others there are experiencing something similar — if so, how is the energy being channeled to improve the health of the physical body? (Instead of just activating the "etheric body")

If possible, perhaps someone will respond to my letter.

— *Jeff Brookner, Los Angeles, California*

Missing Paper Doctor

I am writing to ask if you know the address of an author that was reviewed in your *Borderlands*, 1st Quarter 1993, page 41 edition. The book I am trying to locate is called **The Paper Doctor** by Don Gerrard. It was reviewed by Peter A. Lindermann.

I wrote to Mr. Gerrard at the address given in the article about 9 months ago and he had moved with forwarding address expired. If you know how I may contact this author for a copy of the book or who if anyone distributes it now please let me know.

— *Jude Valentine, Moravia, New York*

Mr. Gerrard's address, as we have it, is now 13667 Callais Dr., Del Mar, CA 92014, however, we don't know if the book is still available.

*Do keep those letters, clippings, and photos coming! Please send them to **Borderlands CQC**, P.O. Box 220, Bayside, California 95524 USA. Letters may be edited for length and clarity.*



Weather "Guns" from 1902

Here are some relics of "rainmaking" equipment used in Charleville, Australia. The sign between the two cones refers to the one on the right and reads: "No. 1 prototype vortex gun exploded on testing. Incorrectly assembled, 1902."

— *Photo submitted by Don Eldridge, Queensland, Australia*

Tesla's "Self-Acting" Engine

by Peter A. Lindemann

IN June of the year 1900, Nikola Tesla published an article in **Century Magazine** titled *The Problems of Increasing Human Energy*. Never before or since has there been such a masterful and exhaustive discussion of how to extract useful energy from the environment. In its original magazine format, this article is 31 pages in length. After discussing every known method for energy generation then in use, Tesla begins a discussion of "a departure from known methods — possibility of a 'self-acting' engine — the ideal way of obtaining motive power".

Beginning on page 200, and continuing to page 204 of the original *Century Magazine* article, Tesla outlines his ideas. The following quotations are extracted from this section of the article.

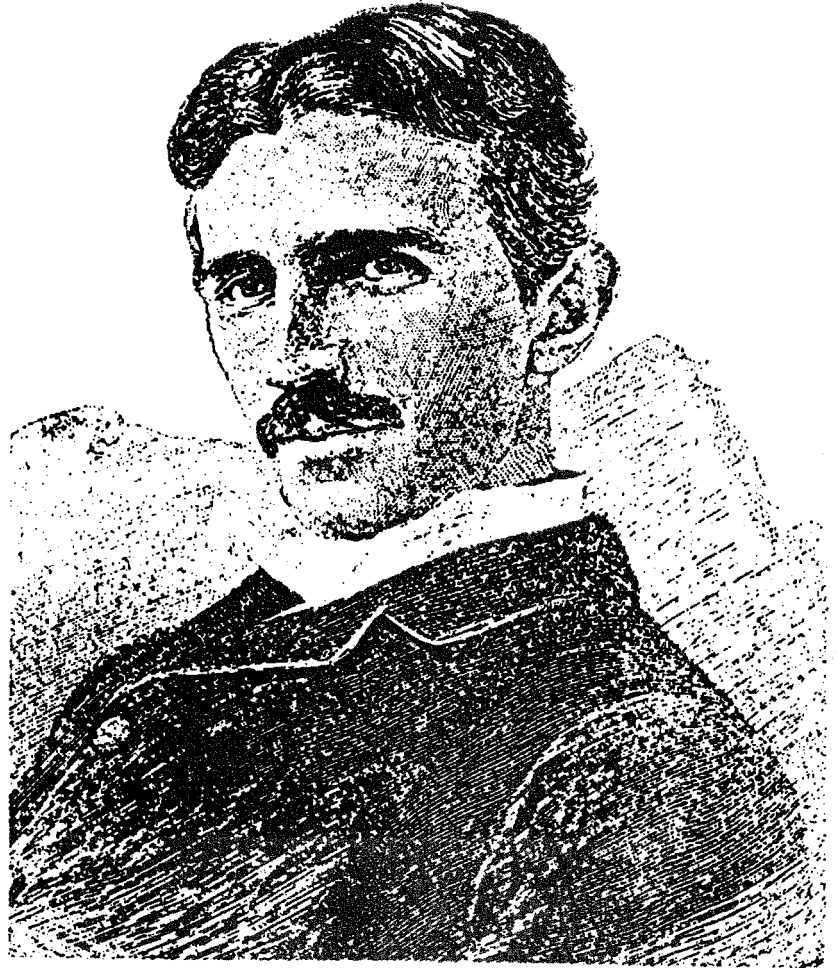
"...a survey of the various ways of utilizing the energy of the medium convinced me, ..that to arrive at a practical solution, a radical departure from the methods then known had to be made. The windmill, the solar engine, the engine driven by terrestrial heat, had their limitations in the amount of power obtainable. Some new way had to be discovered which would enable us to get more energy."

"..the problem was to discover some new method which would make it possible both to utilize more of the heat-energy of the medium and also to draw it away from the same at a more rapid rate."

"I was vainly endeavoring to form an idea of how this might be accomplished, when I read some statements from Carnot and Lord Kelvin which meant virtually that it is impossible for an inanimate mechanism or *self-acting machine to cool a portion of the medium below the temperature of the surrounding, and operate by the heat extracted*. These statements interested me intensely. Evidently, a living being could do this very thing, and since the experiences of my early life...convinced me that a living being is only an automaton, or, otherwise stated, a 'self-acting engine,' I came to the conclusion that it was possible to construct a machine which would do the same."

"Suppose that an extremely low temperature could be maintained by some process in a given space; the surrounding medium would then be compelled to give off heat, which could be converted into mechanical or other form of energy, and utilized. By realizing such a plan, we should be enabled to get at any point of the globe a continuous supply of energy, day and night."

"A closer investigation of the principles involved, and calculation, now showed that the result I aimed at could not be reached in



a practical manner by ordinary machinery, as I had in the beginning expected. This led me, as a next step, to the study of a type of engine generally designated as 'turbine,' which at first seemed to offer better chances for a realization of the idea."

"..my conclusions showed that if an engine of a peculiar kind could be brought to a high degree of perfection, the plan I had conceived was realizable, and I resolved to proceed with the development of such an engine, the primary object of which was to secure the greatest economy of transformation of heat into mechanical energy."

"(In early 1895) Dr. Carl Linde announced the liquefaction of air by a self-cooling process, demonstrating that it was practicable to proceed with the cooling until liquefaction of air took place. This was the only experimental proof which I was still wanting that energy was obtainable from the medium in the manner contemplated by me."

"Much of this task on which I have labored so long remains to be done. A number of mechanical details are still to be perfected and some difficulties of a different nature to be mastered, and I cannot

hope to produce a self-acting machine deriving energy from the ambient medium for a long time yet, even if all my expectations should materialize.”

Tesla’s idea was radical. Design a machine powered by the heat resident in the ambient air that produced an output of mechanical energy and refrigeration simultaneously. He called it “the ideal way of obtaining motive power”. Such a machine would be able to produce useful energy at any time of the day or night, at any location on the globe, drawing upon the vast heat reservoir of the atmosphere. He worked for years toward this goal and absolutely convinced himself, by the power of his own nearly infallible logic, of its potential reality.

To my knowledge, Tesla never finished the work on this invention. But his pioneering efforts clearly conceived the idea, as well as outlined most of the engineering problems to be solved.

It’s remarkable to me, that with all of the attention given to Nikola Tesla in the last few years, I have not heard any mention of this aspect of his work. Volumes have been written on so-called “free energy” devices, wherein the would-be inventors are searching in vain for a ubiquitously present, inexhaustible source of energy from which their machines may draw. Imaginative theories have postulated “tachyons”, “zero-points”, and “magnetism” as the source of choice from which to extract energy. And, while future work may prove that these sources can be made practical, it is still surprising that the most readily available, untapped source of energy from which to draw, atmospheric heat, has been all but neglected.

The patent office is crammed with hundreds of “permanent magnet motors”, none of which work, to my knowledge. Tesla dismisses these ideas with a short stroke, “We may even find ways of applying forces such as magnetism or gravity for driving machinery without using any other means. Such realizations, while highly improbable, are not impossible.” While leaving the door open, Tesla considers this area of research worthy of only a brief mention. He then goes on for four pages, discussing his efforts to tap the ambient temperature as a source of power.

Tesla was a master thinker and inventor. His mind penetrated the ultimate solution to humanity’s energy needs. Like a scientific Sherlock Holmes using the power of his own deduction, when all of the “improbables” and “impossibles” were removed, what remained must be the solution. Atmospheric heat was the largest untapped reservoir of energy on the planet. Tesla refused to overlook the obvious. He was that rare fish capable of contemplating the water he was swimming in. Few were able to follow his ideas. Even fewer were able to follow-up on his work

When I first read this article from **Century Magazine**, I was fascinated by the section on the “self-acting” engines. But Tesla’s idea of gaining energy by dumping heat into an inexhaustible “cold spot” seemed unrealizable. My mind could not penetrate the unknowns involved. Luckily, other minds were not so dull.

To begin to get an understanding of Tesla’s idea, let’s first look at the fundamentals of fluid dynamics. Follow along if you can. If a gaseous fluid (like air) is confined in a closed space, three properties of this gas become interdependent upon each other. These properties are: 1) Volume, how much space it occupies, 2) Temperature, how much heat it contains, and 3) Pressure, how much force it exerts on the walls of the container. For instance, if the container remains the same size and we increase the temperature of the air inside, the pressure it exerts on the walls also rises. Likewise, if the volume stays the same and we reduce the pressure, the temperature must also drop. Conversely, if we increase the volume, either the temperature or the pressure will go down (or both). From this we may see that temperature and pressure are directly related to each other, but are inversely related to the

volume. This is how Dr. Carl Linde liquefied air by his “self-cooling” process. By manipulating the pressure and volume of a quantity of gaseous air, he was able to liquefy some of it by taking advantage of these principles.

One hundred years ago, this was an amazing accomplishment. Now, these processes are used commercially every day. To illustrate, we need go no further than a useful novelty available in a mail order catalog. Many compressed gases are available

today. One of them is carbon dioxide. For less than \$30, you can buy a special nozzle that attaches to a canister of compressed carbon dioxide. When the gas is released through this nozzle, “dry ice” is formed. Room temperature compressed carbon dioxide, when allowed to expand rapidly under controlled conditions, refrigerates itself to form “dry ice”. By this method, about 20% of the compressed gas can be liquefied, or in this case, solidified. This illustrates what Tesla refers to as the “self-cooling” process that allowed Dr. Carl Linde to liquefy air in 1895. Tesla immediately understood the implications. He states that his invention could be designed to run on liquid air, but that “its temperature is unnecessarily low.” All that was needed was a working fluid that changed from a gas to a liquid at a temperature below the ambient.

Dr. Linde’s process required a mechanical energy input to compress the air. But Tesla knew that mechanical processes were reversible. The machine he envisioned used the methods discovered by Dr. Linde, but ran them backwards. To understand how this can be done, we need go no further than our own medicine cabinet. If room temperature isopropyl alcohol is rubbed on your

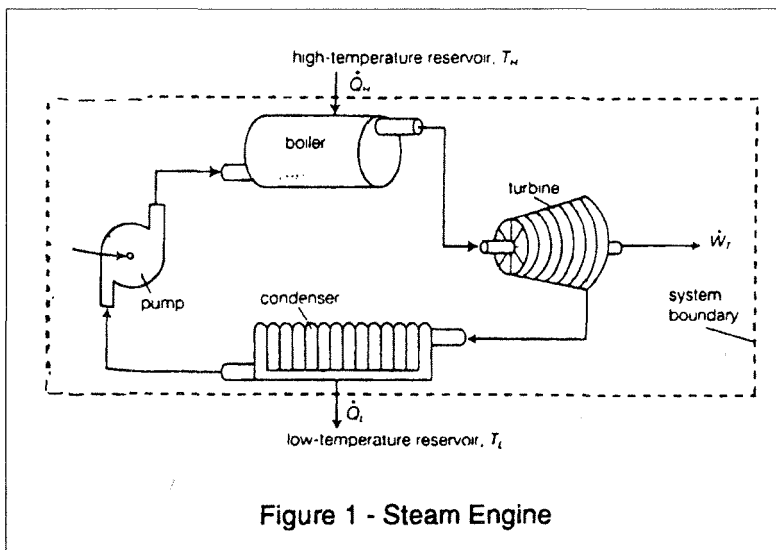


Figure 1 - Steam Engine

arm, it “feels cold”. It feels cold because it is evaporating. It is evaporating because of a change in “vapor pressure” between the closed bottle and the open air. This change of pressure is “forcing” the evaporation to take place. But, for the alcohol to evaporate (change from a liquid to a gas), it needs heat. Since no heat source is available, it must get the necessary heat from the immediate environment. So, it extracts that heat from your arm. That’s why your arm feels cold (refrigeration). Believe it or not, Tesla saw an energy machine in all of this. The one part of the equation that is not so apparent here, is that the volume of space occupied by the evaporating alcohol is increasing dramatically. This increasing volume of gas could be confined to form a pressure that could drive an engine. Tesla saw it all, and knew what it meant. He spent years trying to solve all of the engineering problems associated with it, so that a future society could have all of its energy needs supplied by these processes.

So, what does Tesla’s “self-acting” engine really look like? In order to visualize this, it may be helpful first to review the workings of two different kinds of heat systems that operate on “two phase fluids”; the first is a steam engine and the second is a heat pump. In Figure 1, water is boiled in the boiler to become pressurized steam. This high temperature, high pressure steam is then used to drive a turbine engine to convert the vapor pressure into mechanical work. The low temperature, low pressure steam coming out of the turbine is then allowed to cool further in the condenser, becoming liquid water again. The liquid water is then pumped back into the boiler, and the cycle begins again. In this example, we can easily see that the system takes in heat at the boiler and gives off heat at the condenser.

Figure 2 is a diagram of a heat pump. Low temperature vapor enters the compressor and is compressed to a high pressure and temperature. This vapor is then condensed to a liquid in the condenser. Then, the pressurized liquid is throttled through a special nozzle to low pressure and temperature. Releasing the pressure allows some of the liquid to vaporize. This “two phase fluid”, part liquid and part vapor, now enters the evaporator, in which the remaining liquid is boiled. The resultant low temperature vapor then enters the compressor, completing the cycle. In this example, we can see that the system takes in heat at the evaporator and gives off heat at the condenser.

There is a high degree of similarity between these two systems. Both have a location where heat is absorbed (boiler and evaporator). Both have a location where the pressure is released (turbine and throttle). Both have a location where heat is released (condensers). And both have a location where the working fluid is pressurized to complete the cycle (pump and compressor). In the steam engine, heat energy is added to the system at the boiler and

mechanical energy is removed from the system at the turbine. That amount of heat that was not successfully transformed to mechanical energy at the turbine, is then thrown away at the condenser and represents a loss of efficiency. In the heat pump, mechanical energy, is added to the system at the compressor and heat energy is removed from the system at the condenser. That amount of liquid that vaporizes at the throttle represents a loss of efficiency because no heat is absorbed from the environment to create the vaporization.

The main difference between these two systems is that the steam engine runs on a working fluid (water) that changes phase from a liquid to a gas at 212° Fahrenheit, whereas the heat pump runs on a working fluid (freon) that changes phase from a liquid to a gas at -50° Fahrenheit. Tesla’s “self-acting” engine was a unique hybrid between these two systems.

Tesla knew that his system, if it was to work, had to be much more efficient than standard systems. In our steam engine example, for instance, if we could eliminate the condenser, the system would be more efficient. In our heat pump example, if we integrated the throttle into the evaporator so that all of the expansion happened there, the system would be more efficient. These are the kinds of engineering problems Tesla was attempting to solve.

By taking elements from both of these systems, we can begin to understand what Tesla had discovered. Figure 3 shows such a system. It runs on a low temperature phase change material, like freon.

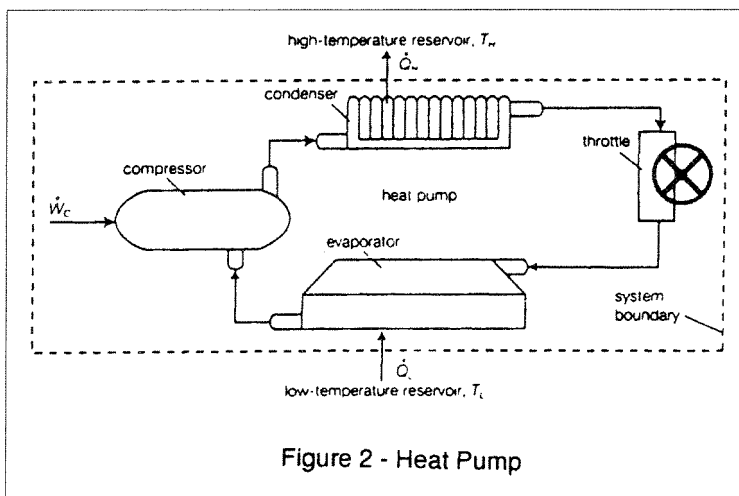


Figure 2 - Heat Pump

The first element acts like a combination of the pump and the compressor. Its job is to take the “two phase fluid”, part liquid and part vapor, and compress it until it is 100% liquid. The next element of the system takes the place of the boiler. It is really a heat exchanger that allows the working fluid to absorb heat from the environment *without* boiling. On the outside, this element gets cold and produces refrigeration effects. On the inside, the working fluid is gaining in its stored heat potential. The next element of the system is the throttle or control valve. This component allows the pressurized, liquid material to experience a rapid pressure drop that promotes instant vaporization of *some* of the working fluid. Since no heat source is available here, the heat of vaporization must come from the stored heat in the working fluid itself. This rapidly expanding vapor/liquid combination is then harnessed by the next element of the system, the turbine. As Tesla said, this is “an engine of a peculiar kind.” It must be able to efficiently operate on the part vapor, part liquid material coming through it. When the volumetric expansion is spent, the “two phase fluid” is then re-compressed to a liquid, and the cycle starts over. Tesla envisioned that his turbine would produce more mechanical energy than the compressor required, so that the system would produce a net gain of mechanical energy.

Unlike the two previously discussed systems, Tesla's "self-acting" engine has no condenser where unused heat is thrown away. Heat energy is absorbed from the ambient, mechanical energy is removed from the turbine and all of the remaining heat potential in the working fluid is recycled for the next go-round.

The whole thing is an amazing idea, but will it work? Can the necessary efficiencies actually be attained? In the 1930's, an Austrian engineer named Rudolf Doczekal successfully built a steam engine that ran on a combination of water and benzene. To his amazement, it could run with or without the condenser in the system. Its efficiency was well above the calculated Carnot Cycle maximum. He was granted a Patent on this system in 1939 (NR. 155744). It took 39 years, and someone else to prove it, but Tesla was right; a high efficiency heat engine could be run without a condenser.

But can all of the other efficiencies be attained? Is there a device that can efficiently compress the "two phase fluid" back to a liquid? The answer is yes. Today, the Copeland Scroll Compressor can perform this function. Is there a turbine that can run efficiently on the rapidly expanding "two phase fluid?" Again, the answer is yes. Impulse turbines with the pressure nozzles built directly into the housing can perform this function, so that all of the fluid expansion occurs inside the engine. In fact, all of the other engineering problems have been solved.

Today there are working models of machines that convert the ambient temperature of the air into mechanical energy, while creating refrigeration as a by-product. One hundred years after Tesla identified the "ideal way of gaining motive power", the gigantic reservoir of atmospheric heat has been successfully tapped. Real "free energy" has arrived on planet Earth. Obviously, the working details of these machines are complicated. The average reader will not have a thorough understanding of them without considerable study. Still, the basic principles upon which they operate have been outlined here with only minor over-simplification.

As of June, 1995, there are two slightly different processes being pursued that give the same basic result. The first is a machine designed by a German physicist, Dr. Bernhard Schaeffer, along with a Russian inventor, Albert Serogodski, building on the pioneering work of Doczekal. Their latest machine has been granted German Patent # DE 42 44 016 A 1, and is capable of being embodied as a refrigerator that produces electricity rather than consumes it. The other development is based on the work of Canadian engineer, George Wiseman, building more directly on Tesla's ideas. Wiseman has written three books that fully outline the principles of this amazing invention. His **HEAT Technology Series, Book 1, Book 2, and Book 3** are must reading for anyone interested in this subject. In these books, turbine

designs are explored along with complete mathematical models of the system. For copies of these books, write to: Eagle Research, Box 145, Eastport, ID, 83826 USA. Each book is \$15, post paid in North America. Add \$5 more for over-seas postage. Buy both books, as they cover different aspects of the system.

One hundred years ago, Nikola Tesla discovered the ultimate way to harness the energy of the sun by converting the ambient temperature of the air into mechanical energy. He outlined the entire method and even solved many of the difficulties himself. But forces during his lifetime prevented him from completing this work. His "self-acting" engine is a true fuel-less power plant, capable of producing useful energy at any location on the planet, at any time of the day or night. It has taken one hundred years for others to finally complete this work, but that day has now arrived. While I do not wish to minimize the irreplaceable and outstanding contributions by Wiseman, Schaeffer, Doczekal and others, still, it is to Tesla that the future owes its thanks once again.

When Tesla first conceived of this invention, he started by deciding that the basic assumptions embodied in the "Second Law of Thermodynamics" were not universally true and therefore could not act as an absolute limiting case. These assumptions are built into our lives today by the idea that if I want the temperature of my environment to be either warmer or cooler than the ambient, I have to expend energy to do it. Tesla was not afraid to question or even disagree with these assumptions.

Even the stature and historic "authority" of Sadi Carnot and Lord Kelvin, whose work was the basis of the "Laws of Thermodynamics", did not intimidate him. He was willing to rethink all of the fundamentals in the light of his own experiments and insight, and draw his own conclusions. By doing so, he was able to conceive of an invention that has taken 100 years to create. ■

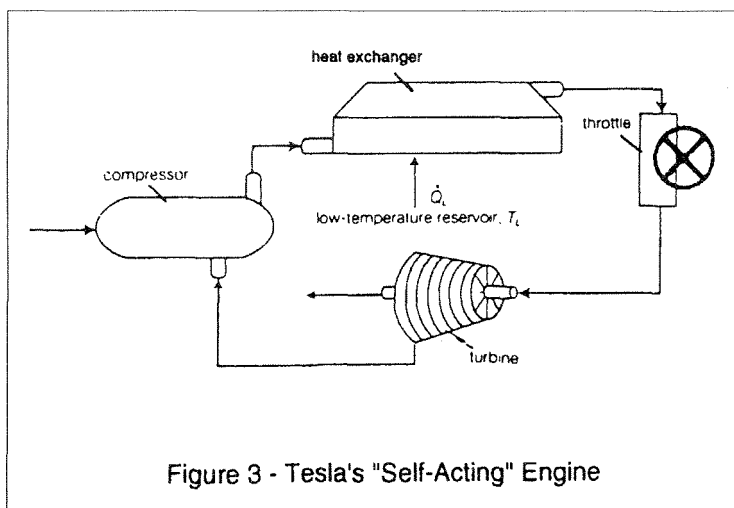


Figure 3 - Tesla's "Self-Acting" Engine

REFERENCES

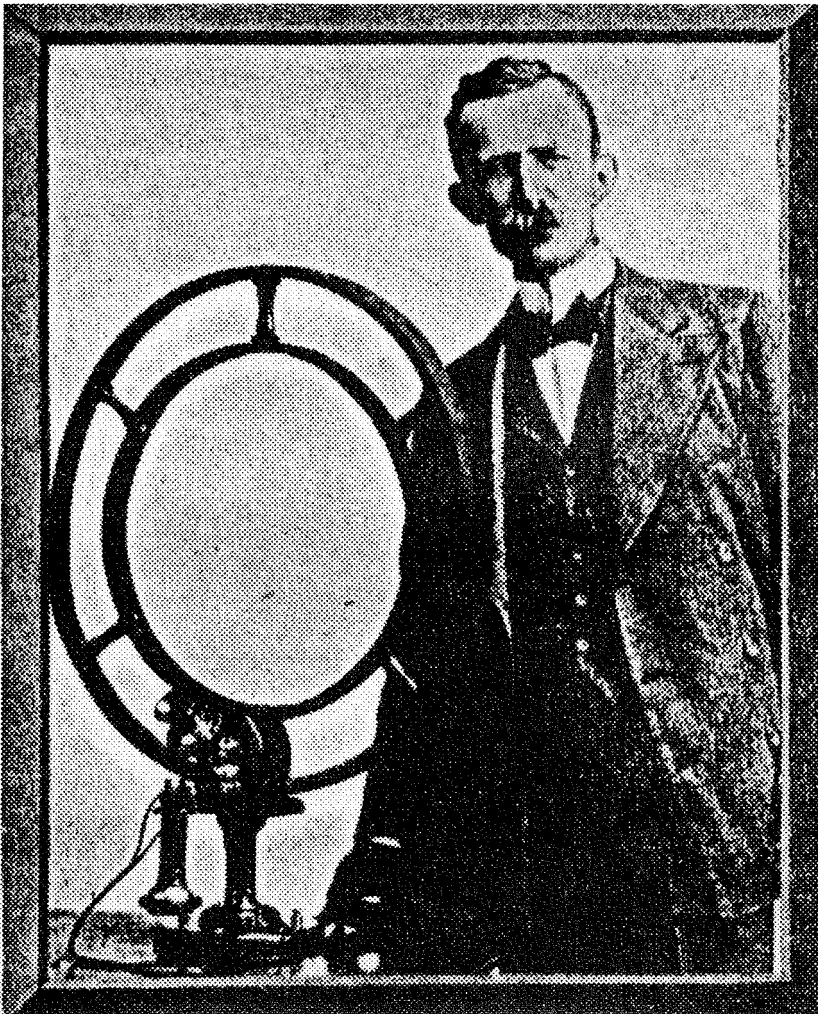
- Encyclopedia Britannica*, section on Thermodynamics, 1989 edition
- Planetary Association for Clean Energy, *PACE Newsletter*, Vol. 8, #2, Feb., 1995
- Schaeffer, B and Bauer, W. D., *How to win energy with an adiabatic-isochoric-adiabatic cycle over labile states of the P-V diagram*, WDB-Verlag, 1991
- Tesla, Nikola, *The Problems of Increasing Human Energy*, **The Century Illustrated monthly Magazine**, June, 1900
- Wisemann, George, **Heat Technology, Books 1, 2, and 3**, Eagle Research, 1994

PETER LINDEMANN became interested in alternative energy and health technologies in 1973. He joined BSRF in 1975, studying Radionics, Bio-circuits, implosion, and related subjects. His first article was published in BORDERLANDS in 1986 on ELF devices. In 1988, he joined the Board of Directors of BSRF as well as helped supervise research at Borderland Labs. Since that time he has written 14 Fizix Korner columns, and contributed numerous articles on MWO research, Radionics, and Free Energy.

EARTH ENERGY AND VOCAL RADIO:

NATHAN STUBBLEFIELD

by Gerry Vassilatos



THE notion of drawing up electrical power from the ground sounds incredibly fanciful to conventional scientists, but numerous patents support the claim. A number of retrieved patents list compact batteries which can operate small appliances by drawing up ground electricity. Others describe methods whereby enough usable electrical power may be drawn out of the ground itself for industrial use.

Earth batteries have been detailed in a previous article. Their history can be traced back to experiments performed by Luigi Galvani on copper plates in deep stone water wells. Currents derived through these gave Galvani and his assistants "shivering thrills and joyous shocks".

A certain Mr. Kemp in Edinburgh (1828) worked with earth batteries, so that we know these designs were already being seriously studied. They demonstrate the validity of very anciently held beliefs concerning the generative vitality of earth itself.

Earth batteries are an unusual lost scientific entry having immense significance. Developed extensively during Victorian times, the earth batteries evidenced a unique earth phenomena by which it was possible to actually "draw out" electricity from the ground.

The most notable earth battery patent is one which operated arc lamps by drawing "a constant electromotive force of commercial value" directly from the ground. In addition to this remarkable claim, a vocal radio broadcast system ... through the ground.

It all began one hundred and fifty years ago with the advent of telegraphy. The meandering wire went through rich dark evergreen forests. Lush corn flowing valleys sparkled and languidly waved as the linesmen drew their trail. Across meadows where wild flowers covered the earth in fragrant bouquets, there went the line in its curious path.

Over rolling hills which soared into the hazy sunlight, the telegraph linesmen sang as they went. And the lines followed a mysteriously winding trail which few discern. Sorciers and Templars alike called these trails "woivres". Anglo-Saxon geomancers called it VRIL, the black radiant organismic energy of earth.

Who is Nathan B. Stubblefield, and why do most citizens in the state of Kentucky justifiably revere his name? A native of Murray, Kentucky, Nathan B. Stubblefield had a love for the lonely wooded areas on the outskirts of town. Certain spots in these woods were mysterious and possessed of a strange magic all their own. Few would seek the magic of these places, and learn its true and deep power. There the song is sweet and deep, and still.

Vitalizing and sense-provocative, Stubblefield knew that specific locations could be unique natural energy sources. Rock outcrops, evergreens, and flowing springs each registered as strong sensual attractants. Could it be that they were sensual attractants because they conducted and projected special energetic ground currents? Can it be that we are enthralled and drawn into certain spots because of their projective energy? Furthermore, what is the exact nature of this energy? Does it contain or exceed the qualities of electricity?

A self-educated experimenter and avid reader of every kind of scientific literature, Nathan Stubblefield supplemented his living with farming. He remained a practical inventor of some of the most unusual electrical devices ever developed in America. What he discovered and demonstrated before hundreds of qualified observers in his day seems to challenge many basic axioms of electrical dynamics.

He developed an extraordinary receiver of ground electricity (which produced great quantities of electric power) and numerous "vibrating telephones" which were used by local residents in 1887.

The telephonic devices were patented in 1888 and represent the first commercial wireless telephones, using the ground as the transmission medium. The years when telephonic lines were suddenly made available to the world betrayed the fact that the new medium was one which only the very rich could afford.

Common people could simply not be serviced with local telephones until prices were made cheaper. While telegraphy employed thrifty iron wire, telephony demanded the expensive and better conducting copper lines. Telephones designed by A. G. Bell did not give powerful enough signals through iron wire at any distance because of the additional resistance represented.

Other problems included the fact that the Bell telephone could not transmit or receive a strong and clear vocal signal without excessive battery power. The Bell System was not a truly "democratic" medium of communications.

A mysterious and unrecorded sequence of discoveries preceded Stubblefield's early developments, but he was able to dispense with wire connections entirely. His was not a "one-wire" system. Nathan Stubblefield performed the "impossible": he developed, tested, demonstrated, and established a small, democratic

telephone service which did not require wire lines at all! His system utilized the ground itself as the conductive medium.

Mr. Stubblefield discovered that telephonic signals of exceptional clarity could be both transmitted and received through the ground medium. There was simply no precedent for this development. The first effect of this wonder was that common people could now have the much-needed communications which both great distance and poverty prevented.

Farms could be interlinked by the Stubblefield exchange by simply plugging both terminals into the ground. Wire would not take up the expense which the telephone exchange would later charge to the customers in addition to service. Signals were loud ... and clear. All those who experienced this kind of telephonic conversation declared that Stubblefield had discovered a true wonder.

We have photographs of his telephone sets. These reveal small, ruggedly built wooden cases which are surmounted by conventional transmitter-receiver sets. Heavy insulated cables run to the outer ground from this apparatus. Stubblefield developed an "annunciator" (horn loudspeaker) which amplified the voice of callers. These sets of his appeared in numerous demonstrations on the east coast, from New York to Delaware.

The signals were so loud and clear that they defied commercial levels of excellence provided by the now growing monopolies of American Telephone and Western Telegraph. Thomas Edison broke the Bell telephone monopoly when he developed the carbon button microphone for Western Union.

Sounds were louder when using the Edison carbon microphone. These carbon microphones needed excessive battery power, and batteries were not cheap. Some telephone companies began utilizing dynamo systems to power their lines. The fuel needs of dynamos drive customer costs much too far, prohibiting the ordinary people from having the system for their own moments of need.

Stubblefield developed remarkably unexpected systems by which available resources became the commodity. In the early Stubblefield system, twin terminals into the ground formed the initial bridge among telephones. System users were effectively joined together through the ground itself: wires were eliminated!

The signals were exceptional, and did not fade or intensify with rain; a fact later to be considered in theoretical discussions. Those who experienced speech through the Stubblefield system each reported similar impressions.

Ordinary soil conduction telephonics require a certain degree of ground water for their operation. Stubblefield's system did not operate on this principle for reasons which will become more obvious as we continue recounting his tale.

Stubblefield developed a means by which calls could be individualized among customers. Later, his central telephone exchange included power-amplifying relays, set in the ground at specific distances. Calls were handled by an elaborate system of two-wire, ground connected automatic switches and relays. Signal purity was remarkable for the time, using a single carbon button for both transmission and reception.

Furthermore, Stubblefield's telephones could be left on for days without weakening the power system at all. Now hundreds of ordinary people in widely separated places could afford the

installation of telephone service.

The theoretical reasons why ground conduction telephony can occur had later been established by researchers in England, notably Sir William Preece. Preece successfully attempted only telegraphic signals across great distances of land and sea. Stubblefield was telephoning through greater distances with the legendary clarity and strength which became equal to his other mysterious developments.

The true difference between the Stubblefield system and these early "conduction telegraphy" systems becomes obvious as soon as we delve further into his biography. How were ground plugged relays acting as amplifiers in the Stubblefield system? This feature forms the core of an intensive investigation which several have reproduced in various forms today.

His discovery of an earth charging phenomenon permitted the development of an equally astounding invention, the Stubblefield earth battery. This device, an earthed electrode, drew up enough natural electric charge from the earth to operate motors, pumps, arc lamps, and his ground telephone system. The implementation of his earth energy technology would have changed the nature of American Society were it permitted free market expression in its day.

MEANDERING WAYS

As telephony gradually replaced the telegraph service, lines were also accommodated to telephony. Before becoming entirely reclusive, Mr. Stubblefield befriended a few employees of the telephone service. These friends obtained cast-off telephone equipment and parts for his experiments.

He became very familiar with the behavior of telephone exchange equipment in the natural environment. The telephonic systems of existing service companies were grounded systems. Each end of both telegraphic and telephonic lines were sunk into the ground, while the single expensive copper line formed the communications link.

Ground sites terminated specific lengths of these service lines in special, thick metal plates. Plates were well-buried in selected ground. These plates were composed either of zinc or copper, and required specific ground placement for their continued operation. Linesmen were taught to find "good ground" for these sites.

Some later insensitivity among the growing numbers of hired crew members required the development of "ground location meters"; none of which were to give the special and anomalous characteristics observed in early linework.

Certain telephonic patents reveal extremely "articulated" termination plates for these service lines: folded, stacked, coiled, and interleaved. Acting as accumulators of earth energies, these often became extremely charged. It was found that signals would both self-clarify and self-amplify to unexpected degrees when these special terminations were employed.

Telegraph linesman "felt" their way through woods, laying the paths for lines according to a peculiar intuition. Theirs was an intuitive path rather than a strictly mathematical one, carved through woods and vales in the artistic meandering way of the ancient "geomancers".

Older linesmen recalled the days when line installations took their winding routes through woods, across meadows, and sinu-

ously along ridges, lakes, and streams. Linesmen innately sensed the most favorable paths along which lines should pass.

Geomancy is the ancient qualitative science by which "holy spots" are discerned, and sacred edifices are properly founded. Intuitive discernment, rather than mathematical objectivity, governs the geomancer's aesthetic. Geomantic aesthetics governed the building of ancient villages and towns, and it is no wonder that most architects of any real artistic worth exercise these same aesthetics. Art-governed architects are natural geomancers.

Geomantic qualitative science precedes geologic quantitative science. A surveyor might simply draw a straight line across a section of land, and engineers would then employ powerful means to cut that straight path despite all natural barriers. Much of modern housing development is based on this "draw and cut" method. The sharp paths of engineers is effective and direct, but the old meandering rural roads dotted with their naturally placed homes are beautiful.

The old linesmen trekked across woods in a careful manner, turning aside from natural barricades. Maps of these first telegraphic lines may be consulted. It will be seen that these lines meandered with natural features. Telegraphic lines twisted and turned through the countryside and wilds; a twisting vine of iron on tar-covered wooden poles.

ELECTRICAL OCEAN

Properly ground-conformed telegraph lines were known to produce unexpected signal strengths, as well as unexpected signals. Night station operators were often "haunted" by spurious messages. These contained fragmentary words and sentences, and could not be traced to other station operators.

It is curious that the older placed lines demonstrated a remarkable and constant feature throughout their years, requiring few or no batteries for their operation. This absolutely astounding fact is well documented in the telegraph and telephone literature of the day.

In these trade journals we find reports of lines in which current was everflowing! Company owners found this fascinating natural fact quite lucrative as well as surprising. The question was, where is the current coming from? The echo of the linesman resounded in the forest, the answer singing beneath his feet.

Another equally remarkable fact involved the engineer's methodically driven lines across land and through mountains. These lines did not manifest electrical self-excitations. Clearly, the difference of methods had produced completely opposed energetic results; the one active and the other inert.

As companies expanded across greater regions of ground, engineers replaced the oldtime lineman's sense of "proper placement" with surveyor's charts. It is not unusual for corporate expansions to bring about such a dramatic loss of quality — in exchange for a growth of quantity.

Mr. Stubblefield pondered the question of "taking current from the ground". He stated in very plain language that the earth was filled with "an electrical ocean". This electrical ocean was surging with huge "electrical waves" which could be felt in certain places. No doubt, he was one who felt the ground energy.

Telegraph lines were once two-wire lines: each completing the circuit among station receivers, batteries, and keys. It was quickly

discovered that single lines, terminated in the ground with heavy metal plates, could achieve similar results. The immense savings in wire, poles, insulators, and maintenance was an attractive feature of this method for company owners.

Telegraph linesmen required skill in finding proper ground terminals. Improperly placed ground plates could ruin a system by not conducting signals properly through time. Spurious conductivity in a line could ruin critical transmissions and receptions. Telegraphic lore is filled with discussions about both "good ground" and "bad ground".

The linesmen were workers in a yet primarily agrarian society, having experience with soil and earth in general. Many of them were farmboys who watched the oldtimers "divining" for water. Linesmen frequently discussed such natural means for discerning the "good ground" for terminating a telegraph line.

Thomas Edison adopted a method which could "valve" line signal by preventing unnecessary signal leakages into the ground. His method included the use of terminal rheostats in order to control the amount of current flowing to the ground during signal time. Several of these terminal rheostat patents have been found. One familiar model uses a thick cylinder of carbon with a slide spring contact.

The most amazing thing to the telegraph linesmen was the variation of rheostatic settings which each ground required before strong signalling could occur. Some terminal rheostats needed to be closed completely. Others could be opened full until signals were of sufficient strength to operate the system. Each ground had its own "character". Each ground was possessed of activities which defied description except but by poetry, song, and twisting green line.

Telegraph line was not copper, neither was it insulated throughout its length. Telegraph line was bare iron wire, and was supported on porcelain insulators fixed to tarred wooden poles. Signal strength along such resistive wire would have theoretically been extremely poor, but was exceedingly strong at times. So great was the developed signal strength that operators could "remove battery cups" and work with almost no current at all.

Where did this extra energy come from? From what mysterious depths did this strange power emerge? Examination of telegraph systems reveals them to be radionic tuners on a vast scale. I suggest that VRIL articulate energy, the dendritic living energy found in the ground, was at work in all these systems.

EARTH RESERVOIR

Nathan Stubblefield's experiments involved the development of earth batteries: buried metallic arrangements which produced electrical power. We find a good number of the earth battery designs in the Patent Registry. The earliest designs appeared in 1841 when Alexander Bain discovered the phenomenon. While working a telegraphic line, he chanced to discover that his leads had become immersed in water. This short-circuit through earthed water did not stop the actions which resounded through his system.

Mr. Bain took the next step to a greater distance, burying copper plates and zinc plates with a mile of ground between them. These, when connected to a telegraphic line performed remarkably well without any other battery assistance. Bain obtained a patent for his earth battery in 1841, using it to drive telegraph systems and clocks.

Stephen Vail (1837) observed the same effect, not knowing what caused it. The establishment of the first functional telegraph line seemed to require ever few batteries with time. Vail began with some 12 battery cups, reducing them gradually until 2 were needed. There came a point where he found it possible to remove even these, while operating the system.

This mystery persisted for years. I have heard such an account by a close friend and electrical engineer who reported that local telegraph stations remained in operation despite the fact that their batteries had not been recharged for a great number of years (W. Lehr).

J. W. Wilkins in England (1845) corroborated findings made by Bain, developing a similar earth battery for use in telegraphic service. An early English Patent appears in 1864 by John Haworth, the first true composite earth battery. This battery is drum shaped, having numerous solid discs mounted on an insulative axis, end-braced, and buried. Their power was rated in terms of disc diameter and telegraph line distance: 1 foot diameter discs for 75 miles of line, 2 foot discs for up to 440 miles of line.

Patent Archives have revealed a great number of these devices including several remarkable operative descriptions. Earth batteries by Garratt (1868), Edard (1877), Mellon (1889), and Hicks (1890) yield therapeutic powers. Earth batteries by Bryan (1875), Cerpoux (1876), Bear (1877), Dieckmann (1885), Drawbaugh (1879), Snow (1874), Spaulding (1885), and Stubblefield (1898) produce usable power.

In addition to these marvelous patents, there are those which found their way into telephonic service later. Designs by Strong (1880), Brown (1881), Tomkins (1881), Lockwood (1881) provided power assistance and primary power for telephonic systems throughout the countryside. The well reputed fame of "earth batteries" centers around their very anomalous electrical behavior. The central mystery about earth batteries is that they do not corrode to the degree in which their electrical production rate theoretically demands. Exhumed earth batteries reveal little surface corrosion. Nathan Stubblefield knew that probes (placed into various soils) reveal an amazing degree of strong electrical activity.

These currents show an amazing degree of variation across any chosen plot of ground. Wet soils often reverse the expected electrical strength: weakening, instead of strengthening their appearance. Proper placements of metallic probes can produce strong currents for use.

Touching a well-grounded iron rod is a good first experiment to try in these regards. Try and find a place where power leakage into the ground is minimal, such as a park or wooded area. Take a yard-long solid iron rod whose surface is free of shellac or insulator coatings.

Carefully drive the rod into the ground with a hammer. Wetted hands on the iron should produce a mild electrical sensation. These voltages may be measured. They "pin" sensitive galvanometers. The current does not cease after several weeks of activity when properly placed.

Stubblefield's observations of natural electrical manifestations led him to consider the taking of "free" electrical energy from the earth. His initial revelation contended that such vast amounts of energy could be used to drive the engineworks of industry.

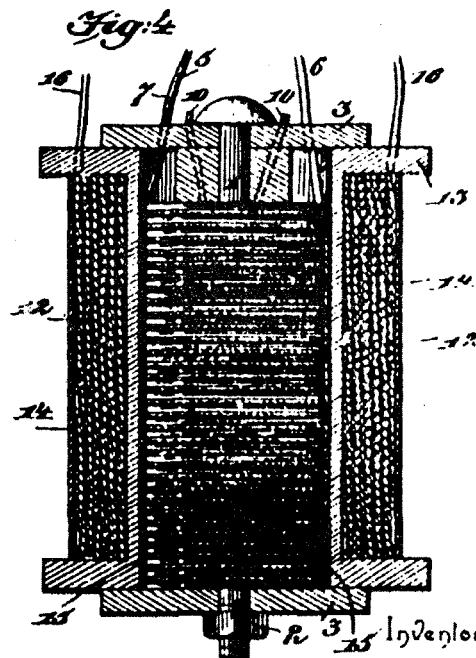
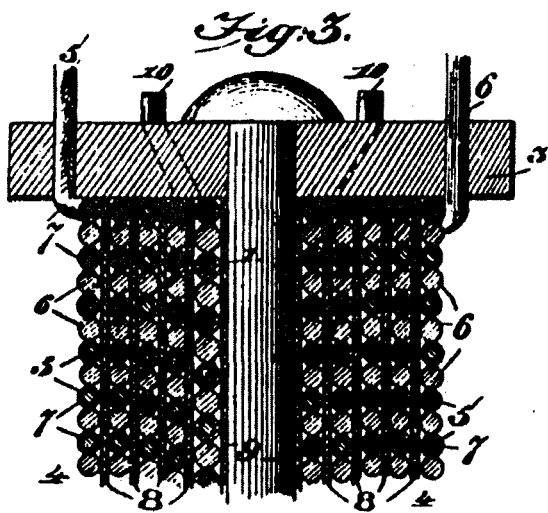
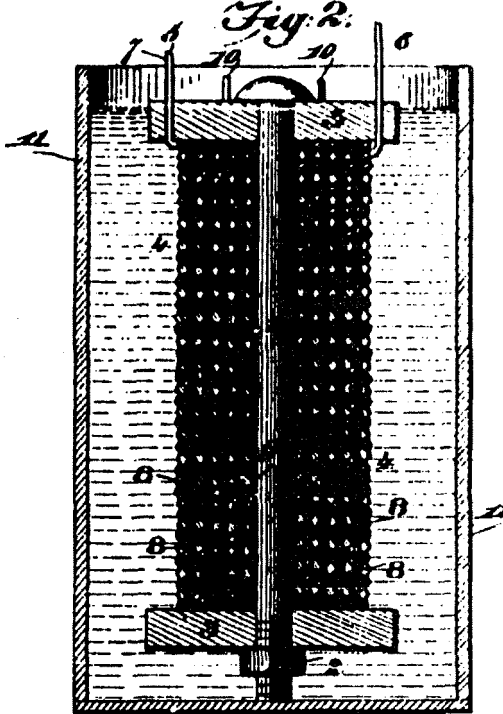
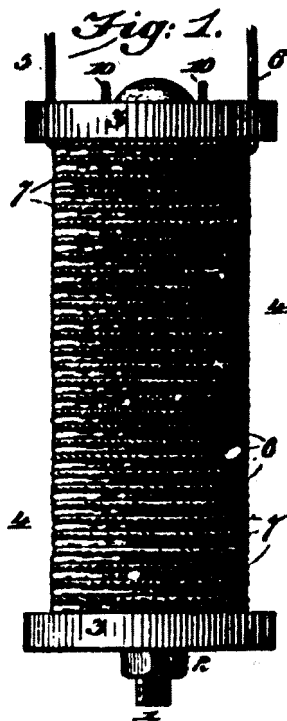
Stubblefield sensed that the ground currents were arriving as

(No Model.)

N. B. STUBBLEFIELD. ELECTRICAL BATTERY.

No. 600,457.

Patented Mar. 8, 1898.



Witnesses
H. S. Dieterich
S. P. Schumaker

By *H. S. Dieterich* Attorneys.

Nathan B. Stubblefield

C. A. Snow & Co.

electrical waves. In Stubblefield's view the electrical waves permeate the earth. Electrical waves were treated as ocean waves, constantly surging and cresting in specific locales. As ocean waves crash against fixed shores and rocks, so electrical waves also surge and crash against underground geological features. Stubblefield reasoned that this electroactivity should be extreme in certain locales ... the "rocky shores" of the electrical ocean. Just as there are rocky shores, calm beaches, and surging ocean depths, Stubblefield clearly envisioned the mysterious dark waves of the vast and unsuspected electrical ocean.

Knowing these truths, Stubblefield arranged ground rods in specific locales in order to intercept the electrical waves for power. He knew that these electrical waves would only appear in very specific places, so he did not expect to find them everywhere in abundance. Stubblefield constantly spoke of "working the ground" before power could be taken from it.

Stubblefield observed the natural tides and boundaries of the electrical ocean in and around his lovely rural hometown. Concerning this earth energy, Tesla and other investigators later developed equivalent models. Tesla charted and used the earth waves in their surging impulses. Moray also intercepted these natural impulses in the "radiant energy" generator.

Some researchers believed that the vast electrical ground reservoir finds its source in the enormous solar efflux. Certainly daytime grounds yield a remarkable amount of static. Ground terminal shortwave reception is excessively "choked" during the daylight hours on certain bands. Despite the supposed insulative qualities of the atmosphere the solar efflux finds its way through space, eventually permeating the ground. Some researchers have referred to the ground-permeating solar energy as the "slow solar discharge".

The "slow discharge" represents the enormous drift of æther through the entire body of ground. The earth evidences a constantly self regenerating charge. Tesla opposed the notion that this potent field was the result of decaying radioactive materials deep in the crust.

Numerous other researchers would refer to this "electrical ocean" as the vast reservoir of untapped natural energy. Somehow this reservoir is regenerated in a constant swelling. Where did the energy come from? Earth static was presumed by Tesla to be a solar activity which manifested in and across the ground. The ever growing static of earth was problematic for physicists who could not see the source for such energetic growth potentials.

Tesla believed that ultrafine corpuscles from the sun permeated the entire earth, manifesting as static charge. Tesla further conjectured that these rays came primarily from the sun, since it was ejecting matter "at excessively high voltages". If this were so, reasoned Tesla, then sunlight contained something of this electroactive component, and it was certainly possible to derive electrical energy from sunlight.

Nikola Tesla announced these facts in 1894, finding only the silencing ridicule of academicians already hating his very name. When Tesla declared that "rays from space" were "bombarding the earth" he was absolutely rejected by the academic club who rejected these claims as "superstitious". Upbraiding his findings, they later claimed for themselves the very same discovery (Millikan, 1932).

Tesla stated that the electrical energy released by the sun is a far greater, more permeating supply than sunlight itself. He certainly believed it should be considered as a first rate natural electrical source of enormous potential for commercial applications. His assertion was based on experimentally verified facts when, measuring steadily growing charge states in vacuum tubes, it occurred to him that earth charge was sourced in solar activity.

Tesla also demonstrated the extraction of free electrical power from solar energy. A well grounded mica capacitor is surmounted by a highly polished zinc plate. This plate may be poised in a highly evacuated glass container to best advantage, the zinc not exposed to corrosive influences. The tube is elevated and exposed to sunlight.

The mica capacitor is connected in series with the vacuum tube. After only several minutes of exposure time, the stored electrical energy is formidable: producing a powerful white arc discharge. Tesla patented this device. Since earth absorbs the permeating solar efflux, then these energies can be extracted for aeons.

Others have viewed the generation of ground static as a natural "radiant process" from the ground itself. Static charge appears as the inert by-product of the mysterious VRIL, the self magnifying organismic ground energy. VRIL, according to medieval mystical philosophers, is the ground of being from which all material manifestations emerge.

VRIL connectively fuses metaphysical realities (dream, vision, ideation, impulse) with physical realities (mineralogy, botany, zoology). By the radionic method by which telegraph lines may be locally "tuned" we may well surmise that this ground based regenerative supply is the true source of static.

Samuel Morse originally planned the burial of telegraphic lines between cities. Having done so across several tens of miles at great expense and through great labor, Morse found his system utterly incapable of operation. Static had so flooded his receivers that no signalling was possible at all. This first bad experience with the static of ground presented such a discouragement, that he almost stopped the entire plan. The uneconomical task of elevating all his cables later became the normal procedure.

Early telegraphers observed a steady growth of static throughout night seasons. This growth continued despite the absence of winds or storm conditions anywhere along the line. Researchers have often referred to this kind of power as "free energy", meaning that the power source is extraterrestrial and natural in supply. Such an energy source would remain cost-free. The privatization of utility companies could conceivably be municipal and democratic. Municipal groups could share the cost of installing the ground energy stations.

ENERGY RECEIVER

Mr. Stubblefield developed a peculiar bi-metallic induction coil which could (when buried) draw up sufficient electrical power to operate lamps and other appliances which he designed and tested. The patent specification describes a terminal which draws electricity out of the ground.

This device required very specific placement. It would not work with equal effectiveness in all locations. A very precise placement of the device required an equally precise knowledge. Stubblefield shared this knowledge with only a few of his associates.

I spoke with an academician who had the extreme privilege of speaking with Mr. Stubblefield's son, Bernard Stubblefield. Bernard, by this time himself quite aged, told that his father's method in locating the "right spot" was deliberate. His father referred to the device as indeed a receptive terminal and not a battery.

Despite the insistence of Patent Officers in calling the device a "battery", Stubblefield declared it to be an energy receiver ... a receptive cell for intercepting electrical ground waves. Its conductive ability somehow absorbs and directs enormous volumes of electrical energy. With this energy Nathan Stubblefield operated a score of arc lamps at full brightness for twenty four hours a day.

It becomes apparent that Mr. Stubblefield had witnessed (or experienced) some natural occurrence of discharging electrical energy in a telephonic system, and had determined the mode of its manifestation with simple means. His ground energy receiver (Pat. 600.457) remains a true electrician's mystery.

There was a definite trigger by which this energy was stimulated and maintained. The induction coil which bears his name is equipped with three coils which are wrapped around upon a heavy iron core. Bare iron wire and cotton covered copper wire are wrapped side by side, comprising a primary coil body. Each layer of this primary coil body is covered by a band of cotton insulation, bringing four wire leads to the coil terminus. Two leads of iron and two of copper are external to the coil. Commercial electrical power is obtained through these connective terminals.

In addition to this bimetallic winding, there is a third winding: the "secondary". This third coil is insulated from the primary bimetallic coil, serving as a trigger device. Presumably, a stimulating impulse shock was introduced into the tertiary coil, after which the upwelling electrical ground response brought forth powerful currents in both iron and copper coils.

Electrolytically (as a battery in acid or saltwater) the Stubblefield coil is disappointing; producing less than one volt according to those who have duplicated its construction. Stubblefield's bimetallic coil was a "plug": a receiver which intercepts the vast and free electrical reservoir of the ground itself. His patent and subsequent company brochures define the manner in which his earth battery was to be activated.

Technically, the Stubblefield device is a modified thermocouple (a bimetal in tight surface contact) but could not supply the degree of power which he reported. While this arrangement could develop a few milliwatts of power in appropriately hot ground spots, the thermoelectric explanation of the device cannot explain the phenomenal output reported in news reports of Stubblefield's demonstrations.

Furthermore, though the Stubblefield power receiver is wound like an induction coil, it produces a steady direct current output. This poses additional problems for the conventional engineers. Electrical induction only occurs with electrical alternations, oscillations, and impulses.

Witnesses described ground-powered motors which ran unceasingly and unattended for months without need for replacing or replenishing the ground battery. Small machinery, clocks, and loud gongs were run by other ground-buried cells as reported by credible witnesses.

Mr. Stubblefield reported that the burial of his "earth energy cell" required time to build up charge. Once the cell was saturated,

however, the cell became a conduit of earth charge and flowed over in "commercial electrical volumes". He did not claim complete knowledge of the phenomenon.

He simply stated that (once the coil became saturated with the earth charge) it suddenly manifested an electromotive force "far greater than any known wetcell ... reaching into weeks and months of continuous work night and day" and poured this charge out for use.

Stubblefield used the cell as a "plug", drawing out the electrical charge of the ground. The cell coilings acted as a lumped conductor. Charge saturated this conductor and flowed up into it, powering any electrically connected appliance. After repeated exhumations, the copper element of these cells "is not acted on in a perceptible degree ... even after repeated renewals".

Mr. Stubblefield described means by which such cells could be connected in series at short distances from one another. "With these, acting as electrodes ... you draw from the electrical energy of the earth a constant E. M. F. of commercial value". That phrase... "acting as electrodes..." is the heart of the Stubblefield energy cell. It is not a battery. It absorbs and flows over with the stupendous energy of the earth's charge. Stubblefield may have discovered the auto-magnifying voltage effect of electrostatic induction in coils before Tesla, who later utilized the effect in his special electrostatic transformers.

Stubblefield's buried bifilar coils may have become saturated with earth electrostatic energy, travelling up the coil. In such a case, the mere battery power of the coil was replaced by the electrostatic flow, the coil acting as an electrode. This seemed obvious when considering the fact that its ordinary battery current (1 watt) was gradually replaced by a continually growing electrical current of far greater proportion.

TREE ROOTS

Experimenters have observed the "slow accumulation and creep" of current up through vertically buried coils and large solid rods. This current has growth characteristics which gains strength with lengthened burial time. Buried coils and rods do not give their full output until they have "developed" power over a few hours of time.

This behavior resembles nothing like a true electrical current. The best model to explain the phenomenon is vegetative growth ... a biological expression. Only a full scale test of the reconstructed Stubblefield device in proper grounds will give conclusive and satisfying answers.

Witnesses convey that Mr. Stubblefield's batteries were usually buried at the roots of certain very old oak trees. From these sites it was possible for him to bring small arc lamps to their full candlepower. Tremendous amounts of energy are required for this expenditure of power. Not only was he remarkably able to draw such volumes of current from the ground reservoir for lamp lighting, but the power was available to him throughout the day.

Arc lamps were hung in the trees themselves with their receiver coils buried in the roots. Such was the nature of this current that the lamps did not heat excessively, and seemed to burn forever. Nathan was not replacing his lamps with the frequency demanded by such continuous operation. Obtained through his employment with the telephone company, he was able to recharge old wetcell

batteries with energy from these buried receivers for other experiments.

Certain conventional thinkers claimed that the Stubblefield simply used wetcell power for his telephones. Later demonstrations indicate the fundamental error of this conventional view. Stubblefield ran most of his apparatus nonstop for days; without turning off the power.

It is more than likely that charged wetcells were used to "jump start" the ground electrode during certain seasons, since the patent reveals that an outer third coil could be added to the copper-iron bimetal. We do not know the secrets of the earth charge as Nathan determined. Others since this time have observed fluctuations at certain times of the year in ground energy. It may be that a sudden induction is required before the excess ground charge surges to the surface — like priming a pump.

The arc lamps could have been low pressure gas arclamps of the kind demonstrated by Daniel MacFarland-Moore; but these required high voltages. Nathan did not utilize such excessive voltages. Another paradox deals with the notion that Stubblefield simply connected hundreds of his small-wattage batteries together, producing a large and commercial output. Nowhere is this evidenced. Nathan showed that one or two such batteries were sufficient to draw off "the charge of the earth"; a very different kind of energy.

When properly placed, the weak power of the Stubblefield "battery" becomes an electrode for the powerful earth charge. But arc lighting and battery charging was not his only specialty; there were other marvels which he began developing in methodic succession. His bimetallic coil receiver intercepted electrical waves and produced enormous power outputs which could be modulated: superimposed with additional signals, sounds, and voices.

GROUND RADIO

Salva (1795) suggested several electrical schemes for long-distance, and even transatlantic telegraphy. He suggested that physiophonic telegraphy be the communications mode; where human recipients would receive the mild shocks of a distant signal station, and so convey messages.

Salva also believed that earthquakes had subterranean electric origins. Working on the hypothesis that subterranean electricity caused violent communications under vast earth strata, Salva suggested that ground and water be used to replace wires for electrical signalling.

Sommerring (1811) first attempted telegraphic transmissions through water-filled wooden tubs. The signals were effectively passed as if through wire conductors, the thought of wireless ground resulting.

James Lindsay (1830) first developed the notion of utilizing artificially generated electricity for special modes of lighting, motor-power, and communication. Mr. Lindsay suggested that submarine cables might be laid between land masses while using "earth batteries and bare wires" as the means for power transfer.

Steinheil (1838) demonstrated the remarkable passage of signals along one-wire to the ground. When trying to use earth as the "second line" he measured large currents. This complete success proved the great conductivity of ground; and so the "earth circuit" was born, liberating telegraph systems from the expense of using

the two-wire system.

Morse (1842) sent telegraph signals across a river. Antonio Meucci (1852) had already demonstrated the transmission of vocal signals through seawater, but traversing the ground represents a different thing altogether.

Mr. Stubblefield reasoned that, since electrical waves traverse the whole earth, it might be possible to send signals to distant places. These ground-permeating natural electrical waves might serve as carriers for the human voice. The ground would act as both power generator and signal conductor. Like a gale carrying messages downwind, these electrical waves could bring wireless communications instantly to any part of the world.

To this end, Mr. Stubblefield experimented with the buried power receiver and a system of telephone sets. He found it possible to send vocal signals through the ground to a distant receiver, referring to this system as a "ground telephone". Telephoning through the ground became routine for this remarkable man.

Signals sent through the Stubblefield method were notable for their reported "great clarity". What is strange about this system is its elegant simplicity. Stubblefield's transmitting system evidences an almost crude minimalism which offends some researchers, while surprising others.

Numerous private and public demonstrations of this first system were made in Murray, Kentucky (1886-1892), where the mysterious "black boxes" were seen. Two metal rods were stuck into the ground a few feet apart from each distantly placed set. Speech between the two sets was clear, loud, and startling despite distances of 3500 to 6000 feet.

These transmissions were made through the ground itself and used the Stubblefield cell for power. As mentioned, in several photographs we see special loudspeaking telephones outfitted with long (1 foot) horns, designed to act as annunciators. Calls from these annunciators brought his son Bernard to the telephone transmitter. The system was never switched off. Power was limitless and did not diminish with time of day or length of use.

While Marconi and others were barely managing the transmission of telegraph signals for equivalent distances, Nathan Stubblefield was transmitting vocal dialogue. The clarity of these signals and their sheer volume was the most widely recognized feature of the Stubblefield system. He was developing the system to operate through far greater distances, using automatic relays to boost signals for very great distances.

He published an extraordinary brochure in 1898 to attract investors who had expressed interest in consolidating a small corporation. In this brochure, Stubblefield insisted that power for his device was not generated in the cell. He calmly stated that the cell received energy from the earth. In a less discussed portion of this brochure, Stubblefield stated that electrotherapeutic potentials were derived from the earth battery. Other researchers made similar claims for their earth batteries (Hicks, Mellon).

In 1902, Stubblefield set up one of his sets in a "Mainstreet" upper office — in a hardware shop. From that point to his farm (some 6000 feet distant) he conducted continuous conversations with his son Bernard. Tapping with a pencil on his one-piece transceiver, Bernard was quickly heard in a loud, very clear voice. This transceiver was a carbon button placed in a tin snuff box. Speech and response were transacted through the self-same device,

which acted as both microphone and loudspeaker. Cells were placed downstairs from the office in the ground. They were never removed and never wore out, though operating twenty four hours around the clock.

Nathan Stubblefield offered to construct a large scale power station for the town of Murray. His quoted initial installation cost were estimated at five thousand dollars. The town politicians declined the offer. Now, the technique of drawing up electricity from the earth remains a mystery.

STATIONS

The Stubblefield ground radio system was demonstrated for approximately one thousand Murray residents (January 1902). Photographs of Stubblefield and his family, and a good crowd of witnesses from town show the cell lying on the ground among all his assembled inventions; a flower-pot sized coil of good volume. Other devices show motors and large capacitor stacks for aerial voice transmission experiments.

After the successful completion of these preliminary tests, Stubblefield travelled to Washington, D.C. for a public demonstration which was to be one of his crowning public achievements (March 1902). Stubblefield sent wireless messages from a steamship to stations on the shores of Georgetown.

This successful test employed trail-wires in the river water. While successful, witnesses acknowledged that Stubblefield's ground telephony sounded louder and came through with greater clarity. Photographs of this event are all available.

He declared that news, weather, and other announcements could be broadcast through the ground across a great territory for private reception. Simultaneous messages and news of all kinds would soon be transmitted through the ground from a central distribution station.

He also stated that (while such broadcasts required wide-transmissions) he was developing a means by which privacy of ground telephonic messages could be maintained among callers. This method of individuation would take place through the ground, insuring that no one could eavesdrop on anyone's conversations.

The Washington D.C. demonstrations were followed by a trip further north. Mr. Stubblefield took his apparatus to New York City for additional tests, preparing for a public demonstration in Manhattan's Central Park. The demonstration was to take place in less than twenty four hours after his arrival.

Stubblefield found (to his shock) that the ground was not permeable to earth charge in all places, and not conducive to easy ground telephony. He requested more time to discover the powerpoints before setting up the stations properly. Time to "work the stony earth" of the Park left a few investors foolishly wary of the system's worth. This demonstration was withdrawn.

His next public expositions were given in Philadelphia's Fairmont Park with greater success (May 1902). He now recognized, more than ever before, the role of geologic formations in determining and establishing stations.

Stubblefield published a prospectus for his WTCA (Wireless Telephone Company of America), stating that "I can telephone without wires a mile or more now, and when the more powerful apparatus I am working on is finished and combined with further

developments, the distance will be unlimited".

Stubblefield sold only one telephonic system to another corporation: the Gordon Telephone Company of Charleston. This system was used to communicate with offshore islands. It would be interesting to retrieve this system and examine its contents.

He entered these commercial aspects with some trepidation. By June of the same year he withdrew from the project completely. A few persons managed to discover the reason for his quiet, sudden retreat. Because of his difficulty in instantly stationing his system in New York City, it was suggested that he adopt the method of burying lines to "fake" the operation ... if just for the purpose of making a good show. Nathan declined.

After witnessing these demonstrations, another inventor (A. F. Collins) duplicated some of Nathan's inventions and filed a counter-patent for a ground telephonic system (patent 814,942 for "Wireless Telephony", 1906). One of the signing witnesses on the Collins patent was one Walton Harrison.

Harrison, a WTCA member later infringed on another Stubblefield experiment with his "Transmitter for Wireless Communication", a telegraphic-telephonic system (patent 1,119,952, 1914). It became apparent that certain WTCA members were trying to oust Stubblefield himself!

The WTCA now took on a life of its own. Stubblefield was thoroughly disgusted at the display of human greed and ambition, and left them to their own devising. Collins and others were later accused of petty crimes having to do with mail fraud.

The WTCA failed in time. Internal disputes over money, rather than technological progress and implementation, was their own death knell. Marconi arrived with an inferior (though highly-publicized) system. When Marconi began his work, the effective signal transmission distance was equal to that achieved by Stubblefield. Stubblefield was experimenting with ground radio since 1888, but did not patent his developments until much later. Credible witnesses saw his ground radio experiments in action during this time frame, establishing the historical priority of Stubblefield ... a true and original American genius.

While Marconi could barely send telegraphic "dot and dash" signals with great difficulty (and static), Nathan had already transmitted the human voice with loud, velvet clarity. Others would adopt and implement the Collins system (Fessenden, DeForest, Bethenod, Braun).

Nikola Tesla performed double ground experiments with impulses as early as 1892, reporting these in lectures and patenting some embodiments in 1901. No one of these later systems ever achieved the same results of clarity, tone, and volume of Stubblefield ground telephony. Priority in this art belongs to Nathan Stubblefield. In addition, his was the only system in which natural energies were obtained, magnified, and entirely employed as the empowering source. All the other inventors used "artificial" sources (batteries, alternators, dynamos).

Following all these ground radio demonstrations, Stubblefield researched "magnetic waves" and developed several systems which did not use ground terminals for exchanging signals. Long distance wireless telephone communications were his aim. Many imagined this to be radio as we know it, but several features of the Stubblefield aerial system are distinctive and different.

First, his transmitters and receivers were telephonic, not tele-

graphic. In his preliminary experiments, the earth battery was used to energize an apparatus to which was connected a long horizontal aerial line. Marconi later adopted this "bent L" symmetry in conjunction with a grounded copper conduction screen. We do not have photographs of these arrays, but have handwritten manuscript copies of certain diary notes in which a progressively greater telephonic distance is reported. Nathan made steady progress in this form of telephonic transmission, but used neither alternators or spark discharge.

A second series of experiments reveal the development of stacked capacitors. Photographs reveal two large capacitor stacks, presumably for inductive transmission purposes. Some researchers induced ground oscillations of electrical current, while absorbing each "flyback" into large capacitors. This system evidenced the "hydraulic" model of electricity, popular during the latter Victorian Epoch.

Tesla would later show the essential differences between current species developed in various electrical machines. Each of these, when separated, evidenced entirely unsuspected new phenomena. It is most probable that Stubblefield was one of the first individuals to discover some of these strange effects, even before Tesla himself.

Direct current impulses have very different characteristics than alternating high frequency currents, used by Marconi. Vocal modulations of strong direct currents release polarized impulses. Impulses do not produce the inductive waves used in conventional radio transmission. Impulses produce inductive rays which travel in straight lines. These inductive rays are penetrating and more like electrostatic energy than electromagnetic energy.

Photographs reveal a final form of Stubblefield's aerial telephone which utilizes a two foot in diameter single turn copper band. This outer copper band is spaced from a second inner copper band, and is mounted on wooden pedestals. A telephone is connected to this array. This compact apparatus transmitted inductive rays for great distances when earth energy was modulated by the human voice.

A truly honest and humble man, he justly considered the ambitious and aggressive (northern) investors as "scalawags and damned rascals". He became suspicious of others. Considering the time frame in which these events took place, we may understand his reaction. Rejecting their tempting swindle, he was compelled to leave for home in order to continue his beloved experiments in privacy. He became mysteriously compulsive about his privacy after this.

In the words of several persons with which I have had the good fortune to speak, "Nathan was honest to a fault". He, disappointed again in human behavior, packed away his equipment and went home. After this unfortunate time period, Mr. Stubblefield preferred to be alone. Some say he became increasingly intolerable to be with. These patterns mark the genius, the dreamer. Those who walk in the future, while being in the here and now. Finally, his wife left him.

HOMESTEAD

As visitors approached the Stubblefield farm, yet a good way off, Stubblefield would appear at the door to wave them away. This often occurred when they were simply too far away to be visually related. He refused to speak to anyone for long periods. This

occurrence was reported during the night, when visibility from the cabin to the distant parts of his fields would be impossible. Nathan would always appear at the door, somehow knowingly, and wave them off.

Pranking schoolboys, intent on stealing vegetables or fruits, would ever so secretly crawl onto his farm quite out of possible sight. Nathan would always be right next to them laughing in no time, somehow mysteriously detecting their presence. In a later embodiment, bells would sound when anyone approached so much as a half-mile from his cabin. It has been suggested that he had developed a device which could actually indicate the positions of any intruder across a space of ground.

Some declared that Nathan, jealous of his privacy, rigged the whole farm with delicate trip wires in order to locate and surprise pranksters. Sometimes the intruders would be met by Stubblefield, waiting at the very spot where they were stealthily heading. No intruder ever managed to feel or find these supposed wires. This tantalizing mystery has never been fully explored.

Others would say that Nathan buried sound-sensors all over the farm. These, when pressed, could model a trace across a map of the farm inside the cabin. Each sensor, tied to an indicator could show up on the map. Studying this map, he could see where intruders were on the fields. Nathan could then gleefully sneak up on them and chase them away.

Methods of distant ranging and location were devised by Antonio Meucci, employing tone signals. These required receivers, however, at the distant end. But Nathan knew where the intruders were coming from and where they were going as well.

Nathan may have developed ground-wireless relays which responded to ground-buried sensors. These may have transmitted a tonal signal to the cabin, where a receiver would be triggered. This receiver may have been the bell-sounding mechanism. How did he locate people with pin point accuracy however? No complex array of detectors was ever found in his cabin when he died.

In light of all his experimentation with earth energy and wireless, we will assume that his last two mysterious inventions speak of utterly new and unknown (though related) ground energy phenomena. But, what natural phenomenon permitted him to achieve this feat?

Ocean waves often contour the shoreline, evidencing something of the shore outlines to distant places. Electrical waves might conceivably do this. But how would Nathan model this inside his cabin? No such map was ever really found. Also, if he were using some kind of ground impulse Doppler radar or sonar (electrical ground impulses outward) then what feature beneath the approaching intruders would signal an echo back to the receiver?

Some have suggested that Stubblefield was utilizing distant variable ground conductivity. Intruders would alter this by their weight and step. How would such a signal be transferred back to the measuring station? Such reciprocation in ground currents would require that they are irritable and sensitive. This would evidence an unsuspected permeating biological nature in geology; a song, a personality with which the old linesmen-dowsers were intimate.

MOTORS

A motor, designed by Stubblefield to operate entirely by

fluctuations in ground static, has been stored in a local museum. The device features several mobile pithballs around a compass-like perimeter, resembling the equally mysterious electrostatic hoop telegraphs of the 1700's. Students of Stubblefield's work have examined the pithball pendulum device and ignorantly concluded it to be useless.

Pithball (static) telegraphs of the early 1700's reveal this Stubblefield design to be a very special "find". Pithball telegraphs utilized a grounded metal hoop, an underlying dial, and a pendulum on which a pithball (cork) was hung. A single line (sometimes of silk) connected two such arrangements.

Signals were made and received in a very curious manner with pithball hoops, an equally historic mystery. Moving the pithball to a particular letter on the dial resulted in identical displacements in the receiver: an anomaly. These archaic devices managed the articulate transaction of messages by unknown phenomena approaching intelligent transfer.

Witnesses of these signalling devices were credible persons in the scientific community. No one questioned how it was possible to articulate such a transfer with static electricity. In any event, any researcher not familiar with the designs would pass over Stubblefield's "pithball table" without counting it as worthy of study.

The device found in Nathan's cabin after he passed away is of singular mystery. One person actually thought that Nathan built it because it "looked really strange" ... like some science artform. It sat upon a trunk off to the side of his cabin room. Bernard Stubblefield, his son, did not recognize the device. Nathan must have built it after Bernard was taken away with his mother. Bernard did not remember seeing the device before this moment. It was taken to a local museum, where it now resides.

This device is a square arrangement, having several insulator-mounted pithballs in each quadrant of the central square table. It is quite likely that this was the means by which Nathan detected movements and positions in his field. If this analysis proves true, then it represents a major leap in his earth power technology.

I have surmised that this device is the Stubblefield long-range detector. Motions in a specific pithball pendulum gave the direction and position of the intruder. Such a device relies on phenomena which are unknown in conventional science.

Natural observations in systems lead to unexpected, theory-busting discoveries. Such an effect demonstrates that an articulate quasi-intelligent energy permeates the natural environment ... of which electricity is a *minor* part.

The natural phenomenon which is responsible for this ability is truly remarkable ... nothing short of the miraculous. In its realm, we see that nature is suffused with an almost biological organization which includes the supposed inert world of geology. This would be equivalent to acknowledging that geological structure is suffused with a neurological sensitivity; a thing which academic science is neither prepared nor equipped to endorse.

Nevertheless, different aspects of this ground sensitivity were discovered and differently implemented throughout the following years. T. H. Moray (1935) also discovered long-range articulate tuning through the ground from a fixed single site. His "radiant energy listening device" permitted him to scan a tract of land and actually eavesdrop on distant conversations and sounds with

earphones. This device did not implement a microphone.

The Moray Listening Device used a grounded rod and special large germanium detector. How does a stationary tuner sweep across land and pinpoint sound sources? Stanley Rogers (193) discovered the same long-range scanning effect when, using a radionic tuner for mineral detection, he found it possible to sweep a field or meadow with a variable capacitor. Adjustments on these grounded tuners could sweep across land, revealing and mapping every mineral contour.

Dr. R. Drown (1951) independently developed a compact device which could sweep, scan, and delve through subterranean grounds for the specific purpose of ore detection. This device permitted photographic detection of ores swept through the ground, isolating specifically sought mineral deposits.

This Stubblefield pithball pendulum represents a leap in ground power technology. It is an engine which operates without electrical transformations at all: a ground powered "auric" engine.

SUNLIGHT

Two more mysteries have lingered from this latter period of invention in the Stubblefield biography. The nature of each reveals the extent to which he had developed and advanced his new technology. Nathan continued to pursue his experiments, but little was seen of him for long time periods. Alone and tired, Nathan stopped working his farm completely.

Later visitors felt sorry for Nathan, now aged and abandoned by his wife and children. Several of the town's many charitable ladies decided to take him some food. On one occasion, they arrived at his farm to find the ground "ablaze with light ... like pure sunlight" was coming right up out of the hillside.

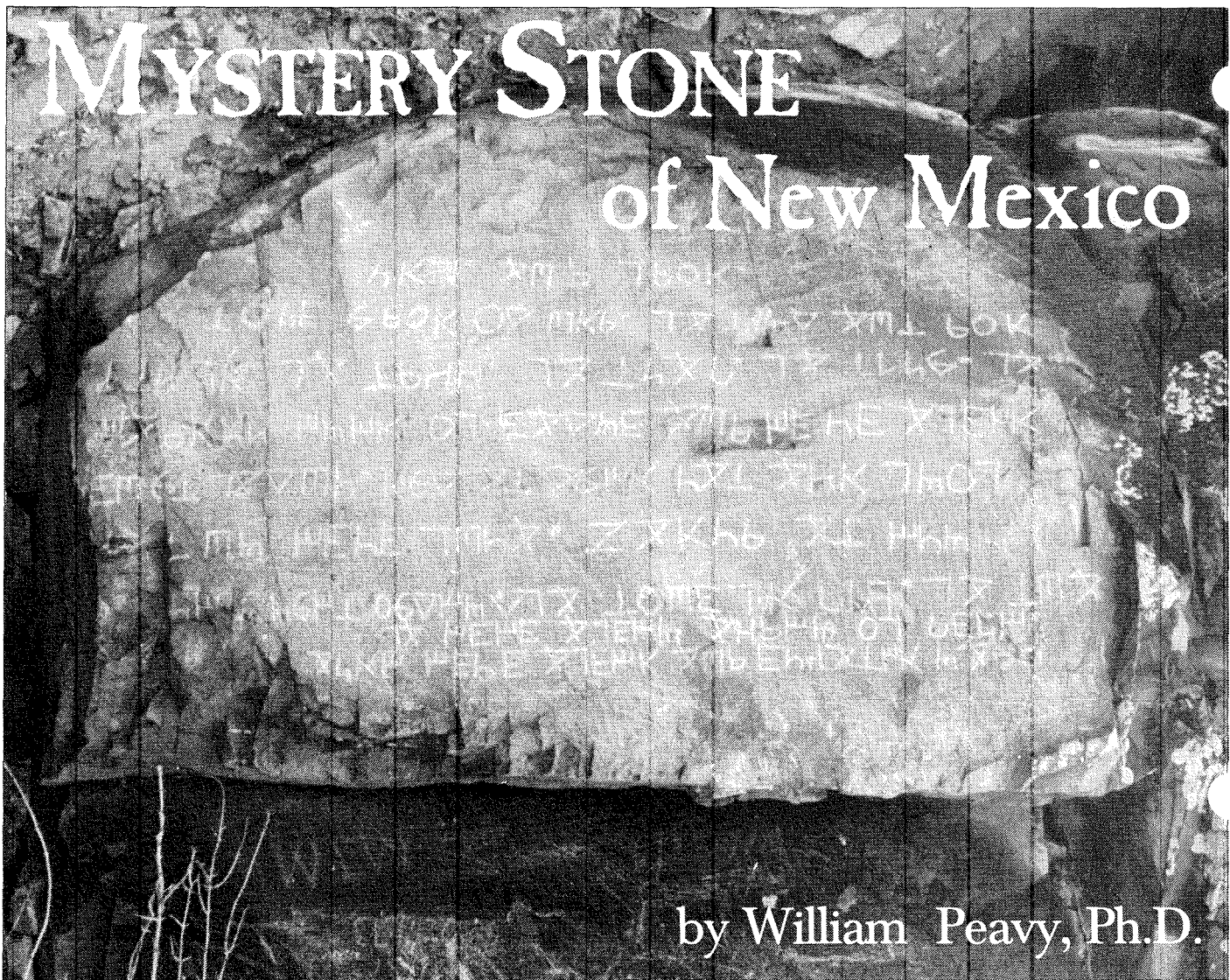
Later investigators entered his land area and found heavy wires leading from the roots of trees. To these wires were attached small arc lamps, hung in the trees. These were long extinguished. They imagined this to be the explanation of his hillside sunlight. Their hasty analysis proved problematic from stories which witnesses report.

The warm and diffuse sunlight which came from the ground itself around his house was not localized in specific lamps. The light came from the ground, not from the trees as before ... "a whole hillside that would blossom with light" ... "lit up like daytime". These observations indicate that Stubblefield had managed indeed the direct conversion of earth energy to light and warmth.

This would be acceptable, were Mr. Stubblefield simply working on a newer means of drawing electricity from the ground to light small arc-lamps; a feat which he had accomplished earlier. But these kind persons could never find any evidence of arc-lighting or any other form of known lighting anywhere near the area. In their own words "the light seemed to come from the ground itself".

In addition to the ground sunlight effect, many heard very loud and unfamiliar noises coming from the whole area surrounding his cabin. What could this be? Had he managed to directly transduce the natural impulses of the ground energy into audio?

His own last claim, made two weeks before he passed away was made to a kind neighbor: "The past is nothing. I have perfected now the greatest invention the world has ever known ... I have taken light from the air and earth ... as I did sound".



ABOUT 2500 years ago (500 B.C.), there was a wealthy Greek named Zakyneros living in Samos, Greece, who had power, wealth, prestige and slaves but got in trouble with the Greek power structure which ruined him. They confiscated his spacious, olive-covered estate, his bank account, and his slaves, then banished him from the country. He was put aboard a Phoenician ship as a prisoner which sailed out of the Mediterranean, across the Atlantic and across the Caribbean Ocean to the mouth of the Rio Grande River near what is now Brownsville, Texas. There they dropped their sails and turned to oars powered by galley slaves to enter the mouth of the mighty river and row northward upstream against the river's current for 800 miles to a point now El Paso, Texas; but they didn't stop there. They continued north another 190 miles to the mouth of a tributary, the river the Spaniards would later name Rio Puerco. They entered this river and rowed another 28 miles northwesterly to a point where now lies the mystery stone with strange inscriptions.

Here the Greek Zak escaped from his captors and hid out in a

canyon where the mystery rock is now located until his captors were gone. There he made his home and wrote his life story in stone, using the Phoenician-Greek alphabet, standing out clearly to this day on the face of the Mystery Rock.

The above is the astonishing story told by Dixie L. Perkins in her carefully researched book, **The Meaning of the New Mexico Mystery Stone**, published in 1979.

This description of the rock with its mysterious inscriptions, how they got there, and their translation is somewhat different from that reported in *Fate Magazine* of Sept. 1990 which went like this: A Phoenician galley with slaves and crew ran aground on a sand bar in the Rio Puerco near the site of a rock carving and a bored passenger happened to have the tools, the skill, and the motivation to chisel a large number of letters deeply into a rock face. The article goes on to say the letters are deeply incised, are in Aramaic, and are a copy of the Ten Commandments. After reading the article in *Fate Magazine* I realized the site described was only an hour's drive from my home in Albuquerque. What an opportunity but how to find the exact spot? This is bleak, desolate country wa...

thousands of canyons and millions of rocks, so finding a rock with special carvings on it would be like looking for a needle in a haystack. But fate smiled on me when a few days later I "chanced" to mention this strange rock to a new friend I had just met. "I know about that rock," he said. "Can you draw me a map or take me to the site?" I asked. "No", he replied, "but I have a friend who can and gave me a phone number to call. Within two days I had put together a team of four including our guide to locate and examine the Mystery Stone. This rock is so well hidden no one could ever find it without a guide but I was glad it was hidden since we found no empty beer cans, no dog crap, and no litter of any kind to mar the wild, stark beauty of this place.

Sure enough, there was the huge rock facing us with the mysterious inscriptions standing out bold and clear as if they had been made only yesterday. How could they have been preserved so well for so long? I had seen many gravestones of granite with the usual words carved into the stone that had been sitting in a cemetery less than 200 years and the lettering on them is always discolored and stained. We could not attribute the new appearance of the inscriptions to the dry climate nor the protected area in which the rock sits because, as we shall see later, the climate in this spot 2500 years ago was said to be moist rather than arid.

The rock face faces north and is tilted downward about 40 degrees. It also leans forward a little. The inscriptions covered an area about 4 feet wide by 2 feet high. There were 9 lines of letters with about 27 letters in most of the lines. The letters were quite large, about 2 inches high and 1½ inches wide with an occasional space between a group of characters. But, the letters were not deeply incised, were not Aramaic, and not the 10 Commandments. Instead, the letters were incised perhaps only about 1/8-inch deep, were of the Phoenician-Greek alphabet, and were, when translated, a record of Zak's origins, his exile, and his survival in a strange land over 5,000 miles away from his native Greece, according to Perkins' book.

As we stood in this desolate, rocky, and treeless land with no water except the muddy waters of a small dying river half a mile away, we had to ask ourselves, "How could Zak or Indians or any other human survive here?" We reasoned that the climate must have been drastically different in Zak's day. When you gaze across the bleak landscape that is New Mexico today, you see a treeless, waterless desert except along about three major rivers of higher elevations over 7000 feet. How could Zak survive here? Perkins' book gave the answer which was written into the rock. New Mexico's desert was not always a desert. Some 2500 years ago the climate was moist so that the land was green and lush with trees and grass and an abundance of wild game. Zak's inscriptions clearly point this out. Whereas today the Rio Puerco is a small exceedingly muddy stream that

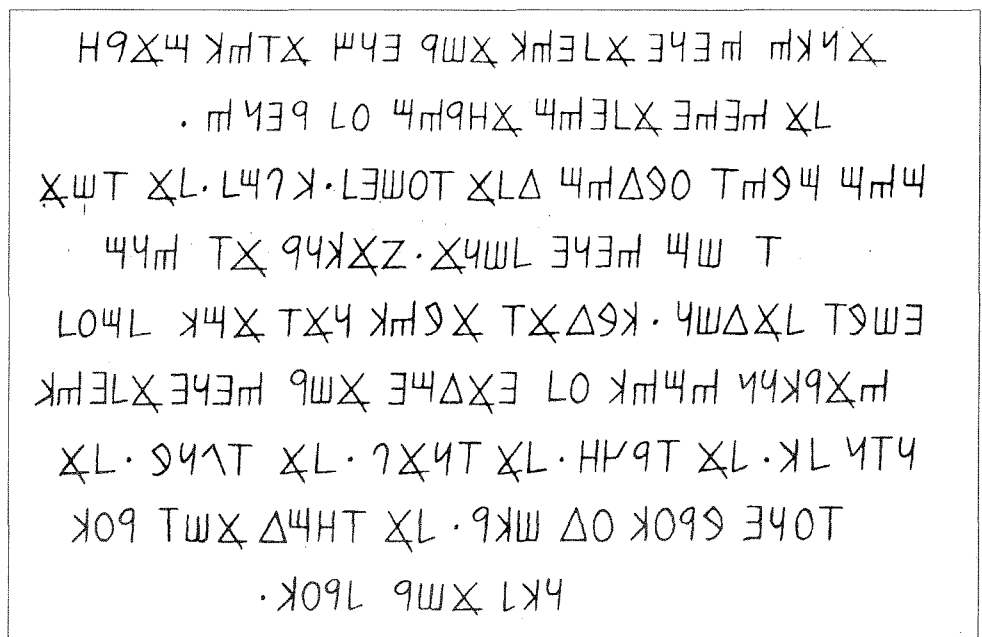
sometimes runs and sometimes is dry, Zak said it ran full, clean, and swift, and we can assume the year round. Rio Puerco translated from the Spanish means "Pig River" and it has been well named since its waters look as if they had originated in a pig sty.

Today, neither the Rio Grande nor the Rio Puerco are navigable in anything except a rubber raft floating downstream during the summer rainy season. The Rio Grande is muddy like the Mississippi with no well defined channel and beginning some 50 miles north of Albuquerque start a series of dams and irrigation canals extending all the way to the mouth of the river and the Gulf of Mexico. But, 2500 years ago, both rivers, according to Zak, must have been running the year round wide and deep and probably clear.

Is New Mexico's Mystery Stone with its strange inscriptions for real or is it a hoax? One thing that bothered all of us who went out to see the rock was the freshness of the lettering. The letters appeared to have been done only a few days or weeks ago. How could they be even 200 years old much less 2500 years old and stand out in such sharp relief without a flaw? Yet Perkins' book says people were aware of the Mystery Stone as early as 1850 and if true, the inscriptions would be at least 140 years old with no discoloration, no staining, no moss, no lichen, no nothing. How could this be possible?

We also noticed that a surfacing job appeared to have been done somehow to flatten out a good writing surface. The rest of the huge boulder was rounded or rough as is typical in nature, not flattened out. Then there appeared to have been some base coat of a strange, unknown, tan-colored, plaster-like material spread over the flattened surface into which the letters were incised. What the material was no one could tell. Nine of us had ever seen anything like it though we were familiar with such things. This base coat does not match any material we have on earth.

If Zak was really a prisoner and escaped, how could he just happen to be carrying the hammer and chisel or other special tools



Facsimile of inscription

necessary to do such a beautiful job of lettering on a very hard rock? When you are running for your life trying to escape from captors would you carry around a rock carving kit with you?

Another bothersome question is, why would a small sailing ship come all the way across the Atlantic, sail through the Caribbean, along the Gulf Coast of the U. S., through the Gulf of Mexico, then enter the mouth of a big flowing river (the Rio Grande) drop sails, and use oars against a flowing river current to meander over a thousand miles inland? I have measured the crooked Rio Grande and it is a very long way by river, especially oar-powered, to get to the site of the Mystery Stone. Why all this distance? Why the Rio Puerco? Why not the Mississippi at New Orleans which is much closer? If they were looking for something special like gold, why does not Zak's inscriptions say so? Can you imagine all the rich real estate Zak's galley had passed once it got into the Caribbean? If it was trade they were after, there must have been hundreds of natives all along the shore along which the galley passed without having to go all the way to the Rio Grande and then row against a river current over a thousand miles.

If the Greek Zak did not do this rock carving, who did? When did they do it and why? Those letters in the inscription are perfectly formed. No wavy lines. No imperfections, It's the job of a professional. It looks almost as if done by some high tech method like laser. Who would have the motivation, the energy, and the skill to incise the letters of a forgotten language on a rock in a remote desert in New Mexico? Is author Perkins' translation correct or could the inscriptions be of extraterrestrial origin? If so, who were they, what was their mission, when did they do it, and what do the inscriptions really say?

This mystery rock bugs us. We think there may be a lot more to the story. We may try to interest some expert from the archeology department of the University of New Mexico unless they think the whole thing a hoax and not even bother to consider the possibility of something real and unique. We are considering taking one or more psychics out to the site to see if they can come up with anything. What we really need is a good psychometrist who could lay a hand on the inscriptions and go back in time to find the origin of the letters.

A chariot of the gods descending to work on that rock with super high-tech energies may be a more plausible theory than that of rowing a galley 1000 miles upstream in a river 2500 years ago to leave an inscription that cannot be explained by ordinary logic.

Hopefully, in a future story, I'll be able to tell you what we found out with further investigation. ■

REFERENCES

1. Perkins, Dixie L., **The Meaning of the New Mexico Mystery Stone**, 1979, Sun Pub. Co., Albuquerque, NM.
2. *Fate Magazine*, Sept. 1990

WILLIAM S. PEAVY is a retired professor of Horticulture at the Texas A&M University, is a student and researcher into paranormal phenomena, and seeks to use the scientific research approach to understanding and explaining these phenomena. He edits a newsletter entitled *Abundant Living*, addressing all the ways and means to the good life through the body, mind, and spirit. He is also the author of a new book on natural food growing entitled **Super Nutrition Gardening**. He can be reached at 316 Horton Lane, NW, Albuquerque, New Mexico 87114.

A
D
O
O
R
H
A
S
O
P
E
N
E
D


Historical info to explain today's events

Essential data to restore sovereignty


Healing remedies and insights

Metaphysical overviews

UFO/Alien reports



Access mountains of significant information

Subscribe to  M A G A Z I N E	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 2px;">Issues:</td> <td style="padding: 2px; text-align: center;">1</td> <td style="padding: 2px; text-align: center;">6</td> <td style="padding: 2px; text-align: center;">12</td> </tr> <tr> <td style="padding: 2px;">U.S.</td> <td style="padding: 2px; text-align: center;">4.95</td> <td style="padding: 2px; text-align: center;">27.00</td> <td style="padding: 2px; text-align: center;">49.00</td> </tr> <tr> <td style="padding: 2px;">CANADA</td> <td style="padding: 2px; text-align: center;">5.95</td> <td style="padding: 2px; text-align: center;">33.00</td> <td style="padding: 2px; text-align: center;">61.00</td> </tr> </table>	Issues:	1	6	12	U.S.	4.95	27.00	49.00	CANADA	5.95	33.00	61.00
Issues:	1	6	12										
U.S.	4.95	27.00	49.00										
CANADA	5.95	33.00	61.00										

U.S. FUNDS ONLY

Published bi-monthly, distributed in the United States and Canada.

Perceptions magazine, c/o 10734 Jefferson Bl., Suite 502-BL, Culver City, California Postal Zone 90230
 Telephones: Main: (310)313-5185 Fax: (310)313-5198 Ad Sales: (310)313-5194 (800)276-4448

Perceptions magazine contributes to personal and political empowerment while revealing pertinent information glossed over and suppressed by mainstream media. Its full-spectrum approach to today's issues crosses the boundaries that separate cultures, ideologies and religions.

In-depth historical reports, important legislative analysis, thought-provoking concepts and UFO phenomena stand side-by-side in this sophisticated, yet easy-to-read publication.

Perceptions magazine awakens, challenges and tickles the intellect while touching the soul.

Ask for it at a magazine store near you.

Earthquakes and Astrology

The Regional Factor in Planetary Seismic Correlation*

by Judith Hill

IS it possible that earthquakes can be triggered by planetary placements or configuration? This age old question was explored in a pioneering research project which applied scientific method to see what, if any, correlations exist between planetary placements and earthquakes.

Focusing on geographic location was the key that led to the conclusions outlined in this paper. Earthquake occurrence within geographic regions has been found to correlate with planetary positions. The important point is that each region's earthquakes appear to correlate with planetary placements **UNIQUE TO THAT REGION**. That is, strong planetary correlations are often found for one region or fault zone while being completely absent outside of it.

This article summarizes the results of this research project while detailed discussion of the methodology and results is contained in the technical report by Hill & Polit, "Correlation of Earthquakes with Planetary Placement: The Regional Factor," *N.C.G.R. Journal* 7(1), 1987.

In order to determine if planetary charts (the positions of the planets on particular dates) were "similar" on the dates of important regional earthquakes, it was first necessary to develop criteria defining "similarity." Therefore, four criteria were developed which allowed us to quantitatively measure the similarity of planetary charts. These four criteria are not arbitrary, but are representative of the basic principles of western astrology.

It was then necessary to determine what planetary similarities routinely occur in the charts of randomly selected (non-earthquake) dates. Over 2000 groups consisting of random dates were generated by a computer-model graciously supplied to the project by an independent seismologist. The average number of similarities found under each of the four criteria, for these random groups, established the natural frequency of occurrence. It was then possible to compare the planetary similarities totalled in the planetary charts of earthquakes against this established natural frequency for each criterion. This methodology was the first important contribution of this study.

In order to ensure a broad sample of earthquake charts, three separate studies were conducted, totaling 221 groups of important regional earthquakes throughout the world. This includes a complete sample of all of this century's great earthquakes that can be grouped by region. This list was developed from The World Seismicity Map (Tarr, 1977) and supplemented by Kanamori (1977). The resulting number of planetary similarities found

between charts for these regional earthquake groups was then compared to the natural frequency established by the random date groups.

It must be noted that some regions show little obvious similarity between the planetary charts. The majority of regions, however, show very clear patterns that were consistently associated with earthquakes. This variation between regions should not be surprising. Since regions of the earth differ from each other in almost every way, it should not be expected that each region behave the same. Indeed, one of the conclusions of this study was that the planetary-seismic correlation varies greatly between regions. Looking at particular geographic positions allowed the study to produce clear evidence that planetary positions are associated with earthquakes. The results of this study indicate that several regions of the earth do indeed display a striking coincidence of planetary placement at the time of earthquakes.

There are as yet many unanswered questions. For instance, the researchers noted that a strong planetary correlation might occur

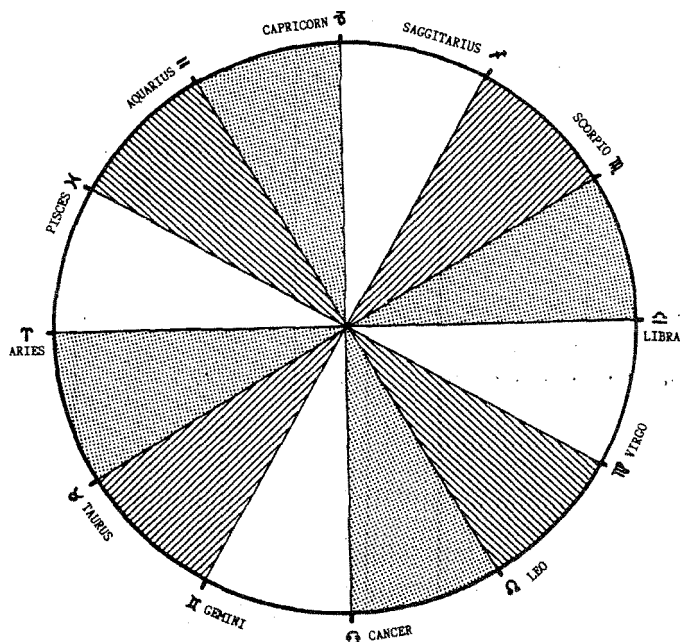


Figure 1
QUADRUPPLICITIES

There are three divisions-by-four of the ecliptic important to astrologers. Each quadruplicity or "cross" is composed of four "signs" or 30 degree sectors of ecliptic longitude. The traditional name of each cross is given at right.

- THE CARDINAL CROSS
Aries, Cancer, Libra, Capricorn
- THE FIXED CROSS
Taurus, Leo, Scorpio, Aquarius
- THE MUTABLE CROSS
Gemini, Virgo, Sagittarius, Pisces

* © 1990 Starlog Group. Reprinted by permission.

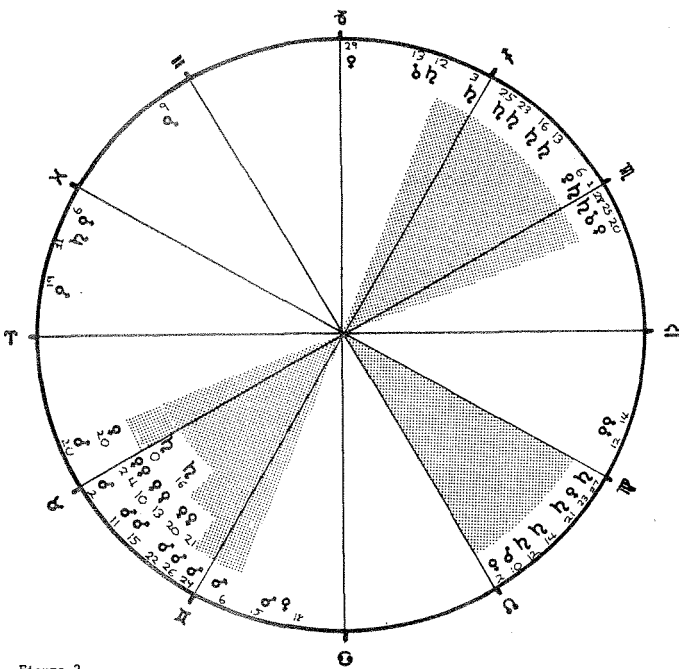


Figure 2
 SAN FRANCISCO BAY AREA
 SATURN=♄ VENUS=♀ MARS=♂
 Longitudinal positions of the Saturn, Venus and Mars for all 15 earthquakes greater than magnitude 6 occurring in the San Francisco Bay Area (1800-1984).

10-11-1800 (M6.0)	6-21-1808 (M6.3)	5-10-1836 (M6.8)	6-7-1838 (M7)
11-26-1858 (M6.3)	10-08-1865 (M6.5)	10-21-1868 (M6.8)	4-10-1881 (M6.0)
5-19-1889 (M6.1)	4-24-1890 (M6.0)	3-31-1898 (M6.5)	4-18-1906 (M6.3)
7-01-1911 (M6.6)	10-22-1926 (M6.1)	4-24-1984 (M6.1)	FIXED CROSS :

within a region for a number of years and then abruptly cease or change. Without further research, it would thus prove unreliable to attempt consistent earthquake prediction based on planetary patterns. Also, some regions were found to be so tightly geographically defined that a difference of 50 miles would cancel or dilute a significant planetary pattern. This occurs especially where separate faults are indicated for the neighboring regions. Also, in most regions, only the most important earthquakes would correlate with significant planetary patterns, while in some regions, even the smallest earthquakes would follow suit. Certainly, a great deal more research is necessary.

The most important question is, of course, how and why have these planetary seismic correlations occurred? Why do the earthquakes of separate regions correlate with separate planetary patterns?

To date, no individual has been able to answer these questions in a satisfying way. A great deal of recent research on the earth's magnetic field is being conducted. The research might offer us some clues to this age old puzzle. It is now accepted among many scientists that the planets at certain angles can act as obstructions to the solar wind, and at other times act to influence the Sun's orbit, thereby affecting the solar wind. Either situation can affect, in turn, the Earth's geomagnetic field, as it constantly responds to changes in the solar wind. According to several researchers, the fluctuations of this geomagnetic field do not go unnoticed. Geomagnetic changes have been shown to be associated with weather extremes [Goodman (1979), Payne (1983), and Goodavage (1980)], short wave radio interference (Nelson, 1951), and cycles of war and peace (Payne, 1984). More and more evidence accumulates to

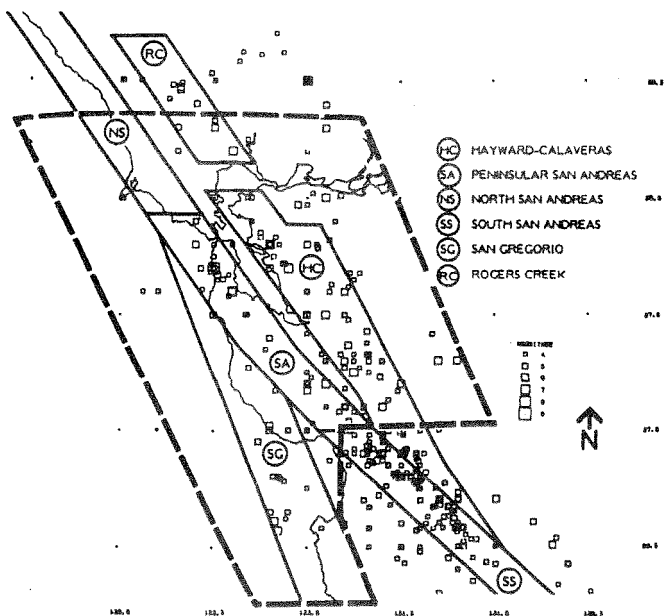
suggest that the Earth is not an isolated, totally self-regulating planet. However, none of this research yet explains why the occurrence of earthquakes in different regions to correlate with different planetary patterns. Future research into this phenomenon should be extremely interesting.

The field of *astroseismology* is as yet in its infancy. Surprisingly little work has been accomplished in this field. Perhaps the results illustrated here will stimulate further inquiry into this enigmatic study. The use of the regional factor for comparison of earthquake charts, while concentrating on the most important earthquakes, should greatly enhance the chances for successful research into seismic-planetary correlations.

INTRODUCTION TO THE ILLUSTRATIONS

In order to best understand the illustrations, it is suggested that the reader familiarize him/herself with three divisions of the ecliptic plane which are traditional to astrology (see Figure 1). These three divisions of the ecliptic are known as "quadruplicities", commonly called "crosses". A "cross" is a group of four astrological signs (30 degree sectors of the ecliptic) which are posited at right angles, or 90° to each other in the 360° circle of ecliptic longitude, thus forming a cross. Figure 1 shows these crosses clearly. There are three such "crosses" in astrological traditions, better known as the Cardinal Cross, the Fixed Cross and the Mutable Cross. (See Figure 1)

The part these crosses play in regional astroseismology appears very important. The single, most outstanding discovery of this research is quite straightforward: On the dates of the important earthquakes in many regions, two or more planets will prefer to show a distinct preference for one of these three traditional crosses (Figure 1) of the ecliptic. The "rule" can be stated another way by saying that the planetary positions on earthquake dates tend to be conjunct, at right angles, or opposed (within an orb of 15 degrees)



S.F. BAY AREA EPICENTRAL MAP
 Outline of Study Area Shown Against Location of Earthquakes With Fault Zones Displayed as Areal Sources

SAN FRANCISCO BAY AREA, CALIFORNIA (FIGURE 2)

The San Francisco Bay Area was chosen (because the authors lived there) as an example of regionally unique planetary correlations at the time of earthquake in the region. All of the earthquakes of magnitude 6 or greater (after Toppazada, 1981) occurring in the Bay Area from 1800 through 1984 were analyzed. The Bay Area is taken as the region roughly encompassed by the Calaveras, Hayward, San Andreas and San Gregorio-Palo Colorado faults, from north of Hollister (to avoid differing faulting characteristics of the San Andreas to the south) to slightly north of San Pablo Bay.

The resulting 15 Bay Area earthquakes demonstrate a strong preference (Figure 2) of Saturn, Mars, Venus, and to a lesser extent, the Sun, for certain portions of ecliptic longitude. The composite chart for these planets is presented in Figure 2 along with the dates and magnitude of the earthquakes represented. The shaded areas in Figure 2 highlight those areas of ecliptic longitude preferred by the three planets. You can see that the planets are largely found to be within three sectors which are positioned at right angles to each other. These three sectors of ecliptic longitude make up the sign of Scorpio and its polar opposite, Taurus, with a 5 degree "bleed off" into neighboring signs, at the cusps. The sign of Leo is

Planetary Chart Similarities for Random vs. San Francisco/Bay Area Earthquake Dates	T15 Random Dates			T15 San Francisco Earthquake Dates		
	Card.	Fixed	Mut.	Card.	Fixed	Mut.
Highest number of planets in any one sign	07			14		
Number of empty signs	0			02		
Highest number of planets in any of the 6 polarities	10			20		
Highest occurrence of Venus in any one sign	04			06		
Highest occurrence of Mars in any one sign	03			06		
Highest occurrence of Saturn in any one sign	03			05		
	Random Dates			S.F. Dates		
	Card.	Fixed	Mut.	Card.	Fixed	Mut.
Total occurrence of Mars in each cross	06	05	04	02	08	05
Total occurrence of Venus in each cross	07	02	06	02	09	04
Total occurrence of Saturn in each cross	07	04	04	01	11	03
Compared cross emphasis for all 3 planets combined	20	11	14	05	28	12

to their own positions on the dates of previous earthquakes in the same region. A special note of interest should be added here. The cross preferred by two different planets will most frequently be a separate one, as best shown in Figure 8. The beautiful symmetrical patterns created by several planets preferring the same cross (Figures 2, 3 and 4) occur much less frequently.

The following are several graphic examples portraying unusual similarity between planetary charts for earthquakes of specific regions. Such similarities are not the result of natural earthquake cycles "coincidentally" linked to the sidereal (orbital) cycle of one or another planet. This idea must be dismissed when there is more than one planet involved in the pattern, as all planets have different cycles. Further, no other physical cause has yet been shown.

A study of each graphic example will reveal how each region possesses its own unique planetary patterns which seem to be in evidence on the date of the most important earthquakes in that region. To dramatize this point, four of the graphic examples (Figure 2, 3, 4 and 5) are taken from different regions in the state of California. At the time of important earthquakes, each of these four regions show extremely strong repeating planetary patterns which are not shared by the other three regions. Significant regional correlations between planetary patterns and earthquakes are to be found throughout the world. The reader should find these graphic illustrations of great interest. For the first time, clear visual evidence can be seen of planetary-seismic correlation.

An illustrated discussion is presented for each region listed below.

1. San Francisco Bay Area, California — Figure 2
2. Parkfield, California — Figure 3, 3A
3. Mammoth Lakes-Bishop Area, California — Figure 4, 4A, 5, 6
4. Santa Barbara, California — Figure 7
5. Kamchatka, U.S.S.R. — Figure 8
6. Peru — Figure 9

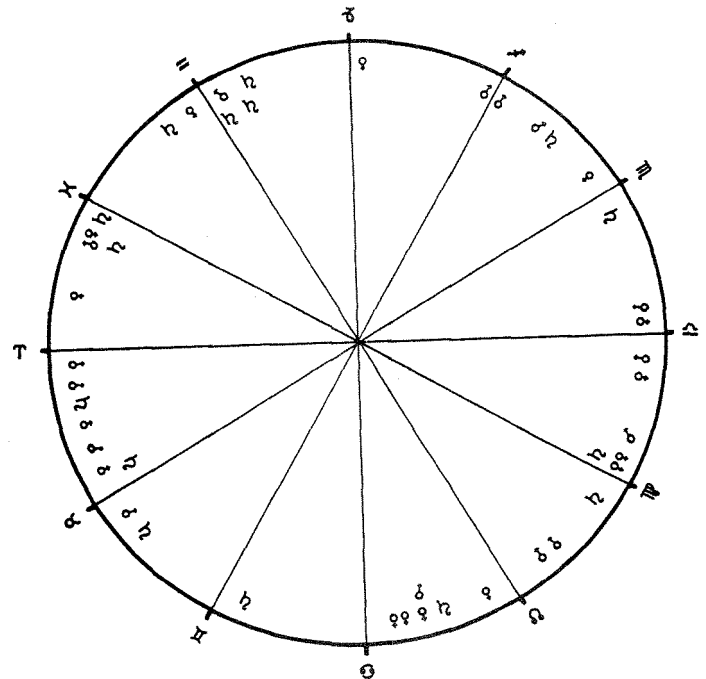


Figure 2A
RANDOM DATE GROUP

This figure gives the positions in ecliptic longitude of Venus, Mars, and Saturn on fifteen randomly selected (non earthquake) dates. This group is to be exclusively used in comparison with the fifteen earthquake dates in the San Francisco Bay Area group, Figure 2.

8-08-1978	3-06-1906	1-29-1904
7-28-1955	1-12-1939	6-01-1961
9-30-1918	2-26-1940	9-23-1969
8-02-1902	9-24-1953	2-14-1906
5-27-1975	2-07-1943	8-09-1961

shown at right angles to both Scorpio and Taurus. These three sectors, accidentally or not, are arranged in a classical "T square" formation of western astrology (the shaded areas forming a "T"). The signs of the T-square are members of the Fixed Cross. (See Figure 1.) The following observations can be made.

1. Saturn transited the Scorpio sector in 7 of 15 events and is found in the T-square in 13 of 15 events. The probability for any one of the 6 studied bodies to fall in this 130 degree sector in 13 of 15 earthquakes is roughly one in 2,200.

2. Of the 13 events where Saturn is within the T-square, 10 events have at least 2 of the following 3 bodies also present in that T-square: the Sun, Venus and Mars. The probability of this happening among any 3 planets (of the 5 remaining) is about one in 135.

The combined probability of (1) and (2) above is roughly one in 300,000. That is, in a survey of 300,000 groups of random dates, one would likely find one group with a comparable build-up of any four planets in this 130 degree section of the ecliptic.

Now that we see that these earthquake dates are not behaving like random dates, we will explore how this information may be usefully applied. In order to do that, we must assume that future earthquakes within that region will coincide with similar planetary patterns as past events.*

The characteristics of Bay Area activity are straightforward:

— Saturn within the shaded area of the T-square (13 of 15 events).

— Two of Mars, Venus, or the Sun in this same T-square (10 of the 13 events when Saturn was also there).

Applying this information (and our assumption) to the future, the first thing to look for would be the position of Saturn. If Saturn

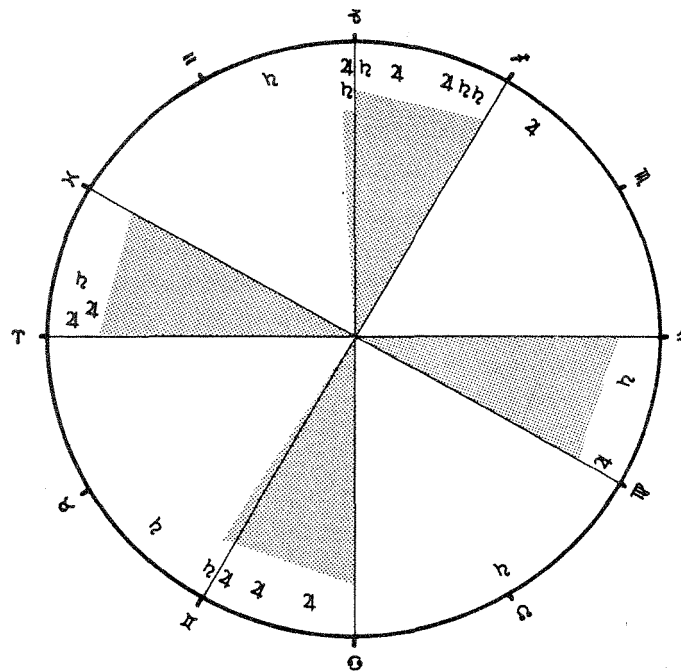


Figure 4

MAMMOTH LAKES-BISHOP REGION, CALIFORNIA

This figure gives the composite longitudinal positions of Saturn and Jupiter at all ten earthquakes of magnitude 5 and above, occurring in this region between 1900-1986.

1)1-4-12	M5.5	118.5	Wlong. 37.5Nlat.
2)7-6-17	M	118.7	" " 37.6" "
3)9-18-27	M6	118.8	37.5
4)11-28-29	M	118.2	37.?
5)5-10-36	M	118.5	37.5
6)9-14-41	M6	118.7	37.6
7)8-3-59	M5.2	118.6	37.4
8)6-4-60	M5.2	118.6	37.5
9)5-25-80	M6.2	118.8	37.6
10)7-21-86	M6.1	118.4	37.5

THE MUTABLE CROSS (of the ecliptic) Saturn ♄ Jupiter ♃

is in Taurus or Scorpio, or within 10 degrees of those signs, or if it is transiting Leo, we would have a higher likelihood of occurrence. Examining Figure 4, however, we see a heavy concentration of Saturn in Scorpio, enhancing the likelihood of a large earthquake while Saturn is in that sector.

While Saturn gives us very broad windows, a buildup of Venus, Mars, or the Sun in the T-square would highlight shorter periods within the Saturn transit. Again, in Figure 4 we see that Mars transited the Taurus sector 8 of 15 times with Venus also transiting the sector 7 times. Thus, a transit of Mars and/or Venus in the Taurus sector would further enhance the likelihood of a large earthquake in the Bay Area.

It is not enough, though, to run to the ephemeris and brace for an earthquake. The condition of two of the three planets transiting this particular T-square at the same time as Saturn has happened about 230 times since the year 1800, with only 15 earthquakes as large as magnitude 6. In all, this condition holds true about 11 percent of the time. Clearly more information is needed to predict earthquakes.

What appears easier for the Bay Area, however, is to predict aseismic windows (when earthquakes are likely to occur): when Saturn is not transiting this particular T-square. Looking at Figure 4, we see that there is only one true T-square not in the shaded region, a Saturn at 11 degrees Pisces. If the future will be like the past, we in the Bay Area can feel relatively safe in between T-square

* The researcher used knowledge of this pattern to successfully predict the earthquake of Morgan Hill, April 4, 1986.

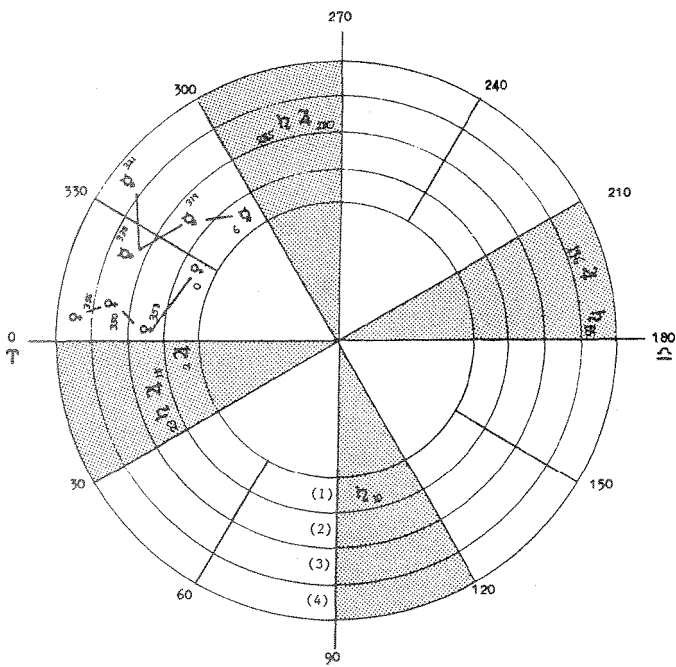


Figure 3
CONCENTRIC CIRCLE GRAPH FOR THE PARKFIELD CALIFORNIA EARTHQUAKE SEQUENCE

Each circle gives the longitudinal positions of Saturn, Jupiter, Venus and Mercury at one of the first four earthquakes of this group. The circles are marked (1), (2), (3), (4). The corresponding dates are listed at right.

MERCURY VENUS JUPITER SATURN

♿	♀	♃	♄
(1) Jan. 9, 1857, about M8.0	(2) Feb. 2, 1881, M5.9	(3) March 21, 1901, M5.5	(4) March 10, 1922, M6.5
(5) June 7, 1934, M6.0 (not shown)	(6) June 28, 1966, M6.0 (not shown)		

transits (e.g., from 1987 to 1997 we are in between transits). Safety, however, is elusive. The one outlier, Saturn at 11 degrees Pisces, was the great San Francisco earthquake of 1906. Perhaps Uranus (stationed during the 1906 event) and other slower planets play a more important role for the great San Andreas earthquakes due to their large recurrence intervals, while Saturn apparently controls the Bay Area's intermediate earthquakes.

It is interesting to note that in the time window of February 1988 through the year of 1990, the outer planets, Uranus and Neptune, will simultaneously conjunct and oppose their own positions at the famous 1906 event. Within this time frame, between March 1989 and November 1990, two other repeats of planetary positions will also occur. Jupiter will return to the same sign position. All eclipses in these years will occur in the signs of Leo and Aquarius which was also the case in 1906. If the great earthquakes of the San Francisco Bay Area occur under repeated planetary patterns, a Magnitude 7-8 earthquake could be expected to occur during this time frame. (ed. note: October 17, 1989, Loma Prieta - 7.1 on the Richter scale.)

Random Positions of Venus, Mars, and Saturn for 15 Dates (Figure 2B)

These completely random or non-earthquake dates were selected by computer. The positions of Venus, Mars and Saturn on these 15 dates can now be compared with the groupings of these same planets for the San Francisco Bay Area earthquake date group (Figure 1). The San Francisco group is also made up of 15 dates.

It is very important for the reader to understand the difference between the coincidences of planetary position which occur randomly and those which can occur on the dates of earthquakes for certain regions. What kind of similarities can be expected to occur among purely random date groups) In groups under 20, some degree of cross preference may be noted. In this group

Figure 3A

**LINEAR QUADRUPLICITY DISPLAY
Parkfield, California**

This graph expresses the positions of Mercury ♁ Venus ♀ Jupiter ♃ and Saturn ♄ in the quadruplicities or "crosses" each planet occupied on the date of each earthquake. Compare each planet to itself and to the other planets.

0-30° Card.Cross	0-30° Fixed Cross	0-30° Mut.Cross	
♃ ♀	♄	♀	1-9-1857
♃ ♀	♄	♀	2-2-1881
♃ ♀		♄ ♀	3-21-1901
♃ ♀	♄	♀	3-10-1922

Figure 4A
MAMMOTH LAKES-BISHOP REGION
CALIFORNIA

0-30° Fixed Cross	0-30° Mut.Cross	0-30° Card.Cross	
♃	♃		01-04-1912
♃	♃		07-06-1917
	♃	♃	09-18-1927
	♃	♃	11-28-1929
		♃♃	35-10-1936
	♃	♃	09-14-1941
♃		♃	08-03-1959
		♃ ♃	06-04-1960
	♃	♃	05-25-1980
	♃	♃	07-21-1986

LINEAR QUADRUPLICITY DISPLAY

This graph shows the positions of Jupiter and Saturn in the crosses they occupied on the date of each earthquake. Compare each planet to itself and to the other planet.

♃	♃
SATURN	JUPITER

(Figure 2A) there is a decided preference for all three planets for the Cardinal Cross. There might also be occasional polarity emphasis (a polarity means two signs which oppose each other on the ecliptic circle); and sign preferences among the planets are common. Degree "bunching" is also sometimes noticed among charts for purely random dates. All three of the above planetary similarities are observable in Figure 2A. This group was particularly selected to illustrate these points.

How then does this random figure differ from the San Francisco Bay earthquake group? The difference lies in both the quantity and extremity of these occurrences, which average twice as high among the Bay Area dates. Let us compare the two groups: (See figure at top left of page 27)

Concentric Circle Graph for the Parkfield California Earthquake Sequence (Figure 3)

On the San Andreas fault near Parkfield, California, there have been large earthquakes (about magnitude 6) occurring with remarkable regularity, one about every 22 years since 1881. Prior to that time there was incomplete earthquake reporting due to the lack of settlers in that area. The regularity of this 22 year Parkfield cycle, and other factors, led seismologists to theorize that a similar Parkfield earthquake could have triggered the great Southern

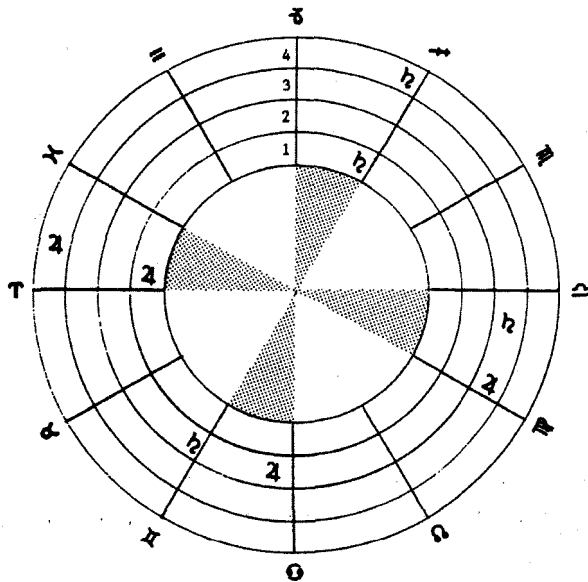
Figure 5
MAMMOTH LAKES-BISHOP REGION, CALIFORNIA

This figure shows the longitudinal positions of Saturn and Jupiter on the dates of the four largest earthquakes (M6 and above) in this region between 1900 and 1986.

Each concentric circle corresponds with an earthquake date. Match the numbered circles to the dates below.

- 1) 9-18-27 M6 118.8Wlong.37.6Nlat.
- 2) 9-14-41 M6 118.7Wlong.37.6Nlat.
- 3) 5-25-80 M6.2 118.8Wlong.37.6Nlat.
- 4) 7-21-86 M6.1 118.4Wlong.37.5Nlat.

Saturn ♄ Jupiter ♃ Mutable Cross ☒



California earthquake of 1857 (24 years before 1881) which ruptured over 200 miles of the San Andreas fault from Parkfield, past Los Angeles, and almost to San Bernardino.

In order to test this theory with respect to planetary positions, we compare the positions of Mercury, Venus, Jupiter and Saturn for the 1857 earthquake with those of the first three recorded earthquakes in the Parkfield sequence. The dates and magnitudes of these earthquakes (and the two subsequent earthquakes, which display some of the same planetary similarities) are listed and numbered consecutively. The similarities are stunning. Jupiter and Saturn are in the cardinal cross in all four earthquakes. Although this cross repetition roughly coincides with the 22 year earthquake cycle of this region, it is highly unlikely that all the earthquakes would fall in those segments of time when both planets were in the cardinal cross. Note also the remarkable consistency of Mercury and Venus. Since these planets circle the ecliptic each year, this repetition of position cannot be affected by the 22 year cycle.

We conclude that the planetary similarities discussed above support the theory of seismologists that a Parkfield earthquake triggered the great earthquake of 1857. Since large earthquakes occur in Parkfield about every 22 years, this trigger mechanism could be an important tool in predicting the next great earthquake on that segment of the San Andreas fault.

Mammoth Lakes, Bishop Area, California Figures 4, 4A, 5, 6

The eastern flank of the Sierra Nevada is marked by hotspots of seismicity which slowly migrate up and down this margin over the

centuries. Such earthquakes are associated with both the uplift of the Sierra mountains and the downdropping of the land mass to the east, such as Death Valley. One such hotspot is currently located in the Mammoth Lakes area, roughly east of San Francisco, and it has produced four large earthquakes in this century.

Figures 4, 4A, 5 and 6 illustrate the repeating planet patterns which are seen accompanying earthquakes in this region. The most outstanding feature is the apparent tendency of the planets Saturn and Jupiter to occupy the "mutable cross" of the ecliptic plane, at the time of earthquakes in this region. The chance of Jupiter and Saturn to occupy this cross at the same time is one in six.

In Figure 4 we seen that this occurred 5 out of 10 times, and if we allow for a cusp of 2 degrees, 6 in 10 times. Jupiter was found alone in the mutable cross 8 in 10 times, or 9 in 10 times allowing for the 2 degree cusp. Saturn transited this cross or its cusp a total of 7 out of 10 times. The expected frequency for either Jupiter or Saturn to be singly in this cross is 1 in 3.

It is important to note that precisely the same effect is seen in Parkfield, California (Figure 3). There is, however, one major difference. In the Parkfield events, we see that Saturn and Jupiter prefer the cardinal cross of the ecliptic (Figure 1), whereas at Bishop these planets favor the mutable cross. In San Francisco (Figure 2) this same effect can be observed in the fixed cross, involving a trio of Saturn, Mars and Venus.

Santa Barbara, California (Figure 7)

There are eight earthquakes of importance in the Santa Barbara area within record. Five of these eight earthquakes took place

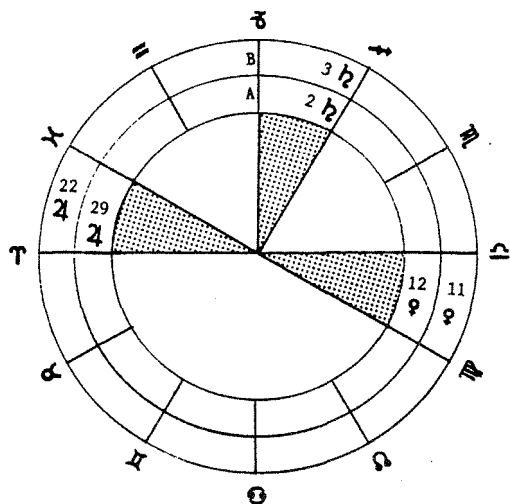
Figure 6
MAMMOTH LAKES-BISHOP REGION, CALIFORNIA

This figure compares the longitudinal positions of Saturn, Jupiter, and Venus on the dates of two of the total four largest earthquakes of this region within this century.

- Circle A: 9-18-27 118.8Wlong.37.5Nlat. M6
- Circle B: 7-21-86 118.4Wlong.37.5Nlat M6.1

Degrees of planets are given in zodaical degrees in place of ecliptic longitude. Each sign has 30 degrees, counted from 0 to 29.

SATURN ♄ JUPITER ♃ VENUS ♀ MUTABLE CROSS ☒



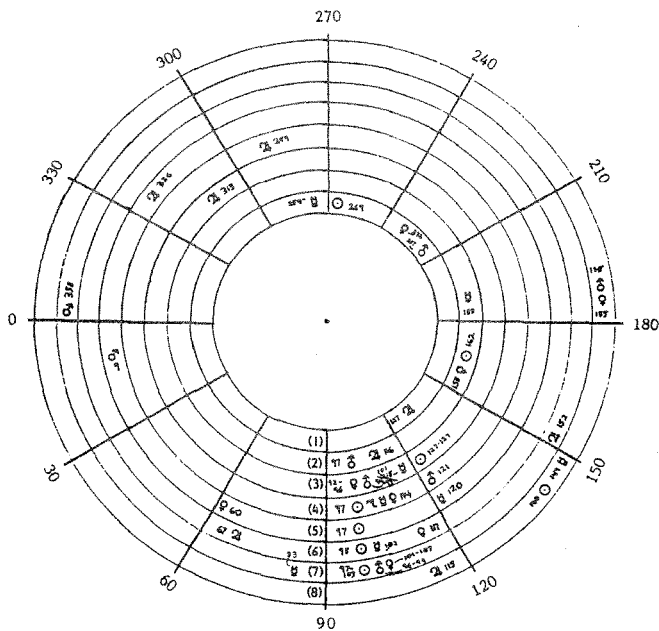


Figure 7 CONCENTRIC CIRCLE GRAPH FOR EARTHQUAKES IN THE SANTA BARBARA, CALIFORNIA, AREA

- (1) Dec. 21, 1812, M=7
- (2) Sept. 5, 1883, M 5.9
- (3) July 27 - 31, 1902, eqk. swarm, M 5.5
- (4) June 29, 1925, M 6.2
- (5) June 29, 1926, M 5.5
- (6) June 30, 1941, M 5.9
- (7) June 29 - July 5, 1968, eqk. swarm, M 5.2
- (8) Aug. 13, 1978, M 5.7

The longitudinal positions of the sun, Mercury, Venus, Mars, and Jupiter are shown for the dates of the most significant earthquakes recorded in the Santa Barbara area since 1800. The dates and magnitudes of the earthquakes are listed and numbered consecutively. Each concentric circle in the figure displays the planetary positions for a single earthquake with the number of the earthquake also given. Compare the positions of the planets individually, both to themselves and to the other planets. Note also their exact degree positions.

within one day of each other in June, in separate years. The sun is therefore between 97 and 98 degrees of ecliptic longitude as viewed from Earth, or geocentrically. These degrees correspond to the 7th and 8th degree of Cancer.

The figure reveals that the planets, Mercury, Venus, Mars and Jupiter, also preponderate in the sign Cancer, or within 1 degree of its cusp with Leo, the neighboring sign. Mercury and Venus are always found at no greater distance than 28 and 48 degrees of the Sun, respectively. This still does not account for the unusual occurrence of four out of a total eight positions for both planets within the boundary of Cancer. Mars, which is free from this proximity bias, also shows four out of a total eight positions within this boundary. Additionally, Mars is positioned within 15 degrees of Venus on five out of the total eight dates. Three of these Mars-Venus conjunctions occurred exclusively within the cardinal cross and within a narrow orb of just 5 degrees, thus forming conjunctions. A special note should be made of the Jupiter positions. On six out of the total eight dates, we see that Jupiter is positioned across a distinct pole, whose midpoint is roughly equal to the cusps of Leo and Aquarius (longitudes 120 and 300).

Kamchatka

One of the earthquake regions from this study deserves special mention beyond the simple comparison by the four criteria. This is the series of four earthquakes which occurred in Southern

Kamchatka, Russia.

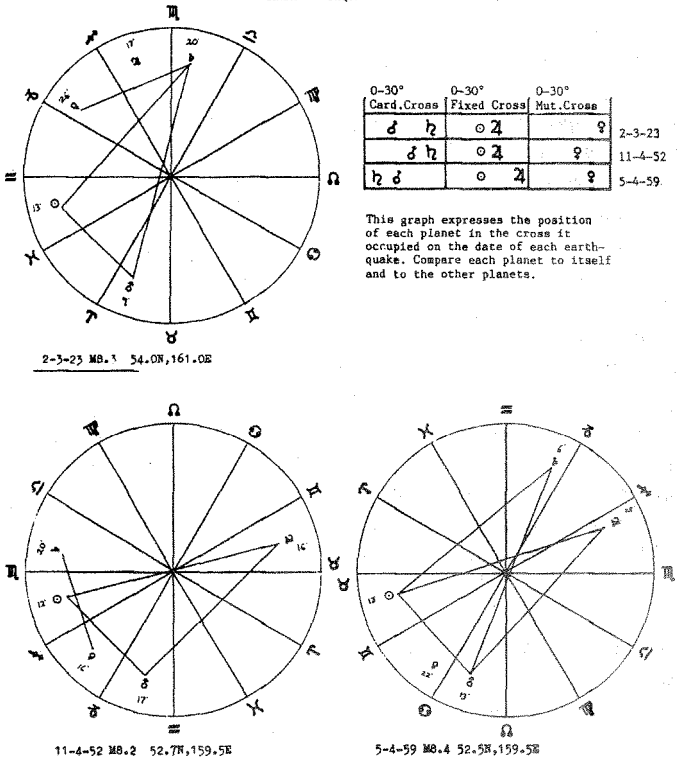
Only the last three events are discussed since their charts exhibit remarkable similarities, while the chart of the first event in 1904 is largely unrelated. The planetary configurations of the Kamchatka group are displayed in Figure 2 and should provide fertile ground for the eyes of an astrologer. Note especially the repeated triangles in the three charts.

The fundamental pattern observed in this sequence of three great earthquakes is that five of the six bodies analyzed in this study repeated positions within their respective crosses. The Sun and Jupiter repeated their positions in the fixed cross, while Venus was in the mutable cross, and Mars and Saturn were in the cardinal cross in all three events. In astrological theory this would be highly significant for the natal charts of three individuals, perhaps a family of three. The probability for five of six bodies to repeat their cross positions in three consecutive events, in a group of four, is roughly one chance in 5,500. That is, on average, you would have to sample 5,500 groups of four random dates to match the cross repetition found in Southern Kamchatka.

What is more compelling, however, is that these five planets did not merely fall randomly within these 30 degree sectors, but remained either conjunct, square, or opposed to their positions during the previous event within the traditional astrological orbs, with an average orb of only 3.9 degrees.

The only exceptions were Jupiter and Saturn during the 1959 earthquake which did, however, maintain looser orbs of 12 degrees and 14 degrees, respectively. Most notably, during the 1952 earthquake, the Sun, Jupiter and Saturn were all within one degree by conjunction, square or opposition of their positions during the previous event in 1923. ■

Figure 8 KAMCHATKA, U.S.S.R. GREAT EARTHQUAKES



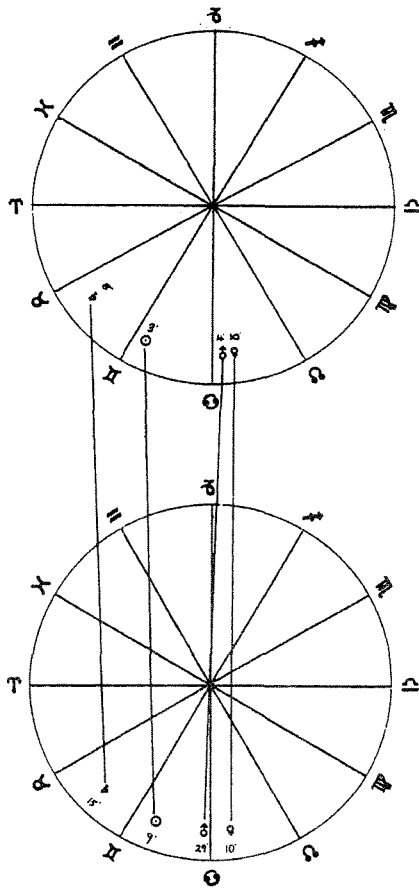


FIGURE 9
PERUVIAN GREAT EARTHQUAKES

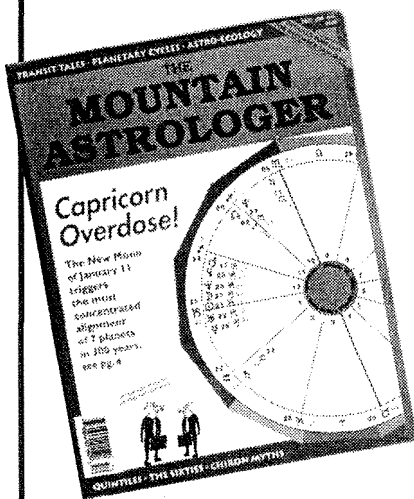
POSITIONS OF SUN, VENUS, MARS AND SATURN DURING 2 OF THE 4 EARTHQUAKES IN THE PERUVIAN GREAT EARTHQUAKE GROUP.

Chart A 5-24-40 M8.4 10.5S 72.0W
Chart B 5-31-70 M7.8 9.1S 78.8W

BIBLIOGRAPHY

- Goodavage, J. *Our Threatened Planet*. New York, New York. Simon and Schuster, 1980.
- Goodman, J. *We Are the Earthquake Generation*. New York, New York. Berkeley Books, 1979.
- Kanamori, H. "The Energy Release in Great Earthquakes." *Journal of Geophysical Research* 82(20), 2982-2983.
- Nelson, J. H. "Short Wave Radio Propagation Correlation with Planetary Positions." *CA Review* (March, 1951), 25-34.
- NOAA/NSDC, 1981. "Catalogue of Significant Earthquakes, 2000 B.C.1979," World Data Center A for Solid Earth Geophysics, Report SE-27, by Robert A. Gause and John B. Nelson, National Geophysical and Solar-Terrestrial Data Center.
- Payne, B. "Cycles of Peace, Sunspot and Geomagnetic Activity." *Cycles* (May/June 1984), 101-105.
- "Prediction of Storms Based on Planetary Positions and Geomagnetic Field Disturbances." *Geocosmic Research* 8(2), 1983.
- Tarr, A. C. "World Seismicity Map," Prepared by the U.S. Geological Survey from Earthquake Data of the National Oceanic and Atmospheric Administration, 1977.
- Tomaschek, R. "Great Earthquakes and the Astronomical Positions of Uranus." *Nature* (July 8, 1959), 177-178.
- "Reply." *Nature* (April 1 23, 1960), 337-338.
- Toppazada, T. R., C. R. Real, & D. L. Parke. "Preparation of Isoseismal Maps and Summaries of Reported Effects for Pre-1900 California Earthquakes." California Division of Mines and Geology, Open-File Report 81-1 ISAC, 1981.
- Utod, H. O., & N. H. Heck. "Earthquake History of the U.S., Part 11. Stronger Earthquakes of California and Western Nevada." U.S. Department of Commerce. Coast and Geodetic Survey, Washington, 1961.

Here is the high-quality astrology magazine you've been waiting for!



The Mountain Astrologer

Join 5,000+ subscribers who rely on *The Mountain Astrologer* to connect them to what is happening in the world of astrology. Each information-packed 100-page issue of TMA includes:

- well-written, substantive articles on a wide variety of astrological topics
- in-depth interviews with leading astrologers
- world events seen through the lens of modern astrology
- a comprehensive forecast section, software reviews, humor and much more!

Check it out! **Subscriptions:** \$35/yr (10 issues) or \$18 for 5 issues in U.S.

Add \$1.50 per issue for Canada/Mexico. Overseas rates: write or call.

Sample copy: \$5 postpaid U.S./Canada/Mexico, \$7 overseas airmail

Send to: The Mountain Astrologer, P.O. Box 970, Cedar Ridge, CA 95924

Credit Card Orders:
(916) 477-8839

Published monthly except March and September — all 10 issues per year available only to subscribers

The Rediscovery of Vril

An Interview with Gerry Vassilatos

Conducted by Michael Theroux

Over the last few years Gerry Vassilatos has contributed several important and vital articles to the journal Borderlands. He is also the author of the many volumes of the Vril Compendium. In this interview, Gerry intimately discusses the work of many notable researchers, including his own researches, which naturally led to the rediscovery of Vril.

Michael Theroux: How did you first become interested in the "Borderlands" of science?

Gerry Vassilatos: This is a mystical theme whose traces have flowed over and through my life for as long as I can remember ... since childhood. The strange awareness of "a forgotten world" was deeply and continually impressed on me. I had numerous dreams about farlike neighborhoods in my backyard, complete with brooks, sunlight, and people. When I was about seven years old I conducted an expedition with my friends to find it! Certain very special dreams excited my faith in the "secret world" found just within reach.

MT: How did this "secret world" hold up in the face of physical evidence?

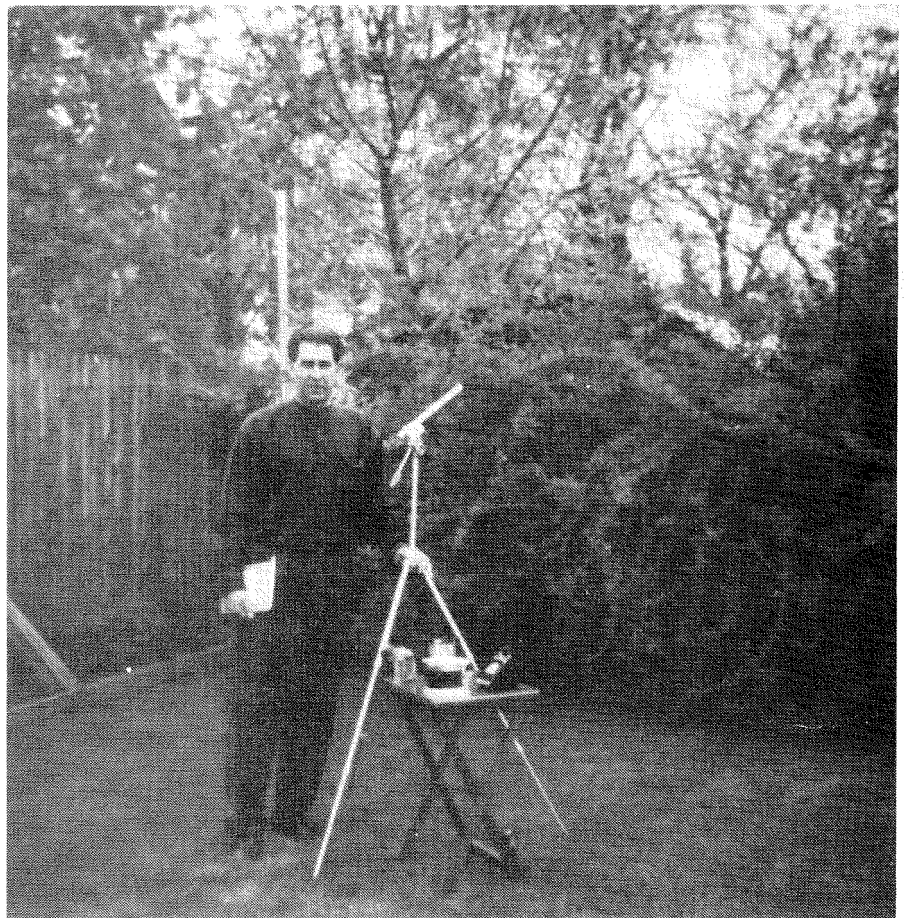
GV: You mean did we physically locate the "secret world"?

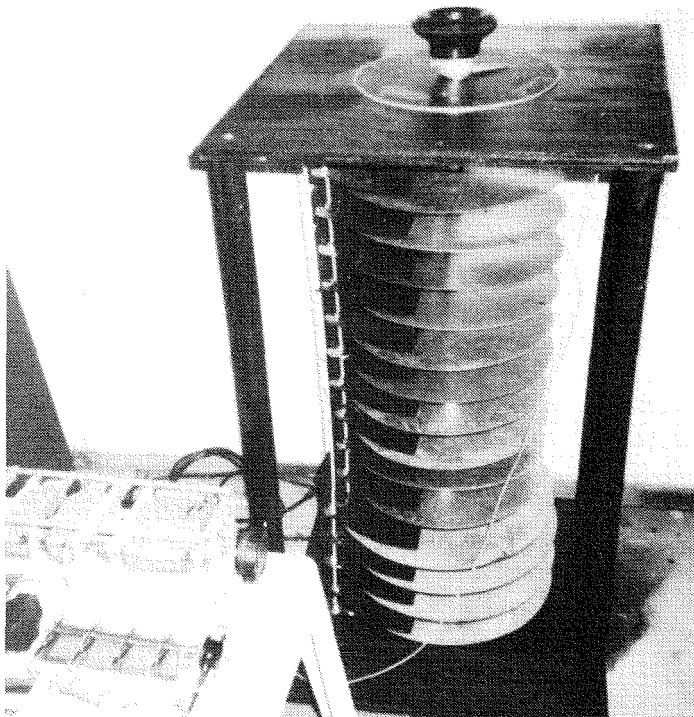
MT: Yes.

GV: Well, yes we did. The question here is one of sensitivity. Here is precisely where quantitative science rolls its eyes and walks away. Children do not stop at the inertial boundaries of matter. Their minds and beings are permeated with the vision of whatever their playworld reveals. They literally envision an eidetic world. This is especially true at a specific "borderland" age, when dream visions and the material world are directly and powerfully sensed. At this critical age, both dream worlds and the material world sensibly coexist in a state of maximum fusion. Were this reality apprehended and remembered by more adults, there would be no quantitative sciences at all. The world-dream state explains and enriches our understanding of childhood's lost sensations. The world-dream state explains all ancient natural sciences.

In this rare and often lost experiential sense, children easily comprehend that inertial matter is enhosted by visionary worlds, whose luminous existence for them is far more vivid than the dulled images of ordinary reality. During our childhood search for the "secret world", my friends and I were each totally permeated with the vision of the place we sought. In this visionary fusion, we possessed ... or rather, were possessed by ... that secret world all along.

Furthermore, we were not disappointed with the fact that it "was underground ... underneath our feet". In fact, we kept going to the





Portion of Vril Ground station

place where we most strongly felt its presence nearly every day for an entire summer. There was no question in our minds whether the secret world existed. The wonderful phenomenon remains: children at play together share the same "invisible places and forms". There we were, looking for the portal of entry which seemed to be right under a very lush patch of dark green vegetation. In fact, the sign which convinced us all that the portal was near came in the form of mysterious black caterpillars ... creatures we had only seen in that very spot!

While we were children, it was not difficult to see exactly "how" the neighborhood landscape was shaped by the permeating presence of the secret world. Mountains grew straight out of the eastern corner of our block. There was a magickal blue lake behind my friend's house, and the "secret bubbling caves" were across the street, behind a row of houses under a patch of green. My friends and I found a Martian portal near another friend's backyard wall, made entirely of black sparkling mica schist. The imaginal memories are endless, and not without their landscape correspondence. Whenever I re-visit my old neighborhood, I automatically experience childhood's world-schema. In fact, now that I think of it, my friends and I always did this while growing up.

You see, for children, the secret world is a fixed reality, one which interacts most directly with the apparent landscape. It was no problem for us as children to flow freely in the vision of this secret world, which here and there was peeking through the inertial boundaries of our neighborhood. Also, we were quite aware that adults did not share the secret world. They couldn't see the secret places.

MT: Children see no difference between dreams and nature.

GV: That's right. Dreams, visions, ideas, and nature ... children

know that there is no difference among these supposedly separated domains at a most fundamental level.

During this childhood period, my friends and I designed and built "machines" seen in dreams. When built of cardboard, aluminum, string, and other metallic parts, our devices performed a strange work. First, they intensified our memory of forgotten dream portions. This signalled the fact that our machines were "in tune with" the dream current source. It is marvelous that, with each visionary world we sought, there was a specific tool by which we each felt that world greatly focussed in our vision. But this is the very essence of radionic science at the new level in which you and I are working.

Once built, the machines stimulated us into powerfully imaginative "interplanetary journeys" during playtime. These hours were so real that I yet cannot help seeing the planetary landscapes when I recall them. We, as children freely do, travelled to the moon, to planets, and to distant worlds of legend. The phenomenon of playtime observed in children, reveals fundamental principles concerning reality and perception. This, of course, is my point in mentioning these seemingly fanciful things.

I have since made a small study of "child machines". The curious technology-defying behavior of these devices is a powerful revelation. Once constructed, these "machines" first magnify and revitalize the dream vision. They intensify the dream which inspired them. Dream machines secure a far more permeating power than that which ordinary inertial machines can ever achieve. Inertial machines perform familiar physical actions ... lighting, heating, rotating, rolling, buzzing ... all the signals which prove to mechanists that the machine is "a success". Inertial technologies only count a machine successful when outward displays of sound, motion, and energetic discharges are perceived.

MT: And most observers would say that radionic tuners appear "null".

GV: Yes, radionic instruments appear to "do nothing" from the inertial perspective. But what they actually do perform is far more potent action: they modify experiential reality directly. In fact, they work in this manner most powerfully when they appear "to do nothing". I have made a deep and intriguing study of the "nullpoints" or "inactivities" found among radionic circuit components.

Equally strange are the "nullpoints" found in natural settings. Regardless of their sites, whether natural or artifice, the most potent and fundamental visionary power is manifested at "nullpoints". Here, the material world is host to the surging currents which compose dreams and consciousness. The currents move through the static transducers. Sensitivity reveals the fundamental visionary content of these currents. Frequently used radionic tuners which are ground-connected often discharge visionary impressions to nearby recipients.

Dream machines are special radionic devices whose discharges require a special discernment and sensitivity before they may even be recognized. We are always receiving these visionary currents, but have been trained to ignore their message. These compose the "background imagery" which every mind's eye envisions. It is not uncommon for an entire population to receive identical visionary impressions when passing through a specific building or natural site

in town. Buildings were someone else's dream machine.

Therefore, most quantitative observers will smile benignly when watching children interact with their dream machines. These observers, insensitive to the real discharges and actions being released, rarely comprehend the great intensity with which children are so occupied. In this aspect, children behave with the power of a religious intent. Those who contradict the vision in playtime are outcasts from the corporate experience. Children know this, and make "gestures of pity" toward those who cannot participate. Children are in strict contact with ground-generative energies which transact as visions.

MT: How and when did you discover the visionary ground energy which you have referred to as Vrill?

GV: Well, knowledge about Vrill began with a startling experience. This all occurred during one summer period about ten years ago.

I was in Florida and feeling rather under the humid, oppressive August weather. There was a tall iron clothesline pole in the midst of a large green meadow. One full sunlit morning, this pole seemed very radiant with a distinct violet glow. I had seen this violet glow radiating from numerous grounded objects before ... usually, at sunset. The glow varied with the radiating objects, whether trees, telephone poles, steel towers, or stone buildings.

I walked out across the meadow and went directly to the iron pole, and was suddenly seized with the notion of grasping it with both hands. When I did so, the sudden eradication of every negative emotion, every negative thought, every physiological burden nearly rocked me off my feet! I was left in a very light dream state, standing there with eyes pleurably closed. Quite unable to open them, and not caring at all to do so, I found that my mind was suddenly able to "see around" into the surroundings ... right through my whole body! What unfolded to my gaze was a glowing black presence into which my mind's vision could effortlessly project. It felt great. An exalted experience.

This experience became a familiar one, as I resorted to the therapeutic effect daily. Sometimes several times a day. I gradually found it possible to "navigate" through the experience, seeing more of the surroundings with eyes closed. What I recognized has changed my world view forever. I literally mapped a suffusive and permeating crystalline structure ... an absolute structure within which our experiential world is rigidly poised. I found that this structure was anisotropic with respect to consciousness.

MT: What do you mean by "anisotropic" to consciousness?

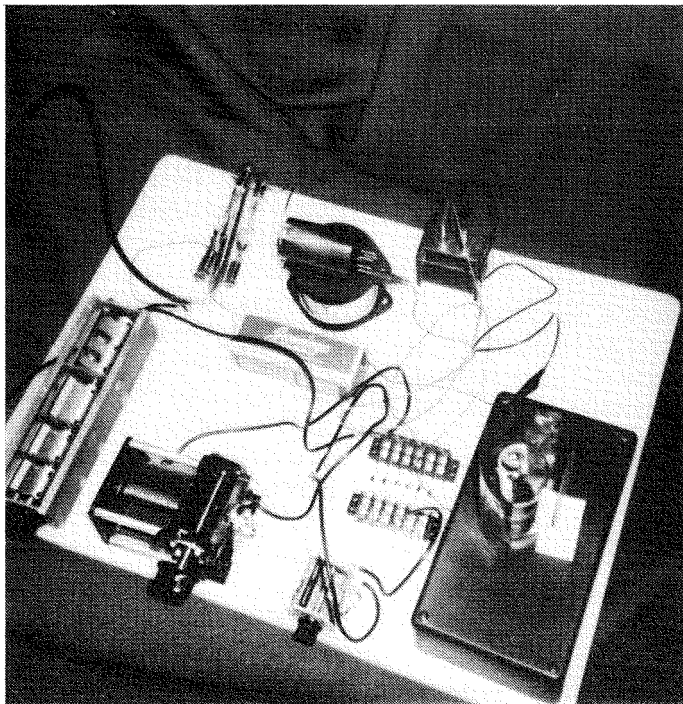
GV: Well, when you gaze along specific viewlines in space, your conscious depth seems greater than along other viewlines. This method is assisted by the use of radionic tools. The assisting tools merely serve to focus, collimate, direct, and magnify incoming conscious energy. A simplest example would be the dowser's rod, which magnifies aquavideo along very specific viewlines only. This is qualitative science, where the percipient is the detector and laboratory of externally sourced experience.

MT: You mean that there is an external conscious supply.

GV: Yes. In this first experience, I consciously mapped an asymmetric and complexly crystalline space ... rather like a vast

consciousness-conductive crystal. I called this black radiant crystal structure "the space gantry" at first. Then I called it "the Structure". It seemed as though every part of the world were suspended, though fixed to this absolutely rigid generative structure.

I also saw that consciousness was able to project across space only along very specific and fixed raylines within this structure. This permeating external structure convinced me that the experience was externally generated. It was a permeating experience. In fact, this daily exercise enabled me to map the local black crystalline structure. I was convinced that the crystal, being so very complex and asymmetric, had more of an organic nature. I finally began calling it "The Absolute" because it was very

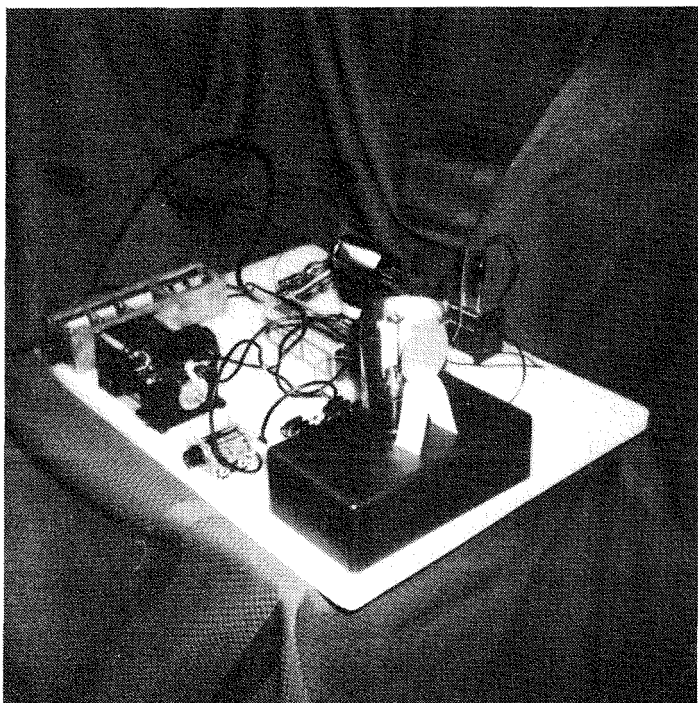


Eidetic Communicator

obviously at rest, while the world and everything of the world flickered through it. This was the ancient world-view. It is only through direct experience that we are able to escape the inertial confines which block our deeper and fundamental perceptual senses, and experience this "Absolute". There is no quantitative proof in the discussion at all. From this absolute world-view, one does comprehend the seemingly continuous and coordinated appearances by which heliocentrism is composed. In the experiential vision of which I speak, it is easy to see these as curious distortions and projections.

MT: This is absolutely fascinating!

GV: Fascinating and real. It was through experiential familiarity that I recognized distinct raylines which coincided with the landscape directly. I had the very clearest impression that this



Another view of the Eidetic Communicator

normally invisible crystalline structure, in its vast conscious proportions, generated and formed the physical landscape: the childhood world revisited on a vast scale! What attracted me most powerfully was the black radiance which not only surrounded me, but suffused me as well.

MT: You have written before about this black radiant state. Would you care to tell a little bit more here?

GV: Yes, since it is the most central aspect to my entire thesis. This black radiance is suffusive. We each experience waves of the black radiance which course over us at times. When this occurs, we experience a vivifying "buzz" after which all our senses are magnified. It is easy to draw relationships among the historical accounts of black radiance. The black radiant state was observed in the human aura by Dr. Walter Kilner. He described the same glowing black radiance in the structure of normal human auras. It is the striated black radiant zone immediately adjacent to the skin surface, projecting outward just before the more extensive luminous striations manifest their presence in cross-section. I suggest that the black radiant state is the actual auric anatomy, and that luminous emanations are secondary effects. I believe that the black radiant anatomy of being is crystalline in form, and not a gaseous region of experiential suspension.

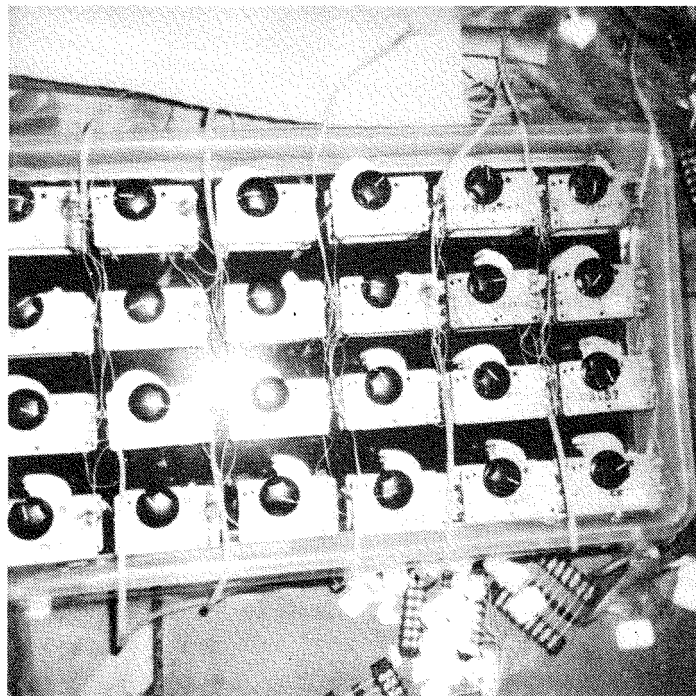
Vril radiant blackness is absolutely suffusive and generative. One can develop the ability to see it in its ground-traversing, ground-permeating radiant black threads. Sir William Crookes observed the black radiant state when very hard vacuum discharge tubes were electrified. Tesla observed the inky black radiance upon the wintery plateaus of Colorado despite the bright light of a full moon.

One can see this black radiance rising above ground during

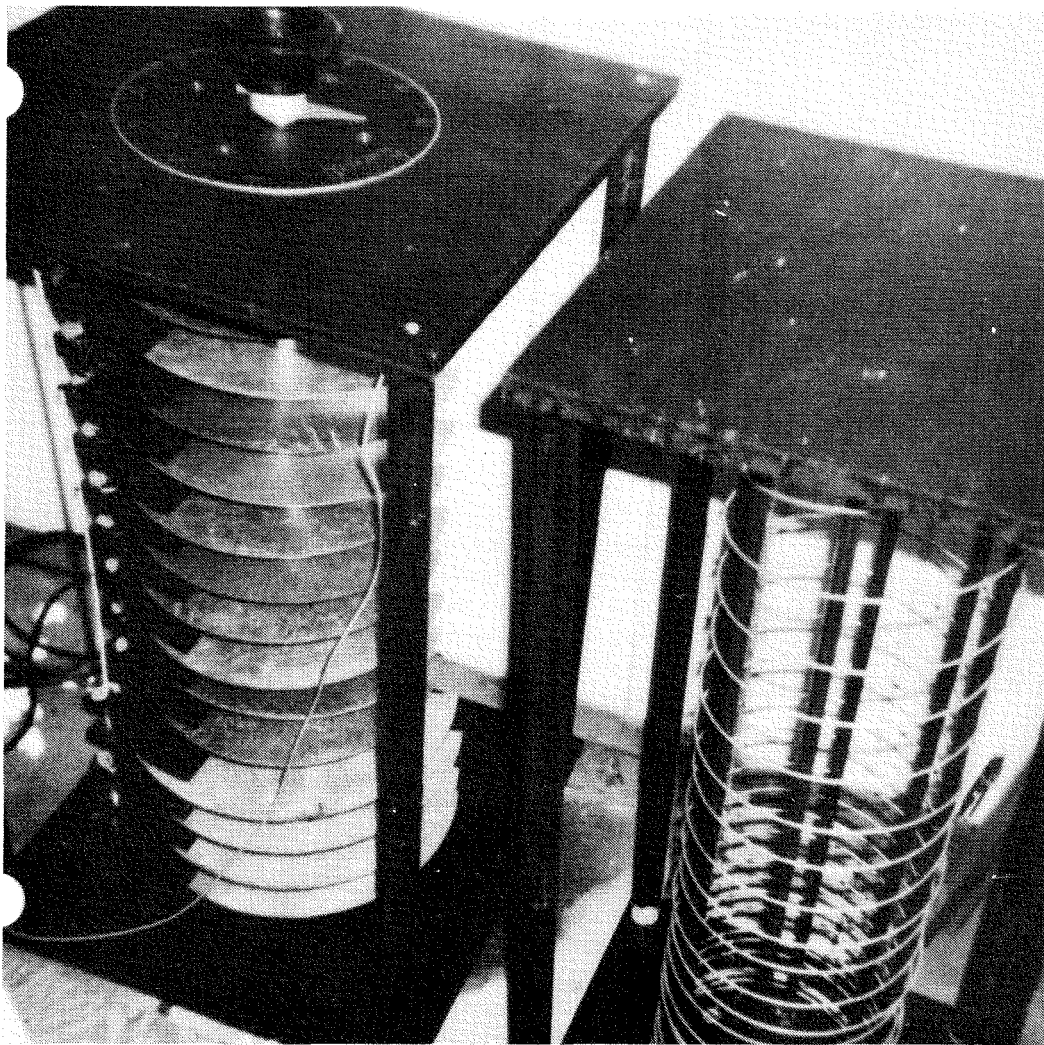
winter and spring, where it rises as a radiant crown. Again, the black radiant state extends from a deep structure into one of familiar manifestations. Since auric anatomy clearly resides in the black inner structure of being, why then should we not suppose that a greater inner structure similarly exists within the ground as a black radiant state? The black crystalline structure also interacts with natural topography. It is possible to see trees projecting their fundamental black radiant auras just near the treetop line. Evergreens more powerfully extend this black radiant state, being the more vivified of the trees. I called the black radiance by several names ... geomantic energy, radiosensic energy, radosensia, blackray vision, radovision, Rado, and so forth. While these names limited me to a merely descriptive term, I wished a more personal one. Ancient sciences often gave personal names to such energies. You see, the experience greatly exceeded a mere surficial description. It required, even demanded a more personal name. After laboring over this for a great long while, only one seemed right. The name I chose is VRIL, taken from an ancient source.

MT: Can you define what Vril is?

GV: Yes. The word is very ancient and very attractive! I use it when referring to the black radiant states which are engaged when grounded iron rods are personally contacted. In these experiences, one envisions a vast black crystalline structure which is suffused with beautiful black fluidic threads. I found that this visual ability continually grew in clarity. I was able to see this structural foundation everywhere. The black radiance suffused everything I laid eyes upon. When I drew the attention of others to this sight, they were suddenly astonished to see the black glow beneath evergreen trees at summer noonday! The fundamental black glowing state is Vril. Upon this foundation, luminous worlds



24 Dial Eidonic Ground Tuner



The two instruments on the left comprise what may very well be the largest known Radionic ground tuner, and were designed, developed, and constructed by Gerry Vassilatos. The variable capacitor and inductor are each 3 feet tall. These ground-powered Vril oscillators are designed to activate through an articulated iron-ground system, in which Vril passes through several stages where it is "fractioned" ... that is, its patterns are selected out and conducted into a system of diodes and vacuum capacitors, and other components. These instruments have been found to collimate, magnify, and clarify the pattern energy. Each element of the instrument can then be tuned to the local Vril lines.

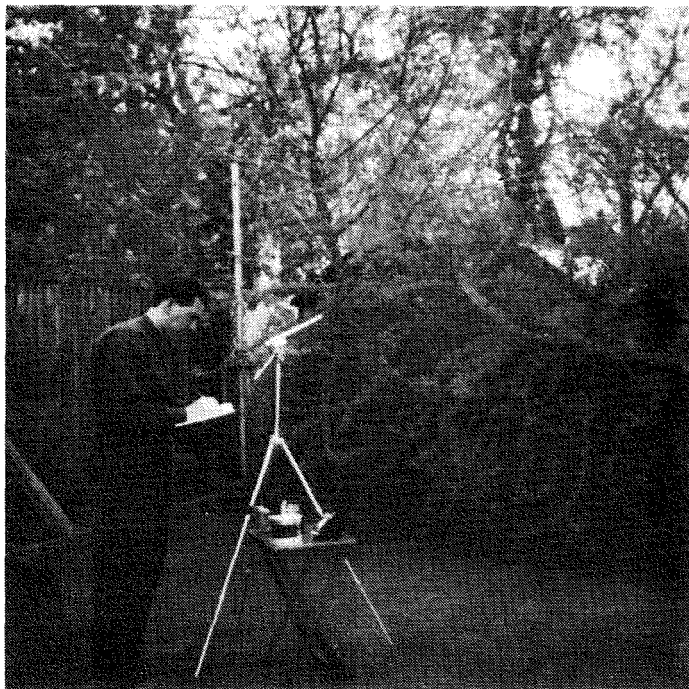
converge and materialize. The word itself finds its source in Celtic, Old English, Old Norse, and Old French. Virol (woven, bracelet), Vaifri (waver), Vrille (tendrill, vine), and Viril (vivifying), each convey the general ancient meaning quite directly. The earliest observations of Vril began with study of vegetation and its growth patterns. Twisting and growing, assimilating and proliferating, rooting and flowering across meadow, ancient sensitives recognized that vivification proceeded from the ground. The ancient geomancers and visionaries of these lands had no difficulty comprehending that a ground-sourced energy vivified the dead earth each spring, generating and impelling green vines in twisting ground paths. They could clearly see the green dendritic paths of vegetation across brown hillsides which seemed vein-like in their initial manifestation.

The black radiance can be seen within and among the dark green of ivy vines and evergreens. When Vril states are properly engaged, tree auras radiate a strong black glowing layer. In cross-section, this black glowing layer projects from the tree tops well before the familiar whitish layer is seen. It also emerges from the ground during winter nights, where it rises as vertical striations. It is also observed as the mysterious "black lightning" during thunderstorms. I once saw black lightning twice in a minute's time, casting sharp black dendritic shadows against a terrace window. It

was no afterimage. Vril is dendritic, and is observed to precess throughout the natural world as thready bundles of dendritic form having a black "glimmering" or "wavering" vortexian nature. Vril passage through materials modifies and filters Vril patterns with special clarity. Numerous persons have reported this as "heat waves", having black radiant edges (Blondlot, Reich). Vril radiant blackness can be quickly experienced just by gazing at some grounded iron object of sufficient mass, or an evergreen tree of equally sufficient mass for several seconds without blinking. The effect is not a mere chemical failure to see. One sees through the thin veil called "the world solid" when performing this experimental exercise. Radionic tuners achieve deeper and more permeating black radiant states without the gazing.

It is the pre-structural creative presence from which all structures are projected and maintained. Vril blackness is not darkness. Quite the contrary, Vril blackness is a generative and vivifying presence. One envisions wonderful created things emerging out of its unfathomable depths. Vril black radiance frames the crystalline world structure.

The blackness of space is Vril radiance beyond inertial resistance. Vril radiant blackness stimulates the mind completely. Vril is consciousness, pure consciousness. It is the ground of being, if you will.



Detecting elemental Vril Rays

MT: In your view, how is Vril related with dreams, matter, and space?

GV: Vril is the World-Ground. This is an experiential fact. Once experienced, there is no doubt. The unmistakable sense of the external consciousness is revealed in direct experience with Vril. The mysterious blackness, the generative blackness, is the focus of every sentient being. Minds naturally seek out local Vril ground points, drawing consciousness itself from these. This is why ancient people drew near to these sites, securely placing megaliths in the Vril radiant points. Rocks of special composition were anciently discovered to give magnified Vril effects. This was the true start of radionic science, the original technology. Vril technology had as its aim the elevation of life force and consciousness.

No doubt, these descriptions sound quite mystical and ecstatic. There are numerous experimental proofs which show that Vril is the formative agency which molds world-structure directly. But first, in order to recognize the Vril Structure one must be properly equipped. The use of special iron ground systems enables a continuous experience of this black radiant state. It is very comforting, not frightening at all. The effect is gradual, magnifying as you are willing to absorb it.

Several years ago I developed certain chemical mixtures which enabled a smooth transition into the Vril experience. This was my "N-Mixture". It is a special mixture of carbon, iron, and manganese dioxide powders. The mixture is applied to long glass or iron plates. Connected to grounded iron rods, these plates provide a large surface area of contact for human physiology. Placing the hands on such plates brings the Vril visual experience directly into focus. With the use of several variable capacitors in series between ground rods and N-mixture glass, one can effortlessly observe and map the local black radiant Vril structure. I built this system into

an armchair, and was able to rest while my hands contacted the plates. It was rather like watching the room go black rapidly, and then "seeing" the whole Vril landscape. The Vril landscape retained its features with each sitting.

Vril is unique in that it absolutely unifies external and internal experience ... dreams, experience, natural creation, and space. The N-mixture plates in combination with grounded radionic tuners provides a personal observatorium of Vril structure. Vril projects new conscious states into recipients, and is a desirable presence to concentrate and maintain. Vril primarily interacts with consciousness and physiology. Very magnified Vril experience is found at specific ground points. These have been called sacred spots. Sentient beings recognize the Vril presence in a Vril discharge site by noting the conscious and vivifying elevations which are experienced there.

Ground points which are especially Vril radiant are true sacred spots. From these, one can literally map the black thready Vril discharges which reach across topographies and out into space. Both physical and electrical tensions can be measured along these raylines. One recognizes that Vril raylines precede geological stress and determines geological formation. Close study of ground matter reveals a strangely unmapped macrobiological organization in rock structures which conform with Vril raylines in an area.

MT: You frequently use the term "Eidetics". What do you mean by this?

GV: Each of these magnified manifestations of Vril is accompanied by visionary experience ... eidetic imagery. This visionary component of Vril is its fundamental nature, that which distinguishes Vril from all other manifestations. When black radiant states rise above ground, as during winter nights, visions are received. Vril projects eidetic imagery into recipients, giving visionary and conscious states which transcend the ordinary sense of surroundings. Visionary experiences are most powerfully experienced near and upon Vril active grounds ... where Vril rises from deep ground. There also we find extremely green vegetation which seems never to fade well on into winter. These places seem continually still, peaceful, windless, and warm ... shielded spaces. Cathedrals were originally built upon these Vril sites.

MT: This was explored in Charpentier's book, "The Mysteries of Chartres Cathedral".

GV: Yes. There the Vril is powerful, projecting lovely revelations and visions. True eidetic vision is a distinctive phenomenon. It differs completely from the eidetic vision which academic science teaches.

Psychology teaches that "eidetic vision" is a phenomenon closely associated with visual after-images. They insist that it is an ability limited to children and certain rare adults. Eidetic individuals were once called "Eidetikers". I have not intended my use of the term for these academic limits. Vril-projected eidetic visions are solid images however, not planar after-images. They are not planar pictures. Vril projected eidetic images are solid miniatures of distal realities. They can be examined in three dimensions. This distinction was lost during the 1930's when psychology attempted

quantitative study of the phenomenon.

Strange and numerous eidetic experiences were reported by telegraph and wireless operators. These accounts are found as anecdotes in trade periodicals of the time period. I suspected that this Device Assisted Remote Viewing phenomena was actually evidence of a natural communications channel which surpassed geological veins and strata. Hard evidence for the eidetic nature of Vril was found in chemical telegraphy, which used sensitive electro-photographic techniques. Chemical telegraphy registered exceedingly faint electrical signals on sensitive papers, using very little or no current to do so. Accounts of sudden impression epiphanies often manifested in telegraphers just as the transmissions were arriving. At other times, signals began unexpectedly arriving at the receiving cylinder, producing strangely contoured "strays". When inquiries were made as to their source, it was almost certainly found that the phenomenon was "natural and spontaneous".

Others recognized the anomalous registration of incoherent words, as dot and dash "trails" drawn by no specific operator, the eerie rehearsal of ground-stored meanings. I have detected this process in special chemical emulsions which were directly irradiated by Vril ground tuners. The images reproduced in these emulsions are dendritic and wavy.

Two major components of old telegraphic systems involved ground placement and rheostatic ground entunement. Old telegraphy and wireless alike were grand radionic machines which functioned as Vril tuners.

MT: What are some of your new developments in radionics?

GV: I may cite the development of natural Vril auto-magnifiers and ground-powered Vril oscillators. The discovery of both eidetically active and inactive elements has triggered a major experimental epiphany. Through the proper configuration of these elements, we obtain powerful inertia-dissolving devices. These magnify local mindstates as required. The discovery of vacuum-carbon ground absorption was overshadowed by the development of powerful Vril pulsators. These dissolve inertia with power, permitting the development of greatly magnified Vril currents.

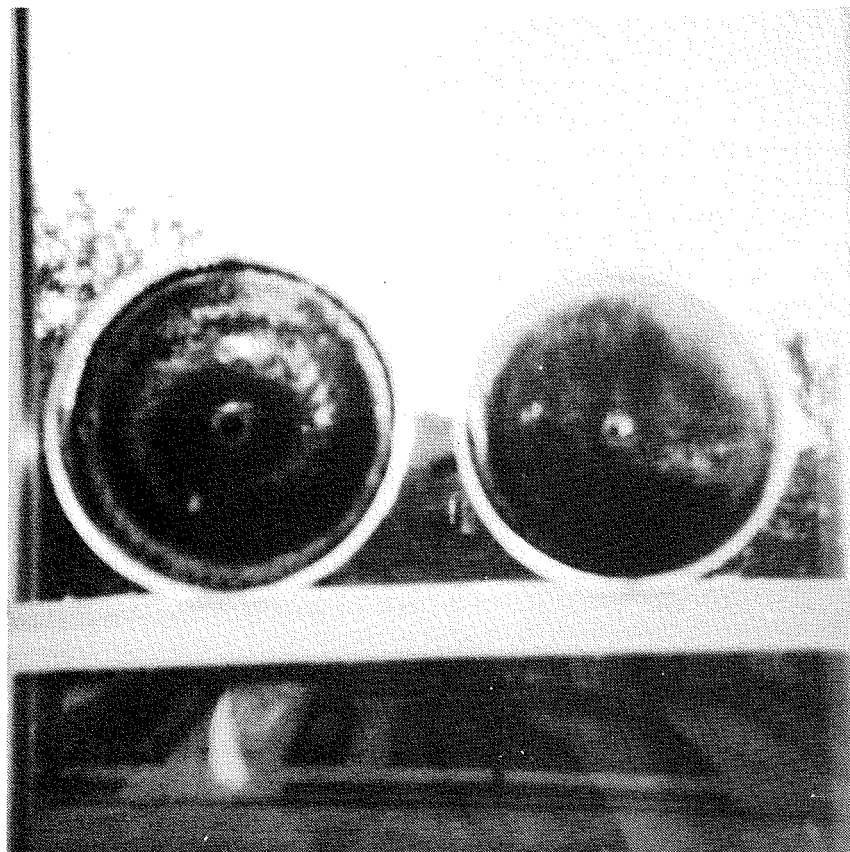
I have been developing several modified radionic tuners each of which is connected to Vril points through ground rods. One unit is designed for therapeutic purposes, using high pressure Xenon tubes to project a powerfully penetrating and soothing Vril Ray.

I also designed and have installed a 24-dial radionic tuner which functions as a consciousness-elevator in my neighborhood. Raise the consciousness of an area, and new social reactions will occur. I utilize element samples which are separately entuned from a single highly treated Vril channel. perceived up through an articulated iron-ground system, Vril passes through several stages where it

is "fractioned" ... that is, its patterns are selected out and conducted into a system of diodes and vacuum capacitors. These have been found to collimate, magnify, and clarify the pattern energy. Each element can be separately entuned with respect to the local sense environment. Each turn of the dials effects sensible changes in local "quality".

The strange experience of telegraphers and wireless operators alike manifested "remote views" at specific times of the day. Accounts tell of an ability among such operators to "know both the individual calling and the exact nature of the message". While T. G. Hieronymous proved that ground energies have optical characteristics, it was not he who discovered the nature of these optical signals. Dr. Ruth Drown achieved the most thrilling success in these venues with her Radiovision devices, proving that eloptic energies contain graphic visionary content: eidetic images.

This so stimulated my thinking that I made a complete study of the topic area, retrieving several rare documents from the forgotten archives. These include studies made in Japan and in Germany before World War II. I believed it was possible to "entune" remote scenes from a grounded radionic system. You and I coordinated those first few experiments three years ago Michael. Designed to ultimately receive images through the ground, both you and I have obtained results which are staggering in their implication, having been able to receive sudden image-discharges of distant surface locations with a high degree of accuracy. As you recall, the device seemed to operate best in the daytime, solar light being the



Eidetic emulsions captured 11 May, 1994 (L) 9am, (R) 11am.

requisite stimulator of surface eidetic imaging.

Device Assisted Remote Viewing is completely astounding technology, being based on Dr. Drown's developments. I have very recently constructed a more developed model whose emissions are truly powerful. Images are received in discharges, in the same manner as when one receives imagery from poetry reading. The process does not require the graphology of words, projecting directly into peripheral portions of the retina, and being recognized as scenes.

MT: We worked together on the "Earth Tones" project. Do you have any new discoveries along these acoustic lines?

GV: I do not think that many researchers have thoroughly comprehended the importance of the Earth Tone phenomenon which we both took great pains to study Michael. It proved that grounded objects are "irradiated" with a non-electrical energy. In other words, pure Vril. This was shown when glassy substances, connected by a single wire, emitted their own distinct sound. Furthermore, the complex multi-cyclic nature of these tones made them unique detectors of Vril pattern pulsations throughout the

day. But we have both shared in the extended research of ground-derived Vril.

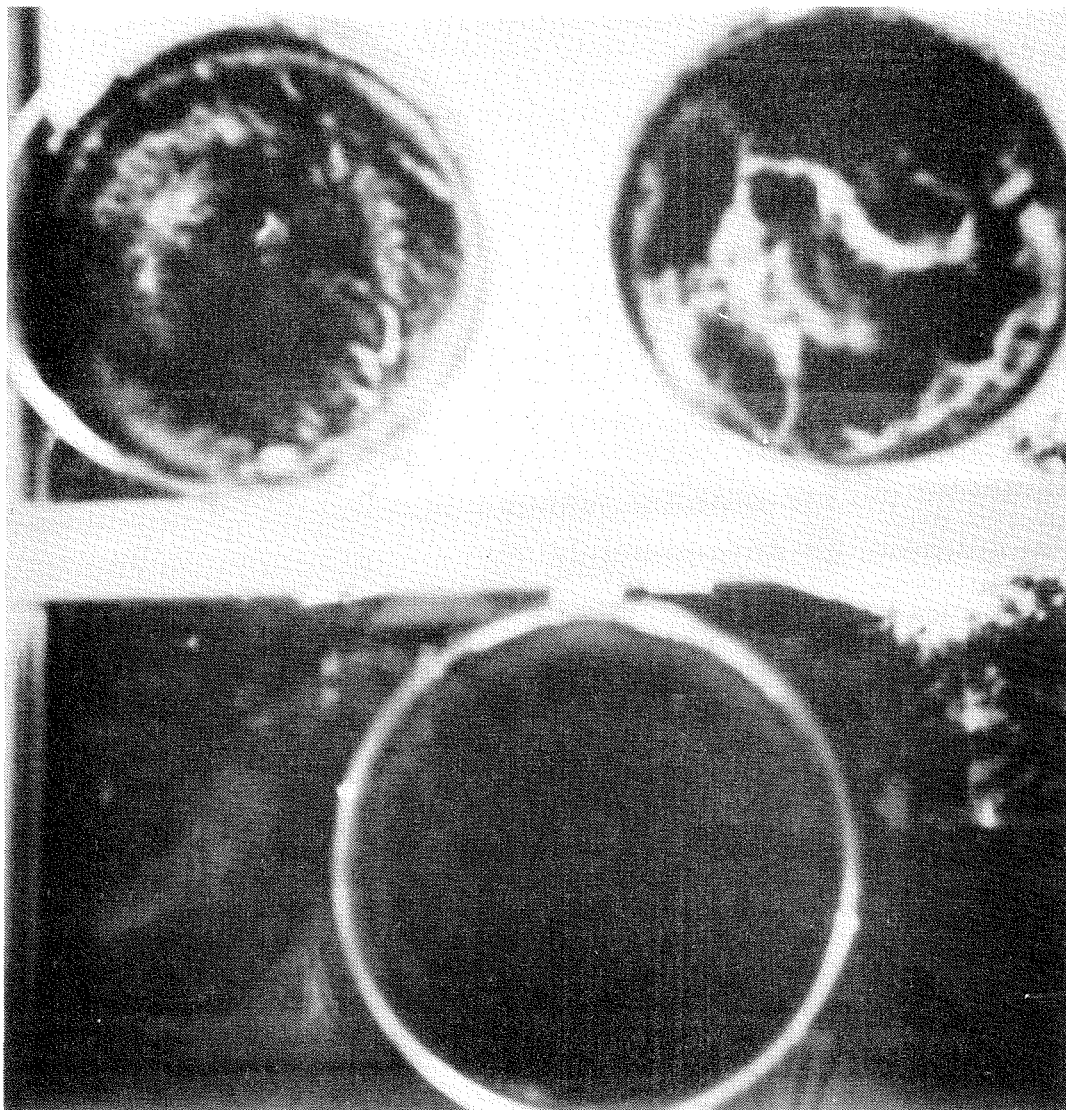
While not at all interested in the generation of electricity, I have measured steady electrical currents in dry ground when using a widely separated system of carbon and iron grounds. Galvanometers remained absolutely "pinned" for days with this system. An intriguing Vril characteristic was confirmed when this flow was interrupted once.

MT: What happened?

GV: Well, the current vanished! Once extinguished, Vril withdrew into the deep ground again. It was impossible to regain this greatly magnified state even when replacing the electrodes into the exact same holes! The Vril growth and pulsation characteristic preclude any electrical analogies here.

MT: How does Alchemy match Vril dynamics?

GV: Alchemy is the central study which we have both found "fits the action" of Vril. In alchemy we find the natural science which



Eidetic emulsions: A Carbon solution was mixed with alcohol and brushed onto appropriate plates. These were firmly placed over the discoidal ground. Into the plate center dipped a fine wire which was connected to a nichrome rheostat taken through a distant second ground. In a very few moments, the plates begin to exhibit blue-brown dendritic and wavy markings across its surface. When and only when the capacitor was tuned ... haloes appeared with force and motion in the emulsion.

These emulsions at left were performed before, during, and after the solar eclipse of 11 May, 1994. Note the striking dendritic patterns which appeared shortly before, and during totality (upper left and right) revealing the unmistakable trace of a twisting ground energy whose patterns pulsate in accordance with planetary rhythms.

studied growth, propagation, and transmutation of substance without violent application of force.

Furthermore, true alchemists were not concerned with the "ash" left in the crucible, however gold-rich this might be. Alchemy was a visionary study ... one whose observations were focussed on the radiant eidetic qualities of a chemical reaction. True alchemists were more intrigued with the manner in which space radiant aureoles propagated from a chemical reaction than the actual manufacture of elemental gold. Disagreement on this point is inevitable, but study has shown the truth of this statement. There is no other way to truly comprehend alchemical symbology from its base.

Visionary currents are what the true alchemists cherished and prized. These currents were personally experienced when specific conditions were met. All the conditions centered about Vril. In order to obtain visionary currents, Vril was necessarily summoned into the proper substrate. Imitating nature, the alchemists discovered how natural element-genesis occurs.

Originally the alchemists were not trying to "make" anything. Their study centered on understanding and participating in the natural Vril process. Vril is a mind-expanding presence. Communion with Vril is a revelatory experience. This is why so many ancient castes focussed Vril with megaliths and other monumental accoutrements. Vril presence is greatly heightened consciousness.

Articulate Vril conduction was the alchemical discovery. Vril currents carry in them the articulate world-patterns. One can theoretically connect to anywhere in the world by connecting with an appropriate Vril channel. Fr. Kircher stated as much in his "Mundus Subterraneus".

Vril responds to certain ground surface activities, emerging in articulate processions. When it does so, one senses the radiant blackness in fluidic waves. Conducting Vril from the deepest subterranean regions up into appropriate vessels requires some care. Vril surges can be terrifying when overwhelmed by the radiant blackness. When specific patterns were desirably enhosted in matter, the use of the warm incubator simulated organic temperatures in earth.

Correctly shaped ceramic and glass vessels were placed by alchemists in ground contact. They most certainly stimulated Vril emergence when their overall volumetric capacity and expansive form were properly arranged.

Vril enters all grounded objects, especially those having specific forms which enhance Vril growth and stream pulsation. Casual study of alchemical vessels reveals arrangements in which ground-emergent Vril can cascade in a series of pulsations and auto-magnifications.

MT: Will you clarify what you mean by auto-magnifications?

GV: Yes. Vril auto-magnifies when it encounters certain materials and geometrical configurations. This is especially pronounced with Vril barricades or resistances. Vril encounters these material arrangements and grows in pattern clarity. When Vril surges, elements are created. Now there are two ways for achieving Vril growth, one of which is natural and ordained. That is by providing Vril with conductive paths through vessels and other kinds of conductive capacitance. The use of pre-existent elements and

material shapes causes Vril auto-magnification.

There have been those legendary investigators whose work with percussion, shock, violent electrical discharges, and extreme heat have succeeded in torturing the transmutation of elements. Emmens percussed his metals. Paneth studied electrical shock discharges in gas filled tubes which were fitted with heavy metal electrodes. Moray used gamma ray blasts to stimulate gold crystallizations in soily gold tailings.

Yet, such violent ways are not the alchemist's ways because none of these engage Vril. Electrical, radioactive, frictive, and thermic methods are perceived by Vril as irritants. In fact, the violent methods engage Vril magnifications of a kind designed to destroy the irritant. Often, the destructive effects plague the devisors of these apparatus in now-legendary ways.

To know more about Vril activity is to know alchemy, a science most certainly not permeated with the violent methods which the decadent "puffers" engaged.

Alchemists studied nature and the manner in which mineral, vegetable, and animal manifest the life energy. Alchemists observed Vril patterns. Imitating natural process, they were able to demonstrate the gestation of minerals while in the fertile earth, the auto-refinement of certain ores being a common occurrence. You and I have that the alchemical models completely match observed Vril activity, being sure of its involvement as prime activator in all of natural alchemical process.

Growing Vril is rather like growing tissue cultures in laboratory vessels. We enjoy patternate Vril energy in ground-sourcing radionic tuners systems and host compounds. The ancient use of radionic device may be seen throughout the alchemical laboratory. Earthen furnace, alembic, earthen incubator, condensers, each conduct Vril through their material contents in throbbing pulsations.

Vril is the radiant black generative presence, whose creative impulses ordain the generation of elements with a wisdom adored by very few visionaries. Vril projects elements. These projected elements are the eidocurrents of other worlds. Proper entunement brings their presence.

Vril continues moving and articulating through its own creations in new creative ways. Vril grows in these generated things, surmounting its own created foundations with new patterns. As it does so, it spontaneously mutates into improved forms.

A very intriguing and important viewpoint was advanced by our dear friend Jorge Resines. In his treatise on Dr. Moray, Jorge introduced the idea that Moray employed an essential "improvement of elements". Each elemental "improvement" produced elemental species which neither chemists nor physicists recognize. He progressively engaged and improved elements which had no terrestrial equal. It is clear that his method produced Vril surges from the ground into his samples. Unfortunately, he focussed those irritating inertial energies in his process ... those energies which literally enrage Vril into destructive surges.

Vril mutations have little to do with atomic mass or atomic weight changes. We do not see most of the elements which Vril generates. Vril elemental mutations reveal new visionary qualities, visionary currents in matter. Recall, if you will, those legendary and mythological elements which are now lost. There are those tales which describe magickal elements, by whose presence dream

world realities and desires materialized.

MT: Would you tell me more about your eidetic photo-emulsions?

GV: My studies in the Manhattan Public Library Annex gave me familiarity with the chemical telegraph systems of the 1870's. These used ferrocyanides and other light-sensitive chemicals to record faint telegraphic registrations. What struck me was the often mentioned "anomalous" action of these chemical recording systems with certain "ground conditions". Wavy patterns covered these papers, which spontaneously appeared while none were transmitting along the lines. Ferrocyanides were somewhat poisonous, so I decided to find another chemical reagent. Searching through old chemical experimenter's books, I found that sodium and potassium iodate solutions could record faint electrical and photic energies. So many critics appeared during my discussion of eidetic communications, that I decided to attempt a direct photographic capture of remote views. I performed experiments whose aim was the capture of Vril process in photographic wetplates. I used various solutions to achieve these results. Potassium iodate solution was mixed with starch and brushed onto appropriate plates. These were firmly placed over the discoidal ground. Into the plate center dipped a fine wire which was connected to a variable capacitor taken through a distant second ground. In a very few moments, the plates begin to exhibit blue-brown dendritic and wavy markings across its surface. I was shocked. When and only when the capacitor was tuned ... haloes appeared with force and motion in the emulsion. I established two such sites in my cellar, making hundreds of these emulsions for two month's time. The results were absolutely enthralling, revealing the unmistakable trace of a twisting ground energy whose patterns pulsate throughout the day. The patterns have been identified, being completely plasmic in appearance. A defined CCW rotation manifests throughout the diurnal recordings, made 3 to 4 hours apart. A beautiful occurrence chanced to be preserved last year when flowers began to bloom here. Preceding the emergence of each wildflower sequence, I recorded chilling prints where crystalline wreaths threaded their way through the wavy, haloed emulsion patterns. I took this to be proof that Vril process precedes and activates earth life processes, being the generative source of mineral, vegetable, and animal life.

MT: Do you care to discuss the "Vril Compendium"?

GV: Certainly. In 1990 I chanced to discover a warehouse annex of the Manhattan Public Library which contained all the Victorian texts and journals. Here was also found a complete patent archive dating back to the mid-nineteenth century. Two notable "patent cyclopedias" were accidentally discovered here. Dust covered and forgotten, they contained the documented treasures of lost electrical technology. It became apparent after a few moments of study that these old and weighty volumes contained communications systems which "should not work". Here again was that science in which dream and nature were fused. I found document after document in which the empirical discoveries defied theoretical dogmas. The Vril Compendium was the catalogue — my files — of these documents. The late R. J. Reynolds was my generous patron, a debt of which I will always be thankful. His kind help allowed the publication of seven Vril Compendium Volumes. I had planned a



Vril Aerial Discharge Terminal

continuing series, numbering up to twenty five. There certainly are enough files left to publish. I haven't even brought forth my files on old wireless as yet. That material is fantastic! All of it very clearly supports the Vril world-model. Hundreds of hours in the study of early telegraphy and wireless patents taught me that most of the early systems, empirically designed and operated, were plagued by notable unexplained "electrical" anomalies. Furthermore, these "electrical anomalies" were so frequently observed that entire sections of the various telegraphers' periodicals were devoted to them. All ground referenced technology is necessarily suffused by Vril, the permeating and fundamental energy whose presence produces "anomalies" within those systems.

Before engineers began designing resonant-matched telegraphy, the world used ground-ended telegraphic systems. These operated as gigantic radionic tuners, interacting with the Vril in a biological manner. The "electrical manifestations" of Victorian inquiry were produced by Vril. These ground connected systems manifested energetic anomalies characterized by organismic growth, assimilation, intelligence, and irritability. Tesla made great headway in these venues, observing the self-magnifying nature of once-initiated ground currents. The operation of no such system was ever completely and satisfactorily explained by electrical activities alone. Numerous highly credible and noteworthy academicians honestly proclaimed these truths in the periodicals of the time. The Vril Compendium contains the highest concentration of anomalous such technologies in the form of patent reprints and unexpected magazine articles. (**note:** Four new volumes of the Vril Compendium on wireless technology are due to be published this fall by Borderlands.)

MT: I understand you are working on a book about Tesla.

MT: What are some things to look forward to?

IV: Yes, I am. What began as a short article on Tesla's accidental discovery of impulse-broadcast electricity has become a romanticized biography. Tesla, while maintaining the outer Stoic face, remained an individual thoroughly impassioned with life and very much the romantic. One reads between the lines of his biography with ease. Neither his infatuation with Katherine Underwood Johnson has not been investigated nor the complex "fatal attraction" of Anne Morgan with Tesla have been explored.

How Tesla's relationship with both Anne and her formidable father figure in a possibly intended assassination attempt was never fully discussed by other writers. The disappearance of Tesla for more than a week was not previously given much attention, though I cannot imagine how such an event could have been overlooked. How he emerged from the total destruction of his laboratory fire in the light of his transmuted poise thereafter are the items on which I have focussed much of the action. While the book portrays Tesla's thoughts and conversation with others, the text remains scientifically accurate.

I have addressed the re-emergence of Nikola Tesla after a few years of poverty. I have expanded on the means by which Tesla managed to regain a fortune, by which he also later owned two penthouse suites atop the Hotel New Yorker. This biography also deals with the emergence of his new electrically empowered radionic technology.

MT: How do Tesla's ideas, as somewhat mechanistic, fit in with his new technology?

GV: Tesla accidentally discovered the effects of high voltage impulse radiance. His employment of this dielectrical radiance formed the very centre of his technology, an understanding curiously absent among those societies who purport to represent him. Nevertheless Tesla discovered the distinctions between these forces electrical from those forces vitalistic while investigating the therapeutic effects of currents developed by his Transformers. He eventually found that these vitalistic effects could be derived from grounded coils which were non-electrified. Lakhovsky later re-investigated these "non-powered" configurations and, long before his implementation of spark generators, found vital influences emanating from such grounded coils of specific dimension and composition. Tesla's mechanistic views enmeshed his thinking only as long as he was enthralled with the "electrical" nature of his devices. As soon as he recognized the conjugate vitalistic signal which vivified human recipients of impulse currents, he changed his views.

Tesla cherished Goethe, Reichenbach, and Abrams. It is clear that Abrams was a favorite, since Tesla uses several of Abrams' terms in his famous article on "Increasing Human Energy". Tesla cryptically proposed the elevation of the world mindstate through ground-broadcast impulses. He further described means for "transmitting intelligence" directly throughout the world in "light-like" patterns. He maintained the amplification of radionic signals through electrical means ... through electro-irritations. Those who doubt this are directed to recall the "Wheatstone Bridge" which was found after his death with an attached warning.

GV: The necessary experiments are endless! I do not seek the development of technology which first converts Vril say, into electricity, and then derives utilities from that electricity. Vril contains every potential of utility and more. Vril is the energy which links conscious experience with physical experience. It is the unifier of sciences. All we need is the discovery of means by which specific patterns may be derived from the Vril current.

Vril current is a pattern polypotential. Every created pattern is in it. We need to fraction the Vril current as chemists fraction petroleum. Radionic artifices enable this fractioning process to occur. The discovery of Vril auto-magnification effects is the second step. The third step in Vril technology is the discovery of natural sources of light, heat, motion, and other yet-undreamed utilities by which will be defined the future course of qualitative science.

The desired technology is not one whose utilities focus consciousness in little appliances and devices. The lamps, heaters, and motors of existing technology would be replaced by units capable of entuning experience-permeating light, heat, and motive power through space. Whether the world can accept it or not, Vril technology is here to stay.

MT: Do you have anything to say in closing?

GV: I really enjoyed sharing these facts and technical developments with you Michael. I would be very happy to address any other questions in the future. As you, I believe that the future technology is a non-inertial one, but a radionic one. The discovery of natural eidetic channels, however, has forced me to rename the science of radionics. EIDONICS now seems a better term, the technology which will change the world. ■

SUGGESTED READING

- Goethe's Scientific Studies
 - Cosmic Superimposition, Wilhelm Reich
 - Gold of a Thousand Mornings, Barbault
 - The Metal-Planet Relationship, Kollerstrom *
 - Proceedings of the Scientific and Technical Congress on Radionics and Radiesthesia *
 - Electronic Reactions of Abrams, Abrams *
 - Radionics, New Age Science *
 - L. E. Eeman Report *
 - Metal Power, A. Davidson *
 - Radiovision Instruments, R. Drown *
 - The Work of Sir Jagadis. C. Bose, Geddes *
 - Nature of Substance, Hauschka *
 - The Human Aura, Walter Kilner
 - Earth Energies, S. K. King *
 - Od and Magnetism, Reichenbach
 - Earth Tones Tape, Theroux, Vassilatos *
 - Vril Compendium Volume 2, Vril Telegraphy *
 - Volume 3, Vril Linkage *
 - Secrets of Time and Space, Watson *
- *Available from BSRF*

IMPROVING SEX THROUGH QIGONG

Dr. G.K. Knowlton

If you are a regular reader of *Borderlands*, you are familiar with my writings (October 1993, 4th Quarter, 1994 and others) on Qigong. If not, it might be wise to either go back through your back issues or purchase them to bring yourself up to speed.

Qigong is the ancient Chinese art of energy regulation and direction. It is more complicated than that, but for more history, please refer to an earlier article. Qigong is a discipline that anyone can learn. By practicing it, it will make you feel better, perform better and experience higher levels of health.

Qigong has been shown to reduce stress, improve bowel function, relieve insomnia, relieve acute or chronic pain, reduce pain of childbirth, speed recovery from childbirth and other trauma.

It is used in China for more serious problems. It can reduce healing time from surgery, normalize blood pressure, help gastric and duodenal ulcers, help eyesight and improve mental performance.

Benefits have also been seen in such neuromuscular conditions such as post stroke syndrome, paralysis from brain and spinal cord injuries, multiple sclerosis and Parkinson's disease. It also reverses the aging process.

Qigong has long been known to enhance sexual function and help sexual performance. Many books in China have been written about Qigong helping impotence, frigidity, infertility and the improvement of sexual relations.

In this article, I will present some simple Qigong exercises that will help the sexual hormones of the body and in general, improve your health.

EXERCISE ONE

This is for general sexual energy and improved health.

1. Stay calm and relaxed during this exercise. Move slowly and easily.

2. Stand straight up, feet shoulder width apart. Look straight ahead. You may do this exercise seated if desired. Keep your eyes open or closed.

3. Perform "rocking hands." This is done by lightly and slowly swinging your arms up to chest height with elbows straight and back again. If you can't go to chest height, just go as high as you can. Perform this motion 10 times to start off with and work your way up to 20.

4. Reach behind you and place your palms on your lower back, directly over the kidneys. Slowly rub the kidneys in a small up and down motion for 10 times.

5. Stand (or sit) with arms hanging down at your sides. Now, by bending your elbows, bring the hands up until the arms are parallel to the floor. Palms are facing down. Start off with 10 motions and work your way up to 20. Remember to do this slowly and carefully.

EXERCISE TWO

This is a Qigong breathing exercise and can be done at any time of day.

1. This exercise may be done, standing, sitting or reclining.

2. Inhale, through your nose, deeply and slowly. As you do, allow the air to first inflate the lower abdomen and then fill up the chest.

3. Do not hold the breath. Gently, change from inhaling to exhaling, letting the abdomen deflate first and letting the air empty out of the chest.

4. Exhalation should be done through the mouth until no more air comes out.

5. Do not force or strain.

Practice both exercises daily. Do not be fooled. These exercises, although simple, have tremendous regenerative effects on the body.

The other part of improving sexual function is herbal formulations. The Chinese have centuries of study and have proven their products in extensive medical studies.

One product for men with impotence was tested on over 700 men. The effective rate was 99%. It also had an immediate and long lasting effect on improvement of sexual function, sexual weakness and premature ejaculation.

Another product was introduced for women. It was found to be effective to nourish the blood, a general tonic, fatigue, dizziness and sexual dysfunction.

The combination of Qigong and herbal products can regenerate your life. ■

For more information write: Dr. Knowlton 8136 S. Memorial Dr., Tulsa, Oklahoma 74133-4309, Phone 918-254-0031, FAX 918-254-0163.

AQUALITHIA REVISITED

by Haroldine

AQUALITHIA is a natural mineral water. It was named from the Greek word "lithos" (Stone), meaning water of stones or minerals. It is a diamagnetic, negatively charged, high grade tellurian water. When it was biomagnetically analyzed, the only whole element that was found present was neon. The lithium content was less than minimal. The conclusion – because of its unusual properties and vast applications – was that the total combination of the contained minerals was what made it different from other waters.

Exactly where this water originated no one can be sure, because of the massive canyons and caverns lining the interior of our planet, which sometimes act as giant reservoirs of primal water before the water eventually ebbs to the surface. One of the greatest problems in most types of mining is the vast amounts of water from the interior of the earth flooding to the surface as the miners dig deeper & deeper. This natural mineral water flowed heavily upward when the miners seeking the precious gemstone tourmaline – dug downward to levels of 800-1000 ft. inside a pegmatite dike of a lithium mine in 1980. Subsequent water specimens tests gathered at the same source at the lithium mine over a period of three years did not analyze with the same percentage of specific minerals as the original called AQUALITHIA. Neither did it contain the same property of a single drop of AQUALITHIA, which when added to one gallon of distilled water, would reconstitute the new gallon to contain equal energy potency as the original.

While checking out a specimen of AQUALITHIA in Sept. '86, a teacher at the Dansville, VT Dowsing School proclaimed it was the 4th most solvent (4th wettest) water on this planet at the present time. Recently, more & more articles are appearing that mention colloidal chemistry. That is the suspension of electrolytes/trace minerals or elements/minerals/crystals that are energy charged or active in a solution that maintains the life force dynamic flow and circulation within a liquid. AQUALITHIA qualifies as a very special high energy colloidal or catalyst altered type water with the additional blessing that its made by Mother Nature – naturally!!!

The following list contains some of the catalyst altered waters being researched. All seem to contain ability to bring a more beneficial type of oxygen to the body systems:

<u>Process</u>	<u>H20</u>	<u>Angstrom measurement</u>
Nature	AQUALITHIA	205,000
Man-made	Bio-Line	158,000
Man-made	Crystal Energy Concentrate	178,000
Man-made	Fantazia	300,000
Nature	Holy H20 – Lourdes France	156,000
Clay	Scott mineral H20 or Iron H20	135,000
Man-made	Willard water	165,000

Over various time spans the top 1/10 of most liquids (most foods contain high liquid content) become South-polar energy charged. The S-polar energy encourages the growth of bacteria, mold and slime which gradually break down the nutrients to a condition often called stagnation. The surface tension becomes so charged, eventually the product or food is no longer fit for use or human consumption.

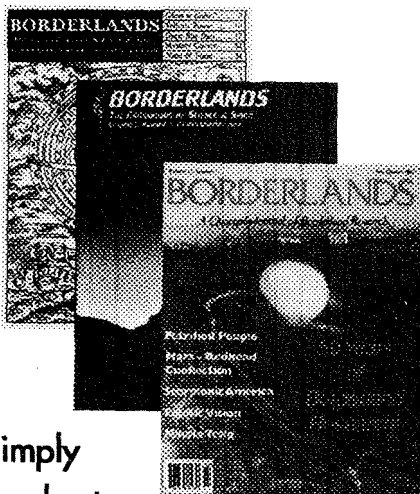
One of the applications of AQUALITHIA (reconstituted spray mist) is that it is able to prolong the shelf-life of many foods in the refrigerator by delaying breakdown and decay. A gentleman farmer and radionic researcher has reported that AQUALITHIA neutralizes the poisonous dioxins in the soil. Another researcher working with commercial farms found AQUALITHIA to be specific for the restoration of the natural energies of the soil while additionally acting as a natural chelator. It is also reported to have the ability to remove the residues of pesticides or insecticides in the commercial grain and hay feed sold to ranchers and dairy farmers for their livestock.

A mist of AQUALITHIA sprayed over the top of the head acts like a fine tooth comb in removing pos-ions from the human aura – one then feels refreshed as if they had just stepped out of the morning shower. For those sometimes having problems going to sleep at night, the mist sprayed on the bottom of bare clean feet greatly eases the ascent into sleeland. AQUALITHIA acts as a food & vitalizer for house plants by spraying once a week, in addition to regular watering and plant care. Immediately sprayed on bumps or bruises after an injury, AQUALITHIA seems to remove pain memory programming to cells along with removing pain almost instantly. Seldom will a black & blue mark or bruise be noticeable the next day. In case of burn or severe sunburn, the spray mist on clean body skin instantly removes pain and at the same time (in case of sunburn), seems to aid tanning. (If utilized both before and after sunning AQUALITHIA appears to enhance tanning even more.) Some use AQUALITHIA for setting their hair curls and as a skin freshener before applying makeup.

I do not recommend AQUALITHIA for internal use, though many researchers do use it that way & report beneficial results. A radionic Doctor in Canada uses 1 drop in an 8 oz. glass of regular water – waits five minutes and drinks. He feels that it causes his body to act like a sponge, absorbing more balancing/healing rays of the sun. A fairly recent research discovery (Sept. '87) is that 3 drops from a reconstituted gallon of AQUALITHIA will transmute one gallon of any tap water into excellent drinking water in 5 minutes. Further, 6 drops from a reconstituted gallon will transmute one gallon of ocean (salt) water into good drinking water. The transmutation of ocean water requires a full 24 hour waiting period!

Original AQUALITHIA is once again available for research from Borderland Sciences Research Foundation. One half ounce of AQUALITHIA can be reconstituted into 240 gallons at a cost of less than \$0.10 per gallon, making it the least expensive of available catalyst waters, instructions are included. 1/2 oz of AQUALITHIA mineral water is \$25 plus \$2 P&H. AQUALITHIA is a trademark of Lithium Labs Ltd.

ADVANCED KNOWLEDGE... UNCOMMON RESEARCH...



Simply
the best
alternative
scientific
magazine
around!



Since 1945

Subscribe to BORDERLANDS

Published Quarterly: \$25/Year Worldwide

BORDERLANDS is the nexus for Borderland Researchers around the globe, as it has since starting as Meade Layne's legendary Round Robin in 1945. Connect to the infinite within and the infinite without as you read and interact with some of the most advanced knowledge seekers in our universe. Discover a vitalistic science beyond modern research, yet rooted in ancient knowledge.

Sample copy: \$6.95

VISA and MasterCard orders: (707) 825-7733

Send Check or Moneyorder to:

BORDERLANDS

P. O. Box 220
Bayside, California 95524



INTRADIMENSIONAL COMMUNICATIONS & TIME travel tech. manuals. Incredible inquiry catalog (stamps) Box 2207 tt, Garden Valley ID 83822

THANK YOU!

Thanks for the overwhelming response to the ad for help about the audio lecture tapes in the last quarter. We received many letters by fax, email, and snail-mail. Borderlanders will be happy to know that the tapes were placed in good hands, and are currently being re-mastered by Mike Elsey, a professional audio engineer in Hollywood. These lectures by Daddy Bray, Riley Crabb, Max Freedom Long, and others will be made available on audio cassette by Borderland Sciences later this Fall. Once again, thanks for all your support.

ADVENTURES UNLIMITED



Exploring frontiers in:

- Science
- Archaeology
- History
- Travel

THE source for:

Ancient Wisdom, Atlantis, Conspiracy, Anti-Gravity, Exotic Travel, Lost Cities, Tesla Technology, UFOs, Free Energy Science, and much more!

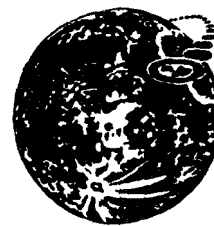
Call, write, or fax for our FREE catalog, a truly astonishing collection of rare, esoteric books and videos.

ADVENTURES UNLIMITED

303 Main Street • P.O. Box 74
Kempton, Illinois, 60946
USA

Tel.: 815-253-6390

Fax: 815-253-6300



CIRCULAR TIMES

AN INTERNATIONAL NETWORKING EDUCATIONAL FORUM ON PROGRESSIVE INTELLECTUAL STUDIES. REAL STUFF: SACRED GEOMETRY, SACRED SITES, CROP CIRCLES, UFOs, ALTERNATIVE ENERGY, ASTRONOMY, MUSIC, ALTERNATIVE HEALTH AND ANY THOUGHT PROVOKING STUDIES UPLIFTING TO WARDS

HUMAN EVOLUTION. CIRCULAR TIMES IS A QUARTERLY PUBLISHED AND EDITED BY DR.

COLETTE M. DOWELL N.D., WHO'S 22 YEARS OF RESEARCH ON ANOMALIES ENCOMPASSES A VAST FIELD OF PARA-NORMAL, HOLISTIC AND SCIENTIFIC STUDIES. CONTRIBUTING EDITORS INCLUDE: JOHN ANTHONY WEST, EROL O. TORUN, LINDA MOULTON HOWE AND OTHER AWARD WINNING RESEARCHERS.

\$ 24.00 ANNUAL

SEND CHECK OR MONEY ORDER TO:

MOVING FORWARD

168 BIRD CREEK EST. RD.

BLACK MOUNTAIN

N.C. 28711

704-669-4293

704-669-9049 @ FAX



COMING UP
IN THE NEXT ISSUE
OF

BORDERLANDS

Physiophony of Antonio Meucci
Vocal and Audio Motors
Analog vs. Digital: Understanding
Meanings, Messages, and Signals
The Music of Erich Zann
Pyramids and Cones

DON'T MISS IT!

Looking for the right livelihood?

Create abundance at home helping others be healthier. Work with wild, organic products and visionary company growing at 300% per year.

Pressure-free information.

Call Jesse Constable at (707) 822-3133
or voice mail at 1-800-927-2527 ext. 6974.

20 Years Ago in BORDERLANDS

Vol. 31, No. 5, Sept-October 1975 (38 pp.)

- * HOW TO SEE VITAL RADIATION - By Trevor James
- * THE DWELLER ON THE THRESHOLD - "THE SHADOW" of C.G. Jung
- * INTO THE FOURTH DIMENSION IN 1953 - By M/Sgt Clarence Dargy
- * THE TOPOLOGY OF A FOUR-DIMENSIONAL UNIVERSE - By F.B. Jueman
- * URI GELLER, CHALLENGE TO SCIENCE, Part VI of a Review
- * CLIPS, QUOTES & COMMENTS - From a "Non-Arrogant Seeker", Haunted by a Durpu Elemental, Haunted by a Psychokinetic Dweller, St. Clair's Opus On Healers Sold Out, More On "Eyes" and Occidental Meditation, Practical Use of the "Eyes", Curtis Upton, Practical Mystic, Promising Results with IKACO, Telepathic Probing, The Phoenix Radioclast, Precise Mathematical Modelling of Thought, Borderland Censorship Threatened, The Reincarnation of Peter Proud, The "Freedom Festival" at Tonopah.

Radionics, Dowsing

175 item equipment/home study catalog

Send \$3.95 to:

Radionics Institute
411K-75 Eastdale
Toronto, Canada
M4C 5N3

BORDERLANDSONLINE

Borderland Sciences Research Foundation Archives

**Connect to Borderland Sciences
on the Internet!**

ftp northcoast.com - login: anonymous
- cd pub/bsrf

Send E-mail to: bsrf@northcoast.com

or

Call the BORDERLANDS BBS

New Number: (707) 825-7739

14,400bps, 8n1

File Sections Include: Archæology, Science Texts and Programs, Borderlands Archives, Radio, Martial Arts, Cryptography, and more ...

Collaborate with Researchers Across the Globe — The main focus of the message bases which include: Borderland Science, Research/Collaboration, S. F. Tesla Society, Seismic Reports, and more... **CALL TODAY!**

BSRF coming soon to CompuServe!



TELESCOPES
BINOCULARS &
SCIENCE FUN

OUT OF THIS WORLD

(707) 937-3335
P.O. BOX 1010

45050 MAIN STREET
MENDOCINO CA 95460

Check out what you've missed!

BORDERLANDS originated as Meade Layne's **Round Robin** in 1945 and was changed to **The Journal of Borderland Research** in 1959, finally becoming **BORDERLANDS** in 1992. **BORDERLANDS** backissues are available from 1990 to the present with very limited quantities of early original issues. Single issues cost \$6.95 unless otherwise priced below.

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 46, No. 2, March-April 1990 (32 pp.)

- * NEW CONCEPTS IN POWER GENERATION - Jim Murray
- * DETECTION OF STATIONARY AND DYNAMIC SPACE SUBSTRATUM - Paramahansa Tewari
- * DIELECTRICITY & CAPACITANCE - Eric P. Dollard
- * FIZIX KORNER - Peter Lindemann
- * EVOLUTION OF MATTER & EVOLUTION OF FORCES, by Gustave Le Bon - Book - Review by Gerry Vassilatos
- * THE VEDAS: Mantras, Mandalas, The Krell Helmet and John Keely - Jerry W. Decker

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 46, Nos. 3 & 4, May-June-July-August 1990 (56 pp.)

- * THE IRON ROD OF MARS - Alison Davidson
- * HOMEOPATHY: A Vibrational Perspective - Dr. Donald R. Beans
- * LIFE FORCES AND PHYSICS - Beryl Payne, Ph.D.
- * EDGAR CAYCE & THE RADIAL ACTIVE APPLIANCE - Phil Thomas
- * BIOCIRCUITS: New Technologies In Holistic Health - Terry Patten
- * OZONE IS GOOD AND NATURAL - Ed McCabe
- * RADIONIC MACHINERY TO REGULATE EARTH VEINICS - Gerry Vassilatos
- * NOXIOUS EARTH ENERGIES - Kathe Bachler
- * EFFECTS OF 6-10 Hz ELF ON BRAIN WAVES - David S. Walonick
- * PHYSICS AND TECHNOLOGY OF THE PHENOMENON OF SPACE POWER GENERATION - Paramahansa Tewari

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 46, No. 5, Sept.-October 1990 (32 pp.)

- * THERE IS NO "FREE" ENERGY - An Anonymus Friend
- * MAGNETIC ENERGY TAUGHT ME BASIC NEW CONCEPTS - Larry Spring
- * THE COIL/ORAC EFFECT - Nicholas A. Reiter
- * VIKTOR SCHAUBERGER'S BIOLOGICAL SUBMARINE - Albert Zock
- * UNDERSTANDING THE CONTINUOUS UNIVERSE, preparing for transmutation - Rhetta Jacobson Baumgartner
- * AMERICA'S AMAZING ALCHEMIST - Vincent H. Gaddis
- * QUICKSILVER - MERCURY'S LIQUID METAL - Alison Davidson
- * OMENS, SIGNS AND THE ENERGIES OF TIME - Eugenia Macer-Story
- * CONDUCTING CHLOROPHYLL ENERGY OVER WIRES - Dr. T. Galen Hieronymus.

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 46, No. 6, Nov.-December 1990 (32 pp.)

- * JUPITER AND TIN - Alison Davidson
- * JACK DERBY - MR. FIX-IT/NEW AGE INVENTOR - Harry Davis

- * APPARATUS FOR DETECTING EMANATIONS FROM PLANETS - Beryl Payne
- * MAGNETIC ENERGY TAUGHT ME NEW BASIC CONCEPTS, Part II - Larry Spring
- * PHANTOM ARMIES OUT OF TIME - Vincent H. Gaddis
- * BSRF BULLETIN BOARD - Letters, Reviews, Contacts

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 47, No. 1, January-February 1991 (32 pp.)

- * LEAD - SATURN'S HEAVY METAL - Alison Davidson
- * THE SYNERGY MODEL - A.A.W. Khammas
- * AETHERIC ART - Virtual State Bureau and Archives
- * SOLAR CYCLE 22 SO FAR - NOAA Report
- * JACK DERBY - MR. FIX-IT/NEW AGE INVENTOR, Part II: Evolution of the Violet Ray Crystal Resonator - Harry Davis
- * THE WORKS OF DR. JOSE ALVAREZ LOPEZ - Jorge Resines
- * MAGNETIC ENERGY TAUGHT ME NEW BASIC CONCEPTS, Part III - Larry Spring

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 47, No. 2, March-April 1991 (32 pp.)

- * HUMAN ECOLOGY THROUGH RAJA YOGA - Dr. E.A.V. Prasad
- * SOME CONSIDERATIONS CONCERNING ANTI-GRAVITY AND RELATED MATTERS - Joel A. Wendt
- * MAGNETIC ENERGY TAUGHT ME NEW BASIC CONCEPTS, Part IV: Mediums of Exchange of Energy - Larry Spring
- * THE SPIRAL COIL MULTI-WAVE OSCILLATOR - Louis A. Schad
- * PSYCHIC SURGERY - Harvey Martin III
- * DISTANT VISION by ELMA G. 'PEM' FARNSWORTH - Book Review by Tom Brown
- * CELESTIAL CYBERGLYPHICS - Duncan Laurie
- * WATER AND CALCIUM MANAGEMENT: 52nd Annual Bio-Dynamic Conference - Report by Tom Brown
- * MAGNETIC LEVITATION VEHICLES - Michael Riversong
- * MEASURING MOTION THROUGH THE LUMINIFEROUS ETHER BY COMPARING ITS EFFECTS - Richard W.W. Allen
- * THE INTANGIBLE ETHER - Leonard G. Cramp

☐ THE JOURNAL OF BORDERLAND RESEARCH

Vol. 47, No. 3, May-June 1991 (32 pp.)

- * OPERATION CLINCHER - A B.R.S.F. Special Report
- * SACRAMENTAL THINKING - Joel A. Wendt
- * URANUS AND THE RADIOACTIVE METALS - Alison Davidson
- * THE WORLD RUNS ON AC - Larry Spring
- * THE SPIRAL COIL MULTI-WAVE OSCILLATOR, Part II - Louis A. Schad
- * THE BSRF BULLETIN BOARD

☐ **THE JOURNAL OF BORDERLAND RESEARCH**

Vol. 48, No. 3, May-June 1992 (32 pp.)

- * BORDERLAND QUAKES! - Michael Theroux
- * ON THE TRAIL OF THE LAKHOVSKY M.W.O. - Jorge Resines
- * VIEW FROM THE BORDERLANDS: Some MWO/RCO Questions Answered - Tom Brown
- * M.W.O. ROUNDUP - Peter A. Lindemann
- * EXISTENCE OF ABSOLUTE TIME - Dorotheos C.E. Cody
- * FIZIX CORNER - Peter A. Lindemann
- * A ROUND PEG IN A SQUARE HOLE - Larry Spring
- * FIELD GENERATORS - R.F. Directo
- * SCIENCE FICTION REVIEWED - Michael Theroux

☐ **THE JOURNAL OF BORDERLAND RESEARCH**

Vol. 48, No. 5, Sept.-October 1992 (32 pp.)

- * TUNNELS OF THE TITANS - Vincent Gaddis
- * PRE-COLOMBIAN GEODESICS - Jorge Resines
- * ANCIENT COSMOGRAPHY AND THE CROP CIRCLES - Michael Theroux
- * THE CIRCLEMAKERS - Book Review
- * MUSIC, ALCHEMY, AND PROJECTIVE GEOMETRY - Michael Theroux
- * DESIGN ECOLOGY - Michael Riversong
- * FIZIX KORNER - Peter Lindemann
- * AIDS/SYPHILIS UPDATE - Peter Lindemann with Joan McKenna
- * THE UNION ESPRITISTA CHRISTIANA DE FILIPINAS - Harvey Martin

☐ **THE JOURNAL OF BORDERLAND RESEARCH**

Vol. 48, No. 6, Nov.-December 1992 (32 pp.)

- * CHACO CANYON - Great Wonder of the World - Alison Davidson & Tom Brown
- * RECORDING TELLURIC SIGNALS, Part I - Gerry Vassilatos
- * ASTRONOMICAL CORRELATIONS FOUND IN CROP FORMATIONS - Colette M. Dowell, N.D.
- * FIZIX KORNER - Peter Lindemann

☐ **BORDERLANDS - The Crossroads of Science and Spirit**

Vol. 49, No. 1, 1st Quarter 1993 (52 pp.)

- * THAT WHICH IS ETERNAL IN US MUST BE AWAKENED - Tom Brown
- * DEVELOPING THE KOLISKO APPROACH - Nick Kollerstrom
- * FIND ACU-POINTS WITH YOUR COMPUTER - Stephen Gibson
- * I AM ENERGY - Larry Spring
- * A POSSIBLE ALTERNATIVE TO BATTERY POWERED VEHICLES - Ed O'Brian
- * DESIGN ECOLOGY, Part II - Michael Riversong
- * RECORDING TELLURIC SIGNALS, Part II - Gerry Vassilatos
- * THE PAPER DOCTOR - Book Review by Peter A. Lindemann
- * THE LAKHOVSKY MWO: BACK TO SQUARE ONE - Peter A. Lindemann

☐ **BORDERLANDS - The Crossroads of Science and Spirit**

Vol. 49, No. 2, 2nd Quarter 1993 (52 pp.)

- * THE MYSTERY OF QIGONG - Dr. G.K. Knowlton
- * CHAOS, ORDER OR NATURE? - Michael Theroux
- * SCHAUBERGER VS. ARCHIMEDES - Albert Zock
- * INTERACTION OF MAGNETIC FIELD AND POWER CURRENT IN SPACE POWER GENERATION - Paramahansa Tewari
- * FIZIX KORNER - Peter A. Lindemann
- * ELECTRO-THERAPEUTIC APPLIANCE - U.S. Patent 412,196, John S. Mellon
- * Paradigm de Jour GREY ALIENS BITE THE DUST - Alison Davidson
- * DESIGN ECOLOGY, Part III - Michael Riversong
- * SCIENCE & HEALTH and THE EARTH & OURSELVES: Books by Georges Lakhovsky - Reviewed by Jorge Resines
- * ANOTHER POSSIBLE ALTERNATIVE TO BATTERY POWERED VEHICLES - Ed O'Brian
- * EXPLORATIONS IN GRAND CANYON: Mysteries of Immense Rich Cavern Being Brought to Light - "Phoenix Gazette", April 5, 1909

☐ **BORDERLANDS - The Crossroads of Science and Spirit**

Vol. 50, No. 2, 2nd Quarter 1994 (52 pp.) *Riley Hansard Crabb Memorial Issue*

- * SHED NO TEARS FOR RILEY - Trevor James Constable
- * FLYING SAUCERS AND AMERICA'S DESTINY - Riley Crabb
- * THE MEANING OF THE WORD PSYCOGRAPH - E. D. O'Brian
- * DECIPHERING THE MOST MYSTERIOUS MANUSCRIPT IN THE WORLD - Michael Theroux
- * EIDETIC GEOCENTRISM - Part I - Gerry Vassilatos

☐ **BORDERLANDS - The Crossroads of Science and Spirit**

Vol. 50, No. 3, 3rd Quarter 1994 (52 pp.)

- * TZOLKIN - John Major Jenkins
- * THERMODYNAMICS AND FREE ENERGY - Peter Lindemann
- * COMMUNICATION AND THE EIDO-DENDRITIC EXPERIENCE - Michael Theroux
- * INDUCING THE URPFANZE - Dennis Klocek
- * EIDETIC GEOCENTRISM - Part II - Gerry Vassilatos
- * EARTH'S CENTER OF GRAVITY - UP OR DOWN - Ray Palmer

☐ **BORDERLANDS - The Crossroads of Science and Spirit**

Vol. 50, No. 4, 4th Quarter 1994 (52 pp.)

- * THE FIFTH SUN - Aymon de Roussy de Sales
- * SEISMOLOGY IN BRIHAT SAMHITA - Dr. E. A. V. Prasad
- * THE ETHER-WORLD OF THE PLANETARY SPHERES - Dr. Guenther Wachsmuth
- * EIDETIC GEOCENTRISM - Part III - Gerry Vassilatos
- * KONG JING - EMPTY FORCE - Dr. G. K. Knowlton
- * FOLLOW THE SUN - Larry Spring

All titles subject to availability.

Order any 10 issues (1990-95)

before December 1st and receive 25% off!

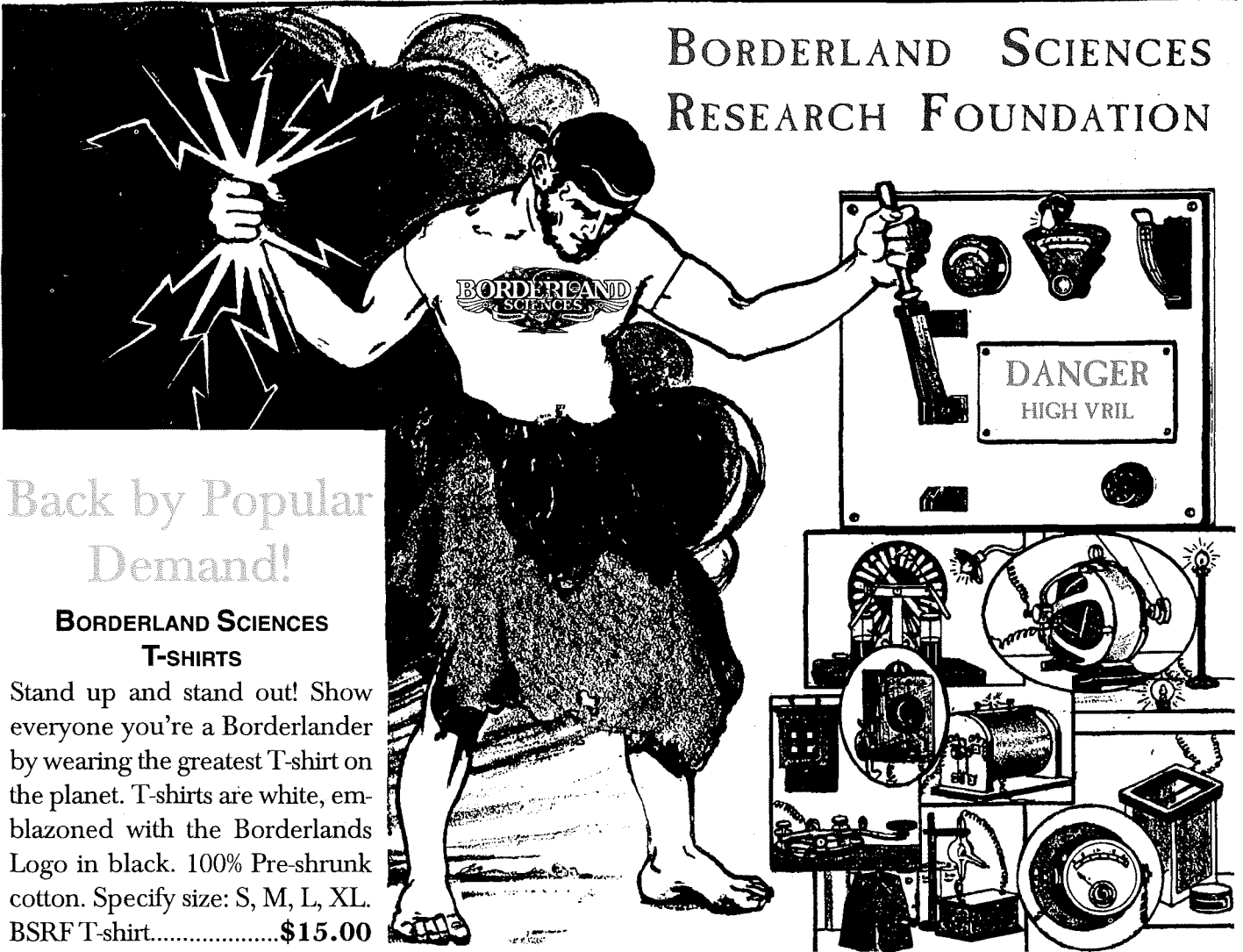
All prices subject to change without notice.

To order call (707) 825-7733 or write:

Borderland Sciences Research Foundation

P.O. Box 220 ★ Bayside ★ California ★ 95524 U.S.A.

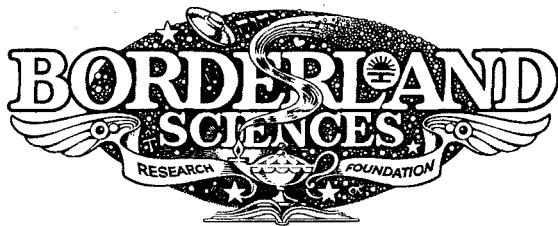
BORDERLAND SCIENCES RESEARCH FOUNDATION



Back by Popular
Demand!

BORDERLAND SCIENCES T-SHIRTS

Stand up and stand out! Show everyone you're a Borderlander by wearing the greatest T-shirt on the planet. T-shirts are white, emblazoned with the Borderlands Logo in black. 100% Pre-shrunk cotton. Specify size: S, M, L, XL. BSRF T-shirt.....\$15.00



P.O. Box 220 ★ Bayside ★ California ★ U.S.A.
Postal Zone 95524

ADDRESS CORRECTION REQUESTED

BULK RATE
USA POSTAGE
PAID

Providence,
Rhode Island
Permit No. 2475