

Reprints 10/c4/01

Climate and Advanced Electromagnetics

A Start of a Proto-Encyclopedia of Systems Theory Concepts Needed for Relating Climate Cycles to the Survival Human of Civilization.

Fred B. Wood, Sr., B.S., M.S., Ph.D. (Electrical Engineering)
Andrea Bowe, B.S. Liberal Studies:(2Yr. Electrical Engineering,
1Yr. General Engin., plus Yr .in Psych. and Nuclear Reactor Tech.)

Computer Social Impact Research Institute, Inc. (non-profit)
Earth Regeneration Society, Inc. (non-profit)
P.O. Box 5583, San Jose, CA 95150-5583
E-Mail: csiri@igc.org

Twenty-eight systems-component areas of science, electrical engineering, bio-science, and spirituality are listed which require research to facilitate the solution of our civilizations's problems with the glacial cycle being distorted by the CO₂ added to our atmosphere by the burning of fossil fuels. A sampling of Fig. 1, Fig. 5, Roots of Differential Equations of Electricity and Magnetism, and Fig. 11 are displayed below to show the path of research used here:

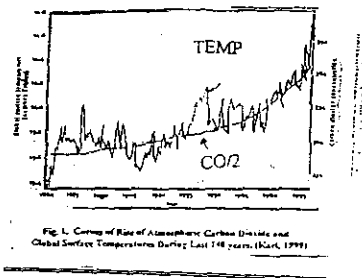
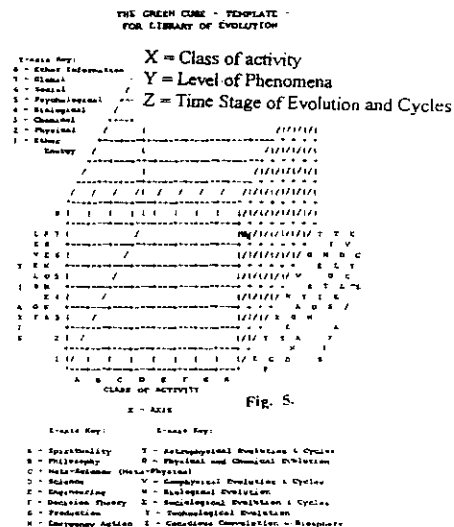


Fig. 1. Curves of Rise of Atmospheric Carbon Dioxide and Global Surface Temperatures During Last 140 years. (Karl, 1999)

Mathematically real root for Physical Systems.

Zero-Sum complex root for Biological Systems and Human Healing.

Pointer to mathematically imaginary root for Ethical and Spiritual Systems.
See Text & Figs. 13 thru Fig. 28.



This report also constitutes a base of 28 component areas for monitoring the uses of the energy available in the Quantum Vacuum for four purposes: (Connected with a proposal of Ms. Andrea Bowe of Santa Cruz, California, for a Spiritual UN):

- (1) Developing an understanding of "Consciousness" related to the Quantum Vacuum Holo-field,
- (2) Monitoring the Weapons being developed for World War III, to restrict the STEALING of Quantum Vacuum Energy from the indigenous peoples healing resources, and
- (3) To develop a dialog between the major political forces on our planet on the proper uses of the three classes of electromagnetic waves for the benefit of humankind and the planet, and
- (4) Establishing an unclassified Manhattan-type Project to design and produce "over unity" electric generators so that every country in the world could produce enough electricity for its own use, without having to go to war for energy sources such as clear cutting of trees, coal mining, and drilling for oil. Development of legal protection for trees that may be the carrier devices (like telephone poles holding wires) for maintaining the integrity of the holo-field.

There may be an opportunity to help some develop an understanding of the three major types of electromagnetic waves: Hertzian, Biological, and Information Carrying Waves like Tachyon and Torsion waves described by engineers or radial waves as envisioned by Teilhard de Chardin to represent Love.

This paper includes two abstracts: First Abstract: Prepared in November 1999, and a Second Abstract: Evolved in steps as the use of systems theory uncovered more and more elements of the system.

FIRST ABSTRACT

WOOD, F. B., SR, and Bowe, A.

CLIMATE CHANGE AND ADVANCED ELECTROMAGNETICS: FUTURE

Computer Social Impact Research Institute, Inc. (non-profit) 2346 Lansford Ave. , San Jose, CA
95125 USA E-mail: csiri@igc.org

Recent apparent evidence of global warming once again highlights the possibility of debate over the nature and extent of climate change, and what we might do to stabilize the global climate should we desire to do so. Using my green cube overview of systems analysis, we determined that the analysis of the climate change problem involves many different fields of science. Advanced Electromagnetics might be part of the solution, because of its potential to contribute to breakthrough developments in energy production and distribution, transportation and other energy-intensive sectors that are now producing high levels of so-called greenhouse gases. However, this same advanced EM may have been already weaponized to some degree, thus impeding its use for peaceful, civilian purposes. Overcoming this obstacle probably requires: interdisciplinary systems research, dialog sessions, diplomatic initiatives and creating win-win strategies. This report includes a proposal for changing this new weapons problem from a "zero-sum game" to a "win-win-game". Using the writings of David Bohm, Teilhard de Chardin, Elaine Smith, and W. I. Vernadsky plus conferring with leaders in the research on conscious evolution, we may attempt the rescue of Planet Earth in a manner approaching evolutionary guidelines inherent in DNA replication, the survival of the "most cooperative", instead of the "fittest" mentioned in Darwinian approaches to conceptualization of life. In climate cycles, we need to take note of their role in the evolution of humankind's brain from 500 cc to 1350 cc in 23 climate cycles, and are we switching from geophysical based evolution to conscious evolution? (**Environmental Systems - Exploratory Panel Or Special Forum on the Art and Science of Forecasting in the Age of Global Warming Or Systems Studies of Climate Change**)

Keywords: Climate, Glaciers, Electromagnetics, Electricity, Consciousness

SECOND ABSTRACT

As the work proceeded, we found more and more connections between the problem of atmospheric warming and other areas such as soil nutrition, biological systems, and questions of ethics leading to more detailed investigation of the role of spirituality in the survival of civilization.

We propose Hypotheses A and B and C as the most significant results coming out of this study:

Hypothesis A: European and American Electrodynamics and Electrical Engineering have had a serious defect since 1872, 128 years ago when Heaviside (Hunt, 1991) simplified James Clerk Maxwell's

equations for electromagnetic radiation by leaving out the scalar potential terms. The simplified Maxwell's Equations were adequate enough for designing the microwave RADAR systems of World War II (1939-1945), but not comprehensive enough for designing the type of RADAR anticipated for World War III. (See work of Thomas Bearden in "Fer-De-Lance A Study of Soviet Scalar Electromagnetic Weapons.")

Hypothesis B: It is estimated that by about 1952 (48 years ago) Joseph Stalin asked the top Soviet scientists to organize a project of the order of magnitude of the American Manhattan Project of World War II to explore the corrections needed to the textbook versions of Maxwell's Equations and the weapons designs of Nicola Tesla (1904-1910) that would make the Soviet Union invincible in World War III. There is evidence that the secret Soviet weapons developments have achieved considerable success. Brezhnev, Krushchev, and Gromyko each in turn made public appeals for the United Nations to establish a committee to supervise the development of new weapons of mass destruction. Our country, the United States, did not cooperate, saying that we thought the Soviet proposals were a trick to get us to reveal our future weapons. It is important that we at least belatedly take the initiative in negotiating for discussions of the new weapons. Furthermore, we are learning that part of our human brain memory system is outside the skull in the quantum vacuum holofield where both American and Russian brains are sharing the same holofield with an elementary security code provided by Galois field multiplier polynomials for coding.

Hypothesis C: There is a severe problem with capitalist economic systems in that they try to prevent their citizens from understanding how the economic system works, so that members of the power-elite can manipulate energy policies to conceal national policies. For example, overunity engines and electric generators could be used to solve some energy problems. The suppression of the development of overunity engines has greatly increased the pollution of the environment, and led a growing population think it is necessary to go to war to protect our oil deposits. This means that, if the United States supported the development of overunity engines, instead of delaying it, people could get all the electric power they wanted, so there would be no power drive for people to go to war for oil or other energy deposits, because everyone could get the power he wanted. They could get it by making use of overunity engines and generators which do not pollute the environment. The drive for more oil, gas, and coal may have stimulated the drive for World War I and World War II, which led to 320,000 casualties in WW I and 1,078,000 casualties in WWII. The speedy development and distribution of overunity electric motors and generators is the simplest way to move toward peace.

TABLE OF CONTENTS

Center Fold of 28 Systems-Components	.6-7
Description of Components	.8-10
Conclusions	.11
Appendix A List for Checking Hypotheses in Science and Engineering	12
Appendix B: Extract of Three Pages from Statement of LTC(retired) <i>Bearden</i> From 35 page Statement "The Unnecessary Energy Crisis: How to Solve it Quickly."	13-16
Appendix C: Law of the Seventh Generation	.17
Bibliography	.18-20
Appendix B:	



WHOLE SYSTEM ANALYSIS
OF PLANET EARTH FOR JULY 2000
MEETING OF INTERNATIONAL SOCIETY
FOR THE SYSTEMS SCIENCES

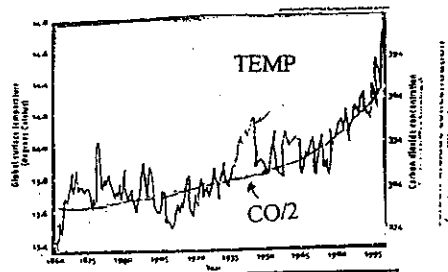


Fig. 1. Curves of Rise of Atmospheric Carbon Dioxide and Global Surface Temperatures During Last 140 years. (Karl, 1999)

Fig. 1. Curves of Rise of Atmospheric Carbon Dioxide and Global Surface Temperatures During Last 140 years. (Karl, 1999)

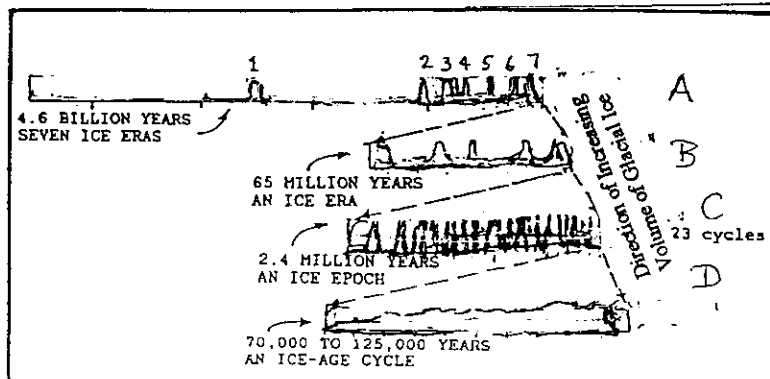
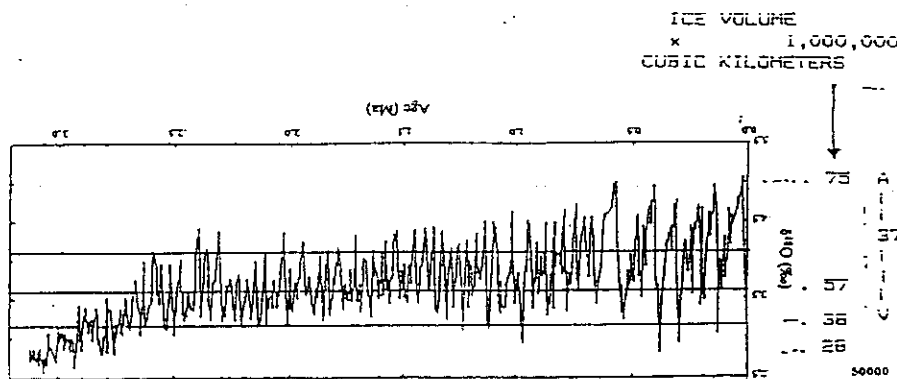


Fig. 2. Last 4.6 Billion Years: Estimate of Cold Cycles, Ice Eras, Ice Epochs, and Ice-Age Cycles.



3A. 2.4 MILLION YEAR EPOCH

FIG. 3B. LAST ICE-AGE CYCLE

THE GREEN CUBE - TEMPLATE -
FOR LIBRARY OF EVOLUTION

Y-axis Key:
8 - Other Information
7 - Global
6 - Social
5 - Psychological
4 - Biological
3 - Chemical
2 - Physical
1 - Ether
Energy

X = Class of activity
Y = Level of Phenomena
Z = Time Stage of Evolution and Cycles

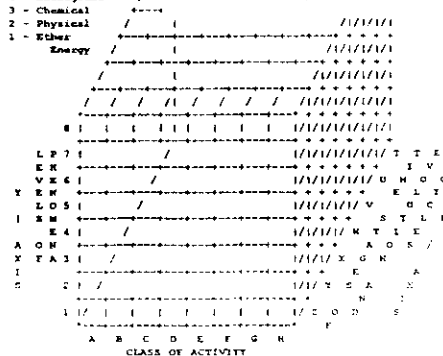
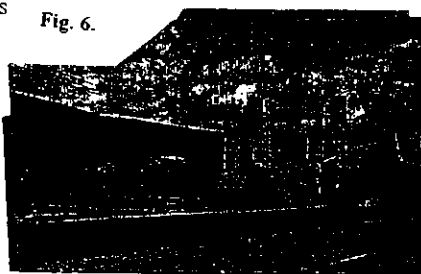


Fig. 5.

X-axis Key:
A - Spirituality
B - Philosophy
C - Meta-Science (Meta-Physical)
D - Science
E - Engineering
F - Decision Theory
G - Production
H - Emergency Action

Y-axis Key:
T - Astrophysical Evolution & Cycles
U - Physical and Chemical Evolution
V - Geophysical Evolution & Cycles
W - Biological Evolution
X - Sociological Evolution & Cycles
Y - Technological Evolution
Z - Energetic Evolution & Cycles



METCALF ENERGY CENTER
A joint development of Calpine & Bechtel

PROPOSED METCALF ENERGY CENTER,
SAN JOSE, CALIFORNIA, RATED AT 600
MEGAWATTS ENERGY WILL PROCESS
TWICE AS MUCH ENERGY, I.E., 1200 MEGA
WATTS, AND DISCARD HALF BY SENDING
THE SECOND 600 MEGAWATTS INTO OUTER
SPACE.

60 million years ago
Almost complete freezing of
all water on Earth.

0 ← Billions of Years

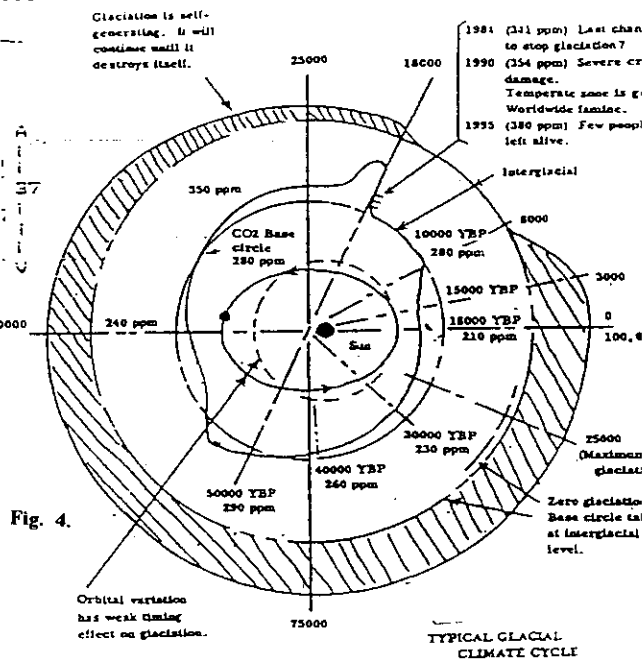


Fig. 4.

Spirals of Energy

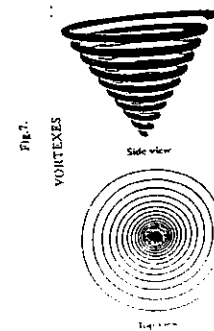


Fig. 7. Vortices - Spirals of Energy



Kazakhstan (N12-1)
Covatel N12-1
Above Picture From:
"FER-DE-LANCE"
US LIB CONG/MSBN#
86-50553/0-914119-03-6

Fig. 8.



Fig. 9A. Woodpecker Signals Focussed over Over North America to from Interferometer RADAR System.

Fig. 9B. Rectangular Clouds over Ventura County Verify Presence of Interferometer over Ventura County, California, 1/24/86

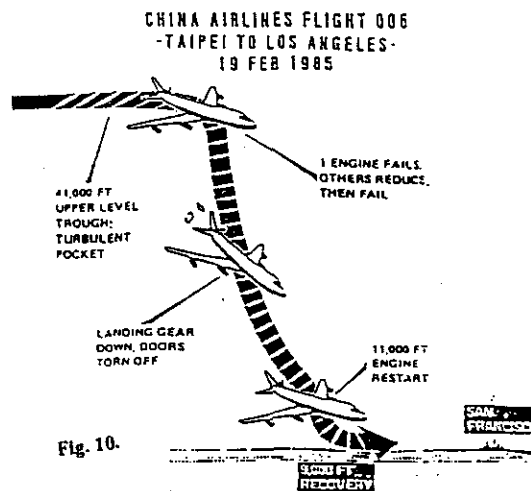


Fig. 10.

Test of a Proposed World War III Scalar Electromagnetic War to Disable an Airplane over the Ocean Without Killing Anyone.

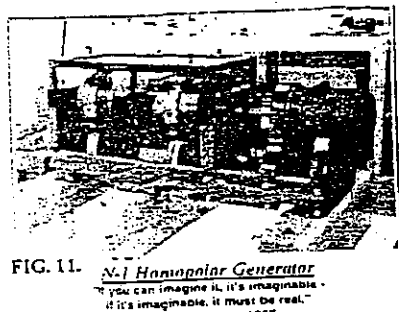
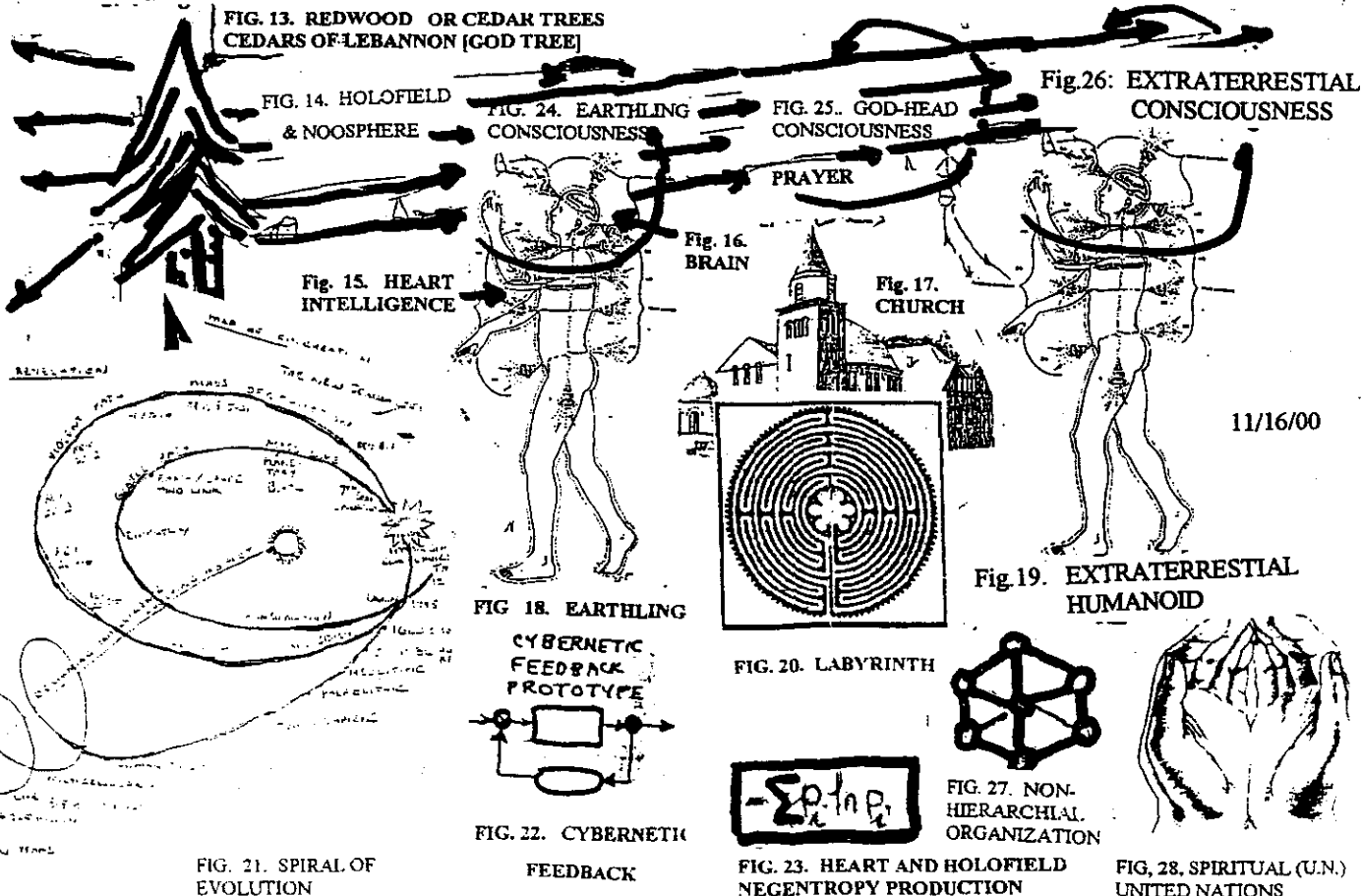


FIG. 11. N-1 Homopolar Generator
"You can imagine it, it's imaginable, it's real."
Bruce DePalma, 1997

1111 1000 0000 0010 000	Dividend
1100 0100 0000 0000 0000 0000 0000 0000 000	Error pattern
Polynomial Divisor	
1100 0000 0000 0010 1	
100 0100 0000 0010 10	
110 0000 0000 0001 01	
10 0100 0000 0011 110	
11 0000 0000 0000 101	
1 0100 0000 0011 0110	
1 1000 0000 0000 0101	
1100 0000 0011 0011 0	
1100 0000 0000 0010 1	
11 0001 1000 0000 000	
11 0000 0000 0000 101	
1 1000 0000 1010 000	Remainder

See Fig. 4, Line Code 1 and remainder on line below Code 1.

FIG. 12 Example of Division by Code 1 Polynomial.



11/16/00

DESCRIPTION OF COMPONENTS

Components of Earth Planet that form the principle elements in a complex natural system that are here represented by picto-grams or graphs of numerical data, to be followed by more detailed descriptions.

Fig. 1. Curves of Rise of Atmospheric Carbon Dioxide and Global Surface Temperatures During Last 140 Years (Karl, 1999) (Schneider, 1989).

Fig. 2. Last 4.6 Billion Years: Estimate of Cold Cycles, Ice Eras, Ice Epochs and Ice-Age Cycles.(Wood, 1998)

Fig. 3A. 2.4 Million Year Ice Epoch. (Kukla, 1992)

Fig. 3B. Last Ice-Age Cycle.(Kukla, 1992)

Fig. 4. Typical Glacial Climate cycle. (How much is base cycle in Nature; and how much is the influence of Humankind ?) (Felix, 1997) (Hamaker, 1982) (Sitchin, 1985) (Tompkins, 1989)

Fig. 5. The Green Cube - Template - For Library of Evolution, Containing dimensions of x: Class of activity; Y: Levels of Phenomena; Z Time Stages of Evolution and Cycles. (Pond, 1990, 1996) (Schneider, 1994) (Wood, M., 1987) (Wood, F.B., 1998)

Fig. 6. Proposed Metcalf Energy Center, San Jose, Peak Processing; 600 Megawatts derived from natural gas turbine plus 600 megawatts energy abstracted from the Quantum Vacuum for a total of 1200 Megawatts energy peak processing. The system will then use the old 1890 designs for generating electric power which can at most only utilize half of the electric power generated, so they will radiate up to 600 megawatts of electric energy into outer space of our universe. Nicola Tesla thought that it was crazy for American power companies to throw away half of the electric power generated. J. P. Morgan of Wall Street arranged to call the loans to Tesla Electric Co., putting Tesla into bankruptcy. Free room and board was made available to Tesla at the New Yorker Hotel for the rest of his normal working life. (Manning, 1996) (Bearden, T., 2000, see Appendix B)

Fig. 7. Vortexes or Spirals of Energy used to be included in engineering textbooks of the 1890 era. After 1904, Tesla claimed that there were more kinds of electromagnetic waves than were described in text books. Natural healers use vortexes in their description of the coupling of bioenergy to human system.

Fig. 8. In the mid 1980's structures similar to some of Tesla's sketches of the 1904-1910 era of new weapons and defenses against them were seen at missile testing ranges in Central Asia through photographs made by high altitude spy planes. D(Bearden, 1986) (Hunt, 1991)

Fig. 9. Woodpecker radio beams intersect over North America to form Interferometer Class of Radar

Operations. The energy in the radar beams forms standing waves which interact to form a coordinate system over the target area for identifying airplanes or missiles to be shot down. (Schwartz, 1998) (Weinberg, 19996) (Wood, 1998)

Fig. 10. Test of Proposed World War III Scalar Electromagnetic Weapon to disable an Airplane over the Ocean without Killing anyone. (Bearden, 1991, Gravitobiology)

Fig. 11. N-1 Homopolar Generator Over Unity Electric Generator of 300 Kilowatt Maximum Output, Input 100 KW, Average Output 184 KW. This Model used to demonstrate the principles. The added 84 KW output came from the Quantum Vacuum Flux or the Primordial Field of the Universe - a sea of 'free energy' which permeates all. - described by Bruce DePalma as the Primordial Field. See web page: <http://www.depalma.pair.com/> This model gave overunity power ratio of 1.84 in power range of 300 kilowatts. An earlier model at 7.56 kw gave a ratio of 28.2 in 1980 reported by De Palma in article by Robert Kincheloe in 1986 in *The Free Energy Device Handbook*, (1994) Stelle, IL; Adventures Unlimited Press. A number of other free-energy devices are reviewed in this Handbook. (Childress, 1994) (Manning, 1996) (Quigg, 1983, 1997)

Fig. 12. Example of Division by Code 1 Polynomial in a Galois Field of binary numbers that are modulating the Holofield.

Fig. 13. God-Trees (Redwood Trees, Cedars of Lebanon, and others) whose electrical aura supports the Holofields auxiliary memory shared by living beings.

Fig. 14. The Holofield and Noosphere of the Quantum Vacuum Flux with different carrier frequencies assigned to different species of living animals and plants which are modulated by galois fields with different code polynomials assigned to different individuals and groups of individuals. (Sharpe, 1993)

Fig. 15. The Heart Intelligence of Human Beings and of other animals maintains communication with the Holofield on principles and sends requests for details to its brain intelligence with comparisons with the highest ideals stored in the holofield by previous generations. These need to be worked out in finer detail using the block diagrams of F. Wayne Kraft. (Childre, 1999) Gordon, 1999) (Kraft, 1983) (Starhawk 1993)

Fig. 16. The Human BRAIN has communication channels, storage cells, and logic structures with which to work out the details of the principles generated by the Heart Intelligence. I don't find any consensus on how the three kinds of electromagnetic waves have particular roles in the functioning of human consciousness. I am trying to determine the role of the three types of electromagnetic waves that are derived from the three roots of the partial differential equations of electricity and magnetism. Russian scientists have derived three types special electromagnetic waves from different configurations of spinning charges. They report that their "torsion" waves may have an important role in consciousness. (Ornstein, 1997)

Fig. 17. The CHURCHES have a role in helping people develop their consciousness to be able to follow an evolutionary path by connecting to information on ethics stored by previous generations in the holofield.. (Fagg, 1999)

Fig. 18. EARTHLING here represents Homo Sapiens on Planet Earth. Examining the "Earth Chronicles" series of books by Zecharia Sitchin, I find that Sitchin's interpretation of ancient tablets point to a planet, Nibiru, where civilization had reached a point more advanced than our civilization, having developed satisfactory interplanetary space ships. They planned to make gold foil sheets to reflect some of the sunlight away to stabilize the rising planet surface temperature, like in Fig. 1 on Earth currently. Nibiru people couldn't find enough gold on their planet, so they traveled in their space ships to EARTH to mine gold and transport it back to planet Nibiru. (Brennan, 1987, 1993) (Kessler, 1991) (La Violette, 1994, 1995)

Fig. 19A. Extraterrestrial Humanoids communicating with the HOLOFIELD..(Clow, 1995)
holofield . (Clow, 1995)

Fig. 20. The LABYRINTH has become more popular in American churches lately. People are improving their health by walking slowly through the LABYRINTH. Probably they are receiving a small equally distributed dose of bioenergy (2nd order electromagnetic) waves.

Fig. 21. Here we have Barbara Marx Hubbard's concept of conscious evolution.
Anderson, 1993) (Begich, 2000) (Hubbard, 1977, 1995, 1998)

Fig. 22. Here is a symbol for a cybernetics feedback prototype to help us direct any such process and be helpful in finding more beneficial changes in social structure.

Fig. 23. Here is a symbol of the Heart and Holofield Negentropy Production (Consoletti, 1998)
Peat, 1997)

Figs. 24, 25, & 26: Here we show the communication with HOLOFIELD for.:

24: EARTHLING, (Johari, 1987) (Laszlo, 1999) (Targ, 1998) (Yogananda, 1946)

25: GOD-HEAD, (Hurtak, 1977)

26: EXTRATERRESTIALS. (Walker, 2000)

27:

Fig. 27. NON-HIERARCHIAL organization like that proposed by Sir Stafford Beer.
Bohm, 1999) (Henderson, 1990) (Hock, 1999)

Fig. 28. A proposal by Andrea Bowe for a Spiritual United Nations. We have recently learned that Bishop Swig of Grace Cathedral, San Francisco is currently organizing a United Religious Initiative similar to the Spiritual U.N. Motto: "To share and care for All" (Bovard, 1994-95)

CONCLUSIONS

We have had glacial cycles for almost one billion years on planet Earth. We cannot eliminate them, but we can reduce the magnitude and rate of coming of the glaciers. To do our best to ameliorate the glaciers and adapt to glacial conditions, we must:

- (1) Continue our research on glacial cycles,
- (2) Educate the public on these issues.
- (3) Develop energy sources for heating buildings and caves during glaciation,
- (4) Stop burning fossil fuels to slow down the increase of carbon dioxide in the atmosphere,
- (5) Provide a job retraining program for workers in the fossil fuel industries,
- (6) Provide an investment trading of stocks and bonds of fossil fuel industries for treasury bonds at equitable rates to insure continuity of pension funds, school funds, and non-profit funds,
- (7) Provide for treasury bond trade with forest land owners for the government taking over their old growth forests,
- (8) Develop overunity engines to generate electricity,
- (9) Develop overunity engines to provide a power source for automobiles, trains, trucks, & busses,
- (10) Develop overunity engines for airplanes,
- (11) Also develop overunity motors for running rock grinders for remineralizing the soil,
- (12) Plant more forests to absorb carbon dioxide, etc.
- (13) Contract with the Chaordic Alliance (Non-Profit 501(c)(3)), Half Moon Bay, California, to have Affiliates provide periodic review of how well the above projects are progressing,
- (14) Establish Research Construction Company to fill in any gaps in the program to withstand glaciation.
- (15) Improve our communications capability with people on planets in other solar systems to see if they have any better ideas for dealing with the glaciation.
- (16) Review old books like F. Creedy, *The Next Step in Civilization*.

APPENDICES

APPENDIX A: LIST FOR CHECKING HYPOTHESES IN SCIENCE AND ENGINEERING.

IDENTIFICATION OF STAGE OF DEVELOPMENT OF INCOMPLETE MANUSCRIPTS

The reason for the existence of this series of "working paper drafts" is that preliminary interdisciplinary studies of the interaction between engineering science and society have to be done by conference or by correspondence between individuals who are interested in the subject but may be geographically distant from each other. After some correspondence and exchange of notes, the material may be referred to someone in the social sciences who may be better prepared to continue the investigation of the problem or it may be revised for submission to one of the engineering or scientific journals.

Where articles may be at different stages of development, we have to pay more attention to the process of solving problems, forming and testing hypotheses in the process of scientific research. It is important that such work be properly identified so that preliminary conclusions are not confused with logical conclusions. An investigation of the social consequences of some invention or a new scientific concept might go through the following stages:

- A: Searching for background reference material
- B: Brief reading of background material
- C: Study and discussion of background material
- D: Summarizing of previous research workers' results.
- E: Definition of the immediate problem
- F: Tabulation of references for the specific problem
- G: Brief study of the specific problem
- H: Formulation of preliminary hypotheses
- I: Checking of preliminary hypotheses for agreement with known data.
- J: Collection of new data or setting up experiments
- K: Checking of hypotheses with cultural values in art, music, poetry, ethics, religious experience, etc.
- L: Critical testing and revision of hypotheses
- M: Preliminary report writing
- N: Circulation of preliminary reports to others for criticism
- O: Revision of reports or oral presentation at scientific societies
- P: Publication of Articles
- Q: Experimental use of ideas with small groups of specialists and/or laymen
- R: Review of the value of hypotheses as tried in practice
- S: Preparation of popularized versions for public use
- T: Preparation of more technical versions for social science research

In some cases the next letter is used to indicate the next version of the analysis, even if the stage doesn't fit the above definitions precisely. Frederick B. Wood, Ph.D. 12/24/4

**APPENDIX B: EXTRACT OF ONE PAGE FROM T. E. BEARDEN, 36 PAGE STATEMENT;
"The Unnecessary Energy Crisis: How to Solve it Quickly," from pages 11-12**

T. E. Bearden, LTC, U.S. Army (Retired)
CEO, CTEC Inc.

Director, Association of Distinguished American Scientists (ADAS)
Fellow Emeritus, Alpha Foundation's Institute for Advanced Study (AIAS)
June 12, 2000

Electrical Energy Required from Hydrocarbon Burning Drives the Problem

The heart of the present environmental pollution problem is the ever-increasing need for electrical energy obtained from burning of hydrocarbon fuels and/or nuclear power stations.

The increasing production of electrical power to fill the rising needs, increasingly pollutes the environment including the populace itself (lungs, bodies, etc.). Almost every species on earth is affected, and every year some species become extinct as a result.

Environmental pollution includes pollution of the soil, fresh and salt water, and the atmosphere by a variety of waste products. Given global warming, it also includes excess heat pollution in addition to chemical and nuclear residues.

Under present procedures, the electrical energy problem is exacerbated by decreasing available oil supplies, which are believed to have peaked this year, with a projected decline from now on.

But really, the electrical energy problem is due to the scientific community's adamant defense and use of electrical power system models and theories that are 136 years old {49} in their very foundations, riddled with errors and non sequiturs, and seriously flawed.

The scientific community has not even recognized the problem, much less the solution. In fact, it does not even *intend* to recognize the problem, even though the basis for it has been known in particle physics for nearly 50 years. As Bunge {50} put it some decades ago:

"...it is not usually acknowledged that electrodynamics, both classical and quantal, are in a sad state."

The scientific community has done little to correct that fundamental problem since Bunge made his wry statement.

Let us put it very simply: The most modern theory today is modern gauge field theory. In that theory, freedom of gauge is assumed from the getgo. Applied to electrodynamics, this means --- as all electrodynamicists have assumed for the last century or longer --- that the potential energy of an EM system can be freely changed at will. In other words, in theory it costs nothing at all to increase the EM energy collected in a system, this is merely "changing the voltage", which does not require power. In other words, we can "excite" the system with excess energy (actually taken from the vacuum), at will. For free. And the best science of the day agrees with that statement.

It also follows that we can freely change the excitation energy again, at will. In short, we can dissipate that excess energy freely and at will. Without cost.

Well, this means that we are free — by the laws of nature, physics, thermodynamics, and gauge field theory — to dissipate that free excess potential energy in an external load, thus doing "free work".

Since none of the systems our energy scientists and engineers build for us are *doing* that, it follows *a priori* that the fault lies entirely in their own system design and building. It does *not* lie in any prohibition by nature or the laws of physics.

A priori, then, the present $COP < 1.0$ performance of our electrical power systems is a monstrosity and the direct fault of our scientists and engineers. We cannot blame the laws of nature or the laws of physics.

The present energy crisis then is due totally to that "conspiracy of ignorance" we referred to, that is maintained by the scientific community, and that has been maintained by it for more than 100 years.

This is the real situation that the environmentalists must become aware of, if they are to see the correct path into which their energies and efforts should be directed — to solve both the energy crisis and the problem of gigantic pollution of the biosphere.

Environmental Community.

In the past the environmental community has been overly naïve with respect to physics, and particularly with respect to electrical physics. Its science advisors have come mostly from the conservative "in the box" scientific community. Hence the community has failed to realize that $COP > 1.0$ electrical power systems are normal and permitted by the laws of nature and the laws of physics. They have no inkling that Heaviside discovered — *in the 1880s!* — the enormous unaccounted EM energy pouring from the terminals of any battery or generator. They are unaware that Poynting considered only the tiny component of the energy flow that enters the circuit. They are also unaware that, completely unable to explain the astounding enormity of the EM energy flow if the nondiverged (nonintercepted) Heaviside component is accounted, Lorentz {9} just arbitrarily used a little procedure to *discard* that troublesome Heaviside "dark" (unaccounted) component.

Lorentz reasoned that, since the huge dark energy flow component missed the circuit entirely, it "had no physical significance." This is like arguing that none of the wind on the ocean has any physical significance, except for that small portion of the wind that strikes the sail of one's own sailboat. It ignores the obvious fact that whole fleets of additional sailboats can also be powered by that "physically insignificant" wind component that *misses* one's own sailboat entirely.

Nonetheless, electrodynamicists continue to use Lorentz's little discard trick, and try to call the feeble Poynting energy flow component caught by the circuit the *entire* EM energy flow connected with it. This is like arguing that the component of wind hitting the sails of one's own sailboat, is the entire great wind on the ocean.

ADAS Position Paper: Solution to the Energy Crisis

As a result, the environmental community has failed to grasp the real reason for the energy crisis and the increasing pollution of the biosphere. They have been deceived and manipulated into thinking that conventional organized science is giving them the very best technical advice possible on electrical power systems. The environmentalists have been and are further deceived into believing that the conventional scientific community is advocating and performing the best possible scientific studies and developments for trying to solve the energy crisis.

Of major importance, the environmental community itself has been deceived as to the exact nature of the energy flow in and around a circuit, the vastness of the unaccounted energy flow (or even that any of the energy flow is deliberately unaccounted), and the fact that this present but unaccounted EM energy flow can be intercepted and captured for use in powering loads and developing self-powering systems.

Worst of all, the environmental community has been deceived as to what powers every electrical load and EM circuit, and that burning all those hydrocarbons, using those nuclear fuel rods, building those dams and windmills, and putting out solar cell arrays are necessary and the best that can be done. In short, they have been smoothly diverted from solving the very problem — the problem of the increasing pollution and destruction of the biosphere — they are striving to rectify.

However, judging from their continued demonstrations in the street, at least many environmentalists now suspect that much of the world's continued policy of "the rich get richer and the poor get poorer" in international trade agreements are deliberately planned and implemented to the advantage of a favored financial class and the exploitation of the poorer laboring classes in disadvantaged nations.

9. We can now show that enormous EM energy flow can be easily and cheaply initiated from the active vacuum, anywhere, at any time. The basis for this was in fact discovered by Heaviside in the 1880s. Lorentz knew of this huge energy flow component but discarded it arbitrarily, apparently to avoid being attacked and accused of being a perpetual motion advocate. See H.A. Lorentz, Vorlesungen über Theoretische Physik an der Universität Leiden, Vol. V, Die Maxwell'sche Theorie (1900-1902), Akademische Verlagsgesellschaft M.B.H., Leipzig, 1931, "Die Energie im elektromagnetischen Feld," p. 179-186. Figure 25 on p. 185 shows the Lorentz concept of integrating the Poynting vector around a closed cylindrical surface surrounding a volumetric element. This is the procedure which arbitrarily selects only a small component of the energy flow associated with a circuit — specifically, the small Poynting component striking the

surface charges and being diverged into the circuit to power it — and then treats that tiny component as the "entire" Poynting energy flow.

15. In an electrical power system, Coefficient of Performance (COP) may be taken as the average energy dissipated in the load divided by the average energy furnished to the system by the operator. Or, it may be taken as the average power dissipated in the load divided by the average power dissipated in the input process. COP can be taken across any component, several components, or the entire system. The COP of a normal generator itself may be 0.9, for example, while when the entire system including the heater, etc. is taken into account, the system COP may be only 0.3. For $COP > 1.0$, excess energy must be furnished to the system by the external environment, while only part of the energy (or none of it) input is furnished by the operator.

49. Maxwell's seminal paper was published in 1864, as a purely material fluid flow (hydrodynamic) theory. At the time, the electron and the atom had not been discovered, hence the reaction of two opposite charges (positive nuclei, negative Drude electrons) in the wire was not modeled but only one was modeled, etc. Maxwell omitted half the EM wave in the vacuum and half the energy, resulting in the omission of the EM cause and generatrix of Newton's third law reaction from electrodynamics. This omission is present in mechanics and electrodynamics, where the third law reaction appears as a mystical effect without a known cause. The cause and mechanism is the omitted reaction of the observed effect back upon the non-observed cause. General relativity, e.g., does include this reaction mechanism from the effect back upon the cause. But electrodynamicists still omit half the electromagnetics, half the wave, and half the energy as is easily shown. E.g., it is demonstrated in every EM signal reception in a simple wire antenna, when the resulting perturbations of both the positive nuclei and the Drude electrons are correctly attributed to their interactions with the incoming EM fields (waves) from the vacuum.

50. Mario Bunge, Found. Phys., Springer-Verlag, New York, 1967, p. 176.

APPENDIX C: LAW OF THE SEVENTH GENERATION

This is a note to begin paper and abstract presented to Global Warming Conference in Toronto in July, 2000

for creative zygonic analysis of solutions

to environmental degradation and global warming. The main solution seems to me to revolve around a spherical analysis and input related to a new level of consciousness allowing the falacies inherent in the so-called "scientific method" to be dealt with in a new way, by assuming mankind has not only the technology and science needed for solving global warming but also the desire inherent in any successful adaptation to environmental factors : the desire to survive and to leave a legacy of not only survival but abundance for the fourth to the seventh generation to come. This understanding of cooperation and tribal or global responsibility is inherent in any culture that has survived many generations of interaction and involvement as well as successful and nurturing ecospheric (i.e. ecological, atmospheric, earthworm approved agriculture creating habitat that nourishes and improves conditions for conscious living and interaction with the earth as a biosphere capable of regeneration with "husbandmanship" or conscious engineering of habitat or permaculture in its many forms and diverse mechanisms allowing abundance without pollution) conditions created by the concept of "Heaven's Flame"—small groups of people living together and working in harmony to support themselves. This harmony presupposes the need and the desire to form "self-activated group consciosness" (the next evolutionary step?), allowing a global mechanism in the earth's body to supersede the need for competition in order to form a more perfect union, like the organism of the human body itself, where all effective functioning is directed toward the survival of the globe as a life-sustaining organism, treating all polluters as cancerous cells that must be stopped immediately before the very entity the parasitical, life-threatening corporations feed on be reduced to a mars like condition no longer capable of supporting life as we know and enjoy it now. Anyone who doesn't believe that the necessary steps must be taken now to ensure the survival of the planet, with Clean air, water and soils a necessity, not a luxury of the rich and famous, is an alien and should be sent back to whatever previous galaxy or planet they came from to enjoy there the fruits of their labor, worlds without habitat, species or diversity: worlds now probably incapable of sustaining life itself, the most miraculous and precious of gifts.

Hence, the LAW OF THE SEVENTH GENERATION:

WE, THE PEOPLE, in order to form a more perfect union dedicated to the salvation of the planet Earth (HEARTH HOME HEART) RESPECTFULLY REQUEST ALL HUMANITY to join in a cosmic purpose, united in solidarity with all peoples and all species, declare the Vision of healing a reality, and focusing all our efforts toward this purpose, we make inalienable the right and responsibility to nurture and sustain the HEART OF HUMANITY. Like the Council of the Grandmothers so conveniently ignored by our Founding Fathers as the fourth part of the balance necessary to sustain a true democracy (see The Iriquois Confederacy), we must care not only for this generation but also consider the needs of the fourth to the seventh generation to come.

BIBLIOGRAPHY

- Anderson, Carolyn, editor. (1993). *The Rings of Empowerment*. San Anselmo, CA.: Global Family
- Bearden, Tom. (1986). *Fer-De-Lance*. Chula Vista, CA: Tesla Publishing Co.
- Becker, Robert O. (1985). *The BODY ELECTRIC: ELECTROMAGNETISM AND THE FOUNDATION OF LIFE*. NY: Morrow.
- Begich, Dr. Nick and James Roderick. . (2000). *Earth Rising: the Revolution Toward a Thousand Years of Peace*. Anchorage, Alaska: Earthpulse Press.
- Bohm, David. (1995). *UNFOLDING MEANING: A Weekend of Dialogue*. 29 W. 35thSt. NY, NY 10001: Routledge, ISBN 0 415 13638 5
- Brandenburg, John E. Ph.D. and Monica Rix Paxson. (1999). *DEAD MARS DYING EARTH*. Freedom, CA: The Crossing Press.
- Brennan, Ann Barbara. (1987). *Hands of light: A Guide to Healing Through the Human Energy*. And (1993) *LIGHT EMERGING: The Journey of Personal Healing*. NY: Bantam Books.
- Childre, Doc and Howard Martin with Donna Beech. (1999). *THE HEARTMATH SOLUTION*. SF, CA: Harper.
- Childress, David Hatcher, compiler. (1994). *THE FREE-ENERGY DEVICE HANDBOOK: A Compilation of Patents and Report*. Illinois: Adventures Unlimited Press.
- Clow, Barbara Hand. (1995). *The Pleiadian Agenda: A New Cosmology for the Age of Light*. Santa Fe, NM: Bear and company, Pub.
- Consoletti, N. (1998) Ph.D. Thesis: "Theory of Whole Systems". nickc@pocketmail.com
<http://www.nickc.f2s.com>
- Fagg, Lawrence W. (1999). *Electromagnetism and the Sacred*. NY: Continuum.
- Felix, Robert W. (1997). *Not By Fire but by Ice*. Bellevue, WA: Sugarhouse Publishing.
- Gordon, Richard. (1999). *Quantum Touch: The Power to Heal*. Berkeley, CA: North Atlantic Books.
- Hamaker, John D., and, Donald A. Weaver (1982). *The Survival of Civilization*. Burlingame, CA. Hamaker-Weaver Publishers.
- Hamaker, John D., and Donald A Weaver. (1986). "The Climate Cycle", An Extract from "The Hamaker Thesis on Survival" *SGSR 30th Annual Meeting, Vol. II. L-31 to L-44*. University of Pennsylvania.
- Henderson, Hazel. (1996). *Building a Win-Win World: Life Beyond Global Economic Warfare*. SF: Berrett-Koehler Pub.
- Hock, Dee. (1999). *Birth of the Chaordic Age*. SF: Berrett-Koehler Pub.

Hubbard, Barbara Marx. (1998). *Conscious Evolution: Awakening the Power of Our Social potential* and (1995). *The Revelation: A Message of Hope for the New Millenium*. Novato, CA: New World Library.

Hunt, Bruce J. (1991). *The Maxwellians*. NY: Cornell Univ. Press

Hurtak, J.J. (1977). *YHVH The Book of Knowledge: The Keys of Enoch*. Los Gatos, CA: The Academy for Future Science. 76-55939

Johari, Harish. (1987). *CHAKRAS*. Rochester, Vermont: Destiny Books.

Kraft, R. Wayne. (1983). *A Reason To Hope: A Synthesis of Teilhard de Chardin's Vision and Systems Thinking*. Seaside, CA: Intersystems Publications.

Karl, Thomas R. and Kevin E Trenberth. (1999). "The Human Impact on Climate." *Scientific American*. Nov./Dec.

Kessler, Ronald. (1995). *Inside the White House*. NY: Pocket Books.

Kukla, Gerohe and Ellen Went. (1992). *Start of a Glacial*. Berlin: Springer-Verlag.

Laszlo, Ervin, Stanislav Grof, and Peter Russell. (1999). *A Transatlantic Dialogue*. Boston, Mass.: Element.

LaViolette, Paul A. (1994). *SUBQUANTUM KINETICS The Alchemy of Creation* 1176 Hedgewood Ln., Schenectady, NY 12309: ISBN 0 9642025 0 6 And (1995) *Beyond the Big Bang*. Vermont: Park Street Press.

Manning, Jeane. (1996). *The Coming Energy Revolution: The Search for Free Energy*. Garden City Park, NY: Avery Publishing Group. ISBN:0-89529-713-2

Ornstein, Robert. (1997). *The Right Mind: Making Sense of the Hemispheres*. NY: Harcourt, Brace and Co.

Peat, F. David. (1997). *INFINITE POTENTIAL: The Life and Times of DAVID BOHM*. Menlo Park, CA: Addison-Wesley.

Pond, Dale and John Keely, and Tesla, Nikola and others. (1990, 1996). *UNIVERSAL LAWS NEVER BEFORE REVEALED: KEELEY'S SECRETS Understanding and Using the Science of Sympathetic Vibration*. Santa Fe, NM: The Message company.

Quigg, Chris. (1983,1997) *GAUGE THEORIES OF THE STRONG, WEAK, AND ELECTROMAGNETIC INTERACTIONS*, Reading, Mass: Adison Wesley Longman, Inc. <http://www.aw.com/gb/> ISBN 0-201-32832-1.

Schneider, Michael S. (1994). *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*. NY: HarperPerennial.

Schneider, Stephen H. (1989) *GLOBAL WARMING ARE WE ENTERING THE GREENHOUSE CENTURY?* SF: Sierra Club Books.

Sharpe, Kevin J. (1993). *David Bohm's World New Physics and New Religion*, 440 Forsgate Dr. Cranbury, NJ. 08512:Associated University Presses.

Sitchin, Zecharia. (1985). *The Wars of God and Men*. NY: Avon books. See also *The 12th Planet* and *The Earth Chronicles* by this author at avonbooks.com.

Starhawk, (1993). *The Fifth Sacred Thing*. NY, NY: Bantam Books.

Swartz, Tim. (1998). *Secret Black Projects of the New World Order: Anti-Gravity UFO's, Black Helicopters and Mysterious Flying Triangles*. New Brunswick, NJ: Abelard Productions Publishing.

Targ, Russell and Jane Katra, Ph.D (1998). *Miracles of Mind: Exploring Nonlocal Consciousness and Spiritual Healing*. Novato, CA.: New World Library.

Tompkins, Peter, and Christopher. Bird. (1989). *SECRETS OF THE SOILS New Age Solutions for restoring our planet*. NY: Harper and Row. ISBN 0 06 091968 X

Walker, Evan Harris. (2000). *The physics of CONSCIOUSNESS*. Cambridge, Mass.: Perseus Books.

Weinberg, Stephen. (1996) *THE QUANTUM THEORY OF FIELDS Vol. II Modern Applications*, ISBN 0 521 58555 4, 40 W. 20th St. NY NY 10011-4211: Cambridge University Press

Wood, Fred B., Sr. (1998). "The N-Dimensional Knowledge Proximity Approach To Technology Assessment: The Case of Electromagnetic Systems. *ISSS Proceedings. csiri*

Wood, Fred B., Sr. (1992). "Climate Cycles and the Development of Civilization" *Whose World to Lose?* Berkeley, CA.: Earth Regeneration Society.

Wood, Matthew. (1987). *Seven Herbs: Plants as Teachers*. Berkeley, CA: North Atlantic Books.

Yogananda, Paramahansa. (1946). *Autobiography of a Yogi*. LA, CA: Self-Realization Fellowship.