

The Spin Force

A Collection of Articles and Experiments by Buryl Payne, Ph.D.

ABOUT THE AUTHOR

Buryl Payne, holds a M.S. in physics and a Ph. D. in psychology, both from the University of Washington. This book is a blend of those two fields. Buryl's work will influenced theories of human nature for the next 1,000 years.

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This book would never have been made possible without the careful editing of Dylan Foregger. His meticulous attention to detail (which I would never have had the patience for!) made a hodge podge of notes into a coherent whole.

Edward Chernovsky, solar-terrestrial physicist who was retired from a government science job, who voluntarily helped me plot the data and recheck it once or twice. I would have given up several times, and Edward Cernosky led me on.

He heard about me on a Larry King show about solar cycles.

Dedication

This book is dedicated to Tom Rhiimaki, a man who supported and encouraged me to send an article to the American Journal of Acupuncture about my discovery in 1980. Without his support, I probably would have dropped the entire project and gone on to other things.

I also dedicate this book to Ron Hruby, whose 'out of the box' thinking about remote healing and the Biofield opened a huge new doorway in my own thinking about this area of investigation, which will certainly lead to a different way of looking at human nature, and probably new technologies of communication.

Preface

A major discovery has been made of a simple device which can detect and measure a spin force around living organisms.

This discovery will eventually lead to changes in the way we view human nature. It objectively shows, clearly, that humans are connected with the Sun, Moon, and at least some of the planets in our solar system.

All living organisms have this connection. Some results of this discovery show that humans can directly affect the force of another human, even thousands of miles away. People have always known this, but now it can be measured.

This simple discovery may lead to a revision of Einstein's Special Theory of Relativity and clarify foundations of the Quantum Theory, especially the current ideas of non locality and action at a distance.

There is even the possibility that usable energy may be extracted from this force.

In 1925 Goudsmit and Uhlenbeck, two Dutch physicists, postulated that electrons have a property they called *spin* to account for a small secondary wave in the emission spectra of the hydrogen atom. This postulation soon became a part of Quantum Theory (see Section VI for more details). In this book I describe how to detect and measure a 'macro-spin force' around the human body and other so-called living organisms. The key word is 'measure'. To measure means to obtain numbers. Such numbers may defined in terms of a liner scale with equal divisions of some quantity, called 'an interval scale' or merely denoting greater or lesser than, called an ordinal scale. Often in forming a science one starts with an ordinal scale and gradually refines it to be an interval scale. For example, to measure the temperature, initially it could only be 'hotter' or 'colder'. Then temperature measurement was refined as relative to hotter than the boiling point of water, or the freezing point of water, as indicated by a tic mark on an instrument (a mercury thermometer). Eventually it was formulated in terms such that one degree was defined as that amount of heat required to increase the temperature of one gram of water by one index mark (called one degree) on a thermometer, an instrument devised for that purpose. New instruments and new reference points are still in progress today for fundamental quantities in physics, chemistry, astronomy, etc.

At this time spin is measured in degrees and direction of rotation as seen from above or as seen from below. To measure something means it can be related (possibly) to other forces and effects. This is the beginning of science or knowledge.

When electron spins are aligned or organized (as in iron), a magnetic field is said to be present. When electrons flow in a wire, magnetism is said to exist around the wire. It always is, of course, although not always apparent to our senses or instruments. Magnetism appears to be a special case of spin. Living organisms show spin and organize matter - atoms, molecules, and cells - so a kind of 'magnetism' becomes manifest around living organisms, and probably even non-living substances, such as: rocks, mountains, the whole Earth, stars, and the galaxy itself (which is known to have spin). This may be what Tesla was referring to by the phrase, a "higher octave of magnetism', or what was called 'animal magnetism' by Mesmer in the 16th century.

A spin force seems to be present around all matter. Some Russians refer to it as a torsion field, or a vortex. Vortices have been proposed for at least 100 years in physics, but no clear experimental data has been found that can be verified by anyone with simple equipment. I have found that a spin force around living organisms can be detected by some string, a few magnets, and a set of tinker toys. This fills a gap between subatomic particles and planets. Some aspects of the spin force around living organisms, especially people, have been experimentally studied, and the results have been published elsewhere. These are included in this book, as well as others, which have never before been published.

Many other parameters are open for investigation. You are invited to join in the research.

I'm excited about the possibilities which are unfolding day by day. In order that the reader may understand how science progress from simple beginning, I have included a variety of papers and thoughts from the beginning of this 'accidental' discovery, to some of the most recent thoughts evolved and stimulated by others who have made discoveries along similar lines.

Introduction

In this book I describe how to detect and measure a 'spin force' around the human body and other so-called living organisms. The property called 'magnetism' appears to be a special case of spin. It is proposed that spin be considered as a fundamental force replacing the term magnetism. Many astronomical phenomena are simply explained by this semantic change.

Spin is everywhere. Even molecules in space have been found to spin. Most heavenly bodies spin; some asteroids, planetoids, and all stars spin. Some giant pulsating stars spin very fast, up to 1,000 times a minute. Earth's moon only spins once every month.

Spin apparently radiates or acts at a distance like the other so called forces of physics: gravity and electricity. A famous experiment by two physicists shows what they have named 'entanglement' of electron spins which can be explained by assuming that a spin force exists which travels faster than light. Two recent researchers have observed data that suggests a spin force may do that.

Spins of molecules within the human body have been observed by some scientists to couple with other molecules several inches away. This puzzles some researchers. Others postulate a faster than light velocity for spin based on observations of distant stars.

This booklet is a collection of articles on the spin force around highly organized carbon based forms called 'living'. The articles are somewhat repetitious but sometimes convey different thoughts, as my understanding has evolved over the years.

To read this book, simply read what interests you. Skip articles of little interest, such as physics theory. Read the experiments. Make your own Biofield Meter (Section IV). Get one of ours; a standard model that you can compare with one you make. Record your observations and share yoru data with us here at PhycoPhysics Labs.

My data concludes that the spin force is much larger around living organisms, than electric or iron magnetism. This takes the notion of spin, used in quantum theory, to macrocosmic levels described by general relativity.

It is proposed that spin is so ubiquitous in the universe it ought be accorded the status of a fundamental force, alongside gravity and the other 'forces' that shape the structure of the universe.



The illustration below is of the former famous red spot in Jupiter's atmosphere. This clearly looks like a spin force generated storm similar to those on Earth, and even on the Sun. (see photo at the end of the 'Introduction')

Section I - History of the Biofield



Early conception of the Biofield, by Randolph Stone

Human Magnetic Fields

Personal Statement Buryl Payne, PhD

This section contains some of my original notes about the discovery of the spin force. It will give the interested reader some insight into new discoveries that can be made by a curious person. It's a combination of insight, accidental discoveries, initial and often continuous confusion, comments and ideas from personal friends, as well as other men who may have lived hundreds of years ago, yet whose written notes eventually came to my attention.

I realize a key factor in my work is taking notes. Perhaps they are only casual at first, and then they slowly evolve into careful observations, taking more details into account, and using ever more sensitive instruments. Thus, any casual person who makes careful observations and writes them down comes to be labeled as a 'scientist'. Anyone can be a scientist and develop a new field of

science, as it is called, or add to existent science (science - a Latin word meaning knowledge).

So here's a place, although not the first, that my notes began.

Early spring, in 1978, two friends and I were returning from a sail. I remember the exact moment during our sail when we were talking about pyramids, and other related topics, and we got the idea of making a pyramid with little magnets on the corners. We had already heard, and I had observed, that there was some interaction between pyramids and magnets.

Later, a friend suggested hanging one of the pyramids by a thread and leaving it free to turn. At first my friends and I made a large wooden frame pyramid about one and a half feet on a side with a few ring magnets placed at the corners. We hung it in a corner, as a curiosity. Nothing much happened. It just hung there. Then, one day some people were visiting for dinner. They had a one year old baby. We moved a big easy chair near the table, which happened to be under the hanging pyramid, and placed the baby in it. The chair was big enough so that the baby wouldn't fall out. As we were eating, someone observed that the pyramid was moving. No one had touched it. It was above the baby, out of his reach; a mystery, which was soon forgotten by everyone but me. To investigate further I made a small pyramid and hung it inside a bell jar so it would be free from any possible air currents. The pyramid was made from little plastic sticks called Geodesic Sticks which I had purchased from Edmund Scientific and the magnets were bought at Radio Shack for a dime apiece. It seemed natural to put the poles called North towards the apex of the pyramid.

And there it hung on the fireplace mantle in the front room of the Institute for PsychoEnergetics (my holistic therapy clinic, in Brookline, Massachusetts) where everyone could wonder what it was for. During one workshop on biofeedback and hypnosis, a participant noticed that it was moving. Another said it always moved when a truck went by, but vibration of the bell jar did not produce rotational movement of the pyramid due to the thread suspension. I began to take more careful notice and soon observed that it moved whenever I went very close to it and put my hands on each side of the glass jar without touching it.

Initially I thought I had something which unequivocally demonstrated 'pyramid energy', for I had no patience with fuzzy experiments on razor blades and preserving dead mice. Here was something measurable. Most everyone could produce rotation, but not all the time. And it varied in the initial direction of motion, though once set into motion, the hanging pyramid would swing to and fro for several minutes.

No correlation could be found with the moon phases, planetary angles, my personal state of energy, emotional condition, or will. Nor was it seemingly affected by weather, time of day, or any other obvious factor. A few persons could produce rotation apparently at will. My Rolfer friend could almost always make it move.

For many months it remained a puzzle and to understand it better I made a number of tests. I tried all the different structures I could create: squares, a single T, a three sided pyramid, changing the magnets around, or even no magnets at all. All of them worked.

One acquaintance made the pyramid move with no magnets. Admittedly psychic, she also had some natural PK ability (PsychoKinesis – The ability to move matter by the power of thought), as did a number of kids at one conference where the instruments were displayed.

But I soon realized that the effect generally did not depend on "willing" for most people and that neither did it relate in any significant way to pyramids. Other shapes worked, though not as well, and the apparatus moved regardless of what I desired.

Sometimes it moved as much as a quarter turn or more even when I was more than 5 feet away from it. It seemed that just looking intently at it would produce motion in a few seconds.

In the interest of keeping better records and coming to some understanding I pasted a paper strip on the bell jar marked in measured intervals and began recording the number and direction (initial, since the pyramid would swing first one way then another, as it was on a thread which would wind up and unwind).

This provided a series of data which I kept off and on for a number of months and still no answers to the factors involved were forthcoming.

At that period I was pursuing my interest in validating astrology and studying related, scientific materials. I came across a reference in one book to the effect that acupuncture points showed a voltage change in immediate correlation with solar flares. Later I was reading Astronomy Magazine and came across a note that in April of 1978 occurred one of the largest solar flares on record. Looking at my notes I noticed that the pyramid had been highly active around that time and I figured that if the Sun's activity could affect acupuncture points then it could also produce some kind of magnetic effects. Referring to my notes on the pyramid in the bottle, it had moved the most when solar activity was largest. Eventually, this connection with solar activity became very clear.

It wasn't for some months that I slowly began to learn about the Earth's magnetic field and its daily changes which are associated with Solar and planetary activity. I also began to recall material claiming that field lines around the earth varied from place to place.

When I moved from Brookline Massachusetts (a suburb of Boston) to Manomet (near Cape Cod) the magnetic apparatus practically ceased working, for a while. Later, I learned that there was a well known decrease in magnetic changes induced by the Sun near the coasts everywhere on Earth. But every now and then it would move a little bit. And occasionally it moved a lot (when solar activity was larger). One march I took it to Egypt and checked it out on top of the great pyramid. On top it moved a reasonable amount (1/8th a turn) and inside the pyramid it did not move at all. Apparently enough rock dampened the effect. Probably in deep mines there would be no movement of the hanging pyramids. I never did get a chance to verify that hypothesis. A trip to Palenque, in the Yucatan area of Mexico, during a solar eclipse, had me amazed with how much movement took place, especially right at the ruins of Palenque! The pyramid moved from over ten feet away. This would be equivalent to a magnetic field of more than several thousand gauss! I wondered if it were moving by itself, but as far as I could determine it did not move when a person was not near. Just looking at it seemed to produce movement.

But how could I tell, since not looking at it meant I couldn't tell if it was moving. I considered designing some kind of automatic light beam detector to determine if movement was taking place when I was not looking at it, but never got around to it.

At that time I had a very large room for an office. I hung a large pyramid

frame in one quiet corner, free from drafts, and mounted a light on the wall, a mirror on the apex of the pyramid, and a scale on the wall where the spot light on the wall reflected. I had what physicists called a 'light beam galvanometer' which was capable of measuring very tiny increments of movement.

To ascertain that no movement occurred when no person was sitting in the chair under the pyramid, I kept a pair of binoculars on my desk and from time to time would look at the spot of light reflected on the scale. There was never any movement, except one time when a cat was sitting in the chair, and I shooed it out verbally at a distance. The pyramid moved, indicating that there was a change in the 'field' around the cat.

I had already observed that the pyramid would move back and forth if a person was sitting under it, and would eventually, usually, come to a new zero point. Then, when the person slowly got up, the pyramid would rotate again. Some times, first thing in the morning, I would observe that the pyramid had moved a few degrees during the night. This could have been because of temperature changes which changed the tension in the support string. Sometimes it was when there was solar/geomagnetic activity during the night.

I had made measurements after shielding the glass case of the smaller pyramid with a grounded copper screen (for electrostatic shielding) with a non-magnetic stainless steel can, and with a magnetic shielding of ordinary iron stove pipe. Only the magnetic shielding was effective in stopping the reaction of the instrument which I now began calling a Biomagnetometer.

I plotted my data for many days and checked for the year 1980 with the magnetic field index for the earth as measured at Fredricksburg, Maryland. My instrument showed deflections on days that the magnetic index was higher than average for 11 out of 15 times. The days at Palenque were not included since that was at a different place on Earth.

Upon taking the Biomagnetometer to Framingham, Mass (about 75 miles from Manomet and inland 15 miles) I found that it moved upon two occasions whereas it did not move at all in Manomet.

So at this point this apparatus and what it is measuring still remained mysterious. There were some really puzzling questions to be answered. Such as: How can the instrument actually move when magnetic field measurements of the human body typically show magnetic fields of the order of a millionth of a

Gauss? To duplicate movements of the Biomagnetometer, using a magnet, requires waving a 300 gauss magnet around at a distance of six inches or so inside the large pyramid.

Since the human organism has very little magnetic material, it is puzzling to understand how this Biomagnetometer can register changes uniquely related to the proximity of humans. Is there some kind of induced magnetic field? If so, why doesn't it show up on an ordinary compass? On one occasion I thought I noticed a compass needle moving when I held my hands around it, but it happened so fast I couldn't be sure. Surely someone would have noticed a magnetic field of these proportions before.

It's not even clear to me how the field of the body, if there is one, can produce the torque to turn the Biomagnetometers. If a 300 gauss ring magnet is held with the face towards the instrument and about 3 inches away it will produce a good sized rotational impulse, so perhaps that is the direction of the human magnetic field effect. If so, it certainly would be sufficient to cause a compass to deflect, I would expect.

But a compass needle doesn't deflect when you just put your hands right next to it, even when it is near a magnetic pyramid which is showing deflection.

As of September, 1980, I was puzzled. My intuition tells me that this phenomenon is important and I don't know what to do next to produce clarification. What seems desirable is for many persons at different locations to experiment with the instruments and see if anyone can come up with something useful or different.

If this effect is due to magnetic fields then it should be detectable as people pass by. Each of us is potentially interacting with every other person within a range of about three to thirteen feet, or over four meters. Just think of the magnetic field interactions between people in large cities. Perhaps it is the case that the Biomagnetometers show more response in large cities. Or perhaps it is the case that they move only certain places on the Earth and these could be, or perhaps are already mapped. What does this mean in terms of your living or not living there? People are now improving healing with magnets and charging water with magnets, and there must be something between magnets and water.

Perhaps this magnetic aura is inhaled when a person takes in water and is

connected with the water treatment from the moon and sun guns.

At this point in time (September, 1980) it would seem that I have demonstrated, though not conclusively, that there is a field which is sometimes present around humans and which is connected or linked with the Sun's activity via the Earth's magnetic field.

The Solar activity, in turn, has been linked with the positions of the planets, and at times the Earth's magnetic field is directly affected by the positions of relatively near by planets and the Moon's alignment with them, independent of solar activity. The next section describes a fascinating experiment which spring from the development of the small pyramid suspended in a bottle.

There is some connection with magnetism and water, and between water and Orgone energy, discovered by Wilhelm Reich. There is some connection between planetary, and solar and lunar radiation and water. Perhaps there is some way in which Orgone Energy has a magnetic second order effect. I don't know of Reich ever mentioning this, however.



A jug of water being treated with a Power Pad magnetic disk. A full article about the hanging pyramids in bottles was written in 1979, but never published. It is printed on the succeeding pages.

THE PSYCHOKINETIC PYRAMID

Buryl Payne, Ph. D. (Unpublished, 1979)

Is there such a thing as pyramid energy? If so, then what value does it have, other than sharpening razor blades and drying fruit? How can it be measured, controlled, or Enhanced? Or is it merely a subjective phenomenon of the gullible?

Being an open minded and skeptical scientist I decided to investigate pyramids, but being bearded and too impatient to dry fruit or wait for plants to grow, I sought a different approach.

What I wanted was some objective way to demonstrate pyramid energy with a meter, produce a tone, light a lamp, or produce some other clear, definitive, repeatable effect which could be performed by anyone. Ideally an effect or indication that would be measurable and repeatable. Something as fuzzy as razor blade sharpness or enhanced plant growth, or the experience of a "better" meditation is too subjective to be worth much as a scientific effect. Searching for something that would interact with pyramids I began with the observations that pyramids sometimes affect compasses. It is also believed by everyone that one side of the pyramid should face magnetic north for best results. Therefore perhaps there is some interaction between pyramids and magnetic fields. Some experimental pyramids are manufactured with magnets built in the base.

From conversations with friends about pyramids and magnets, the idea evolved of placing magnets on the pyramid frame and suspending the pyramid from a thread so that it would be free to rotate. When placed in a glass jar (see photo on next two pages), free from stray air currents, the pyramid was observed to rotate in the presence of people. Thus was the Psychokinetic Pyramid born.

When people look intensely at the pyramid, come within a foot or two of it, or place their hands near it, it rotates. First it moves one way, and then back the other way as tension on the thread increases, like winding up on a child's swing and unwinding.

Sometimes the pyramid will rotate initially to the right and sometimes to the left. Movement may be up to one half a turn, and sometimes the pyramid will respond immediately and sometimes only after a few seconds. In order to make measurements I glued an index on the glass bell jar marked off in centimeters and began taking notes on the magnitude and direction of the initial rotation.

AS OF THIS DATE (July, 1978) I DO NOT KNOW HOW THE PYRAMID WORKS OR WHAT FACTORS INFLUENCE THE MAGNITUDE AND DIRECTION OF ITS ROTATION.

Observations were made when I was happy, sad, angry, depressed, tired, energetic, during all weathers, phases of the moon, and so forth. Nothing outstanding has emerged except perhaps that when the weather is rainy, the pyramids are not so energetic.

During the course of my observations my ability to move the pyramid has increased. This action-at-a-distance effect may be akin to the psi ability called "psychokinesis", hence the name for the hanging pyramid--The Psychokinetic pyramid--called the PK pyramid for short.

Some people clearly have greater ability to produce rotation in the PK pyramid. Once when I was unable to move it, and no one else could move it either, a three year old boy just put his hands out towards it and it took off! When my Rolfer friend points his magic hands at the pyramid away it goes. Generally the pyramid responds best when a person stands very close to it (within three feet) and stares at the pyramid with the intention that it move.

My inference to date is that the PK pyramid is responsive to some field or emanation from the human body. It cannot be magnetic, electric, or thermal for these radiations are all far too small to produce rotation of such magnitude. One of our experimental pyramids weighs nearly half a pound.

The PK pyramid can be moved more readily by those who are known to have healing power in their hands, and the ability to produce movement can be increased. Hence the PK pyramid is both a measuring device and a psychic feedback training device.

If you wish to experiment with the PK Pyramid for yourself here's how you make it:

Obtain a large glass jar, four magnets, a few sticks of any material for the pyramid frame, an eye hook or fastener and a few inches of thread. Place magnets on the lower corners of the pyramid, pointing at the apex. Hang the pyramid from a thread so that it can swing freely and set it in a quiet place where you can get physically close to it.

The PK pyramid is a new scientific discovery. We are just beginning to learn about pyramid energies, auras, orgone energy, bioenergy, and so forth. You have as much of an opportunity of making a discovery as I have. I have no doubt that many things useful for the new age will arise from the new energies. If you build a pyramid and discover some new effects, please communicate with the author.





Different versions of the Biofield Meter were made, using the pyramid shape. Some were put in large wide-mouth bottles (shown above) , suspended from a cork top, by a string. These small ones also showed the effect when a person placed their hands around them.

The first published note about the discovery appeared in the New Age Journal, a magazine published in Boston in 1979. It was called a *psychic toy* by the editor. One evening while eating dinner with some friends we were discussing the current news about the space station called 'Skylab" which was expected to crash into Earth shortly, before any space shuttle crew could get to it to change its orbit.

In a jocular mood I proposed it would be a good psychokinetic experiment to test whether a mass psychokinetic effect could move the space station into higher orbit. I expected people to laugh at the idea, but instead people thought this was a good idea, and the PK Skylab experiment was born.

The SkyLab Meditation

Around this time, the space station, *SkyLab*, was slowing down due to atmospheric drag and was expected to crash into Earth.

There was some public concern that it could hit a populated area, causing death and destruction. Because of the publicity, it seemed a likely target for a test of psychokinetic power, by a group. A flyer was constructed and sent around to groups that might be willing to do this. The project was greatly enhanced when a psychic, by the name of Page Bryant, who had a daily radio show in Florida, said that she would like to talk about it on her show. She volunteered to coordinate the experiment among radio stations. Altogether, about eighty radio stations were contacted, who agreed to connect with Page Bryant's show at the proper time. A popular psychic and I were scheduled to lead a meditation. I heard that the show was translated into Chinese. I was even on the BBC TV show in England for which I was paid \$25, the only money received for the project. This publicity made the experiment work!

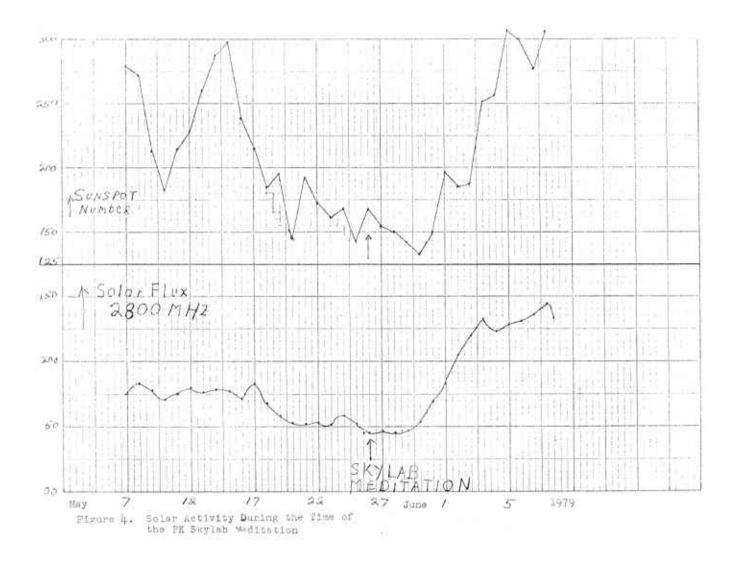
Itzhak Bentov, author of STALKING THE WILD PENDULUM, a new age scientist and a personal friend, who lived nearby actively participated in the project. He died in a plane crash of a commercial airliner on the day of the project. I had two broken ribs, a broken shoulder and broken collar bone from a bicycle accident, and Chris Kilham, another new age activist who played an active role in the project, was very ill. This was a warning to me not to attempt changes of the world order.

Before my bike accident I had gone for a run in the Boston arboretum, stopped to meditate under a giant tree, and asked my guides what to say to people on the radio show. An inner voice clearly said: "Invite people to ask the Sun to take care of IT"

I had no idea what this meant at that time, but during the guided meditation on the radio show I did that.

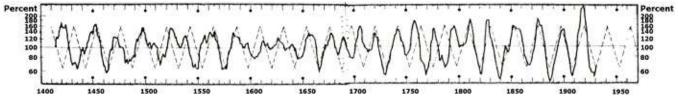
We also were in touch with NASA about the experiment. Then, on the radio show, which was linked to all the others, I guided the audience in the visualization to move the space station to a higher orbit by letting the Sun take care of it. Right after meditation I called my contact at NASA. He reported that they lost the space station on their radar screens. Later, its radar image was relocated and it had apparently not moved. However, it crashed two weeks later than expected. My NASA contact said this happened because the Sun's activity had unexpectedly decreased. This meant the Earth's atmosphere contracted a bit, causing the space station to hit less air molecules than previously, resulting in a slower descent. It fell into an ocean doing no harm.

The follow graph shows the sunspot numbers and solar flux, in correspondence to the SkyLab Meditation. You can see that the Sun's activity decreased at the time of the global mediation.



In seeking to understand the rotation of the pyramid frame I chanced up on the book of Edward Dewey on cycles. He reported on the work of historian John Wheeler who found cycles of war for international battles extending back in history for 2,500 years. Beyond that time he couldn't find accurate data to analyze.

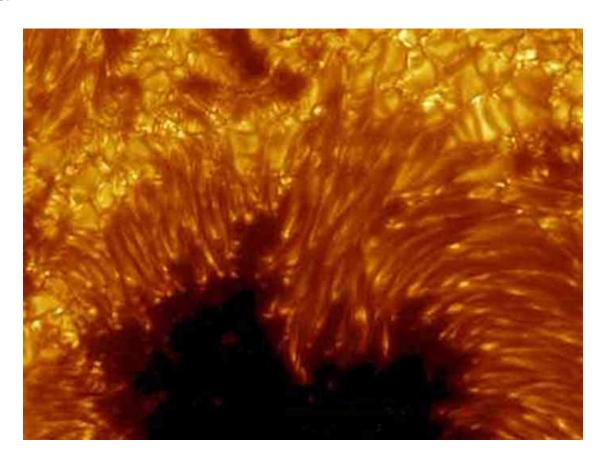
This was the impetus three years later for Global Peace Meditations, which apparently quieted the Sun. This was important because other data showed that the Sun's activity was associated with the cycles of the start of international battles.



One of the major cycles of the start of international battles which Wheeler found is about 11 years, which I subsequently showed is clearly associated with the eleven year sunspot cycle. In a large global experiment, it was later shown that sunspot activity was reduced by peace meditations, up to 30% for two weeks.

In Section VIII of this booklet, which describes remote healing experiments, almost all healers who participated in the experiments (over 30) were able to influence the Biofield of the subjects in the experiment. Some healers were 3,000 miles away! Was this amazing feat related to psychokinesis abilities? The Global Peace Meditations apparently affected the Sun 93 million miles away.

What is the mechanism? Does the Sun have a spin field? Probably. As do other stars.



THE PSYCHOKINETIC (P.K.) PYRAMID

If there is such a thing as pyramid energy of what value is it beyond sharp-ening razor blades and drying fruit? How can it be measured? Controlled? Enhanced? or is it merely a subjective phenomenon of the Guillible? Being an open minded and sceptical scientist I decided to investigate pyramids, to find some objective way to demonstrate pyramid energy with a meter; to possibly generate a tone, light a lamp, or produce some clear, definitive measurable, repeatable effects which could be performed by anyone.

I decided to place magnets pointing upward from the four corners at the base and suspended the pyramid from a thread so that the form would be free to rotate inside of a glass jar and also be free of any interfering air currents. Upon later testing, when we looked intensely at the replica, it surprisingly rotated. The same phenomenon also occured when we approached the Pyramid closely or placed our hands near to it. Sometimes the form gyrated clockwise, and as the thread tension increased with each winding, it would approach the point of return and begin to rotate counterclockwise.

But some could not make the Pyramid rotate in this way. And no one had the ability to make it rotate, at will, all the time.

Movement sometimes attained a half turn, and at times the response was immediate; otherwise it would take seconds before the Pyramid would begin to move. Thus, I glued an index on the glass bell jar and marked it off in centimeters to make measurements. Then I began taking notes on the magnitude and direction of the initial rotation.

As of this date (July, 78) I don't know what force causes the Pyramid to turn or what factors precisely influence the magnitude and direction of its rotation. I made tests and observations when I was happy, sad, angry, depressed, high, tired, energetic; during various weather conditions, phases of the moon, and so forth. No outstanding information emerged except that rainy weather may have lessened the energy responses.

As tests continued, my ability to apply psychokinesis to move the pyramid at-adistance increased. Some people clearly demonstrate a greater ability to produce rotation in the PK pyramid. At one time, no one could cause it to move, but when a three-year-old boy just put his hands out towards the replica it literally took off. The pyramid generally responds best when a person stands within three feet and stares at the pyramid, actually willing it to move.

The PK pyramid is apparently affected by some field or emanation from the human body, more than just magnetic, electric, or thermal forces, for these



THE PSYCHOKINETIC PYRAMID...can be rotated right or left with mind energy focused through the eyes. Dr. Buryl Payne, believes this device is affected by sunspot activity, possibly inducing changes in the human energy field.

radiations aren't sufficient to produce rotation of such magnitude. One of our experimental pyramids weighs nearly

half a pound.

The PK pyramid can be moved more readily by those who have healing power in their hands, my Rolfer, for instance; and one's ability to produce movement can be increased with practice. Hence the PK pyramid serves both as a measuring device and a psychic feedback training instrument.

Burl Payne, Ph.D. Institute for Psychoenergetics 126 Harvard St., Brookline, Mass. 01246 (Institute no longer active) I heard that a whole town in Oregon was planning to do the meditation/visualization on SkyLab. For me, it was a scientific experiment. For most participants, it was a proven fact, just waiting for the happening. Most believed, with no doubts, that it was going to happen. As a psychologist I was pleased that they had this belief, because the experiment would probably work better.



Photograph Taken Of The Research Satellite, Called SkyLab.

Here is a flyer prepared for the SkyLab Meditation event.



The Institute for Psycho Energetics

126 Harvard Street Brookline, Mass. 02146 735-4502

PK LIFT FOR SKYLAB

We are organizing a large scale experiment in psychokinesis to move space station Skylab into a higher and more stable orbit around Earth.

At the present time Skylab is being rapidly slowed by the drag of Barth's atmosphere and if unchecked, is expected to crash into the Earth sometime in late 1979. There is not enough time to reach the space station with a conventional rocket and we have chosen it as a suitable target for an experiment on the power of thought to alter physical reality.

Skylab is now at an altitude of 190 miles and traveling about 16,000 miles per hour. Weighing 83 tons, it circulates the planet every 90 minutes. To be in a dragfree orbit Skylab needs to move out to an altitude of about 270 miles.

We are asking people to meditate on Skylab for five minutes with the intention of shifting to an alternate reality where Skylab is stable and secure in a higher orbit.

THE TIME SET FOR THE EXPERIMENT IS 12:00 NOON LOCAL TIME ON THE SUMMER SOISTICE, JUNE 21, 1979.

Our goal is to have at least one million people participating in the experiment around the entire planet. Psychokinesis—the ability to move matter with the power of thought—is an established laboratory fact. It is an exciting and grand human experiment to see whether or not it can be done on a large scale. The synergistic and resonant action of many minds united in thought and desire may produce extraordinary and unpredictable effects. Even if you have never noticed that you have PK ability you can help—one drop of water will not make a wave but one million drops can make a mighty splash!

TO PARTICIPATE FULLY:

- Make two or more copies of this announcement and send them to friends. If you can send it to someone in another country, please do so and ask them to translate it and pass it on.
- Send the Institute two stamped self-addressed envelopes. One, for detailed suggestions and information about Skylab and PK, and the second for last minute news about the experiment.
- Please send the Institute \$1 to help expand the project and pay for printing costs.

ADVISORS TO THE EXPERIMENT

Dan Baer, Ph. D. Psychology Dept. Boston College Itzhak Bentov Author, Inventor Wayland, Mass. Bury Payne, Ph. D. Chris Kilham

The following is a more detailed article on the 'Biofield' as I had come to call it, That write up is printed in the following pages.

DISCOVERY OF THE BIOFIELD

A Different Type of Magnetism?

(Unpublished, 1981)

The Chinese use the term ch'i or Ki to describe the energy which circulates along acupuncture meridians and provides the essential life force for the body. In the 1940's Wilhelm Reich built what he called orgone accumulators which collected an energy from space. Orgone was considered to be the vital energy of all living organisms and could be supplied to people who were ill, by using Reich's accumulators. It's easy enough to build an accumulator, and I made several, but didn't find the results consistent and objectively measurable. Reich's devices and discoveries stimulated a lot of research which is continuing today.

Psychics who claim to see the human aura have always tantalized researchers to detect it with the latest and most sensitive instruments.

Applying high voltage and low current to the body and taking photographs produces colored photographs. Called Kirilian photography, after the Russian who developed it, it has some validity, though it's difficult to produce measurable effects from the color photographs. So, significant aspects may not have been noticed.

On a cool, dry day the body can pick up electric charge, especially if synthetic clothing is worn, and this charge will spark to a metal surface as it is touched, or spark to another person, if that person has less charge. This comes and goes with the weather; the body does not generate an electric charge which can be detected beyond the skin.

There are small electric currents and voltages generated within the body which can be measured by placing electrodes directly on the skin or placing probes within the brain or heart. Brain waves are only about 10 millionths of a volt and the largest muscle electrical signal is generated by the heart—2.5 millivolts. Other muscles produce voltages of only a few millionths of a volt.

Some people have written that the body has a magnetic aura. Although this has a tiny bit of truth, it is misleading and confusing. While it's correct that any moving electric charge generates a magnetic field, such fields are only a fraction

of the strength of the electric fields. In order to make magnetic fields apparent, coils of wire with many turns must be used. Blood flows out and back and has no net electrical charge, so it doesn't generate any external field, although a very small magnetic field is generated when nerve impulses propagate. To detect the tiny electrical signal produced by the heart muscle requires amplification of about 1,000 times and electrodes must be placed directly on the body. The magnetic field of the brain requires amplification a thousand times more, or a million times altogether. In other words, the magnetic field generated by the heart is only about one thousandth of the electric field. No compass would ever show such a small field. If the body had an appreciable magnetic aura, compasses would not work properly and people would have been forced to rely on the sun and stars for navigation.

The SQUID

Within the last three decades, a very sensitive instrument has been developed which can detect the very small magnetic fields around the heart and brain, where busy neural activity also makes a tiny magnetic field. The instrument used to detect these fields is called a SQUID, an acronym for Superconducting Quantum Interference Device. The SQUID usually is operated in special magnetically shielded rooms. The SQUID itself, in early models, had to be cooled to liquid helium temperatures to reduce internal electrical noise. The measured magnetic fields from the head and heart are less than one millionth of a gauss (a term used for magnetic field strength). While data from the SQUID is now providing information, to say that the body has a magnetic aura is like saying the body has a gravitational aura. We don't walk around attracting objects to our bodies such as paper clips and rusty nails, by our magnetic fields. However, just because people don't have any appreciable magnetic field, does not mean that they are not affected by small magnetic fields.

Animal Magnetism

There is another type of field around the body which is not electric nor magnetic and is very much larger than either of them. It is indirectly related to magnetism, and lacking a suitable term, people have often chosen to use the term "magnetic" to describe it. Anton Mesmer apparently was one of the first people to connect this field with magnetism several hundred years ago.

In 1500s "Paracelsus" believed that humans exude a "vital force" which surrounds the body like a "luminous sphere". Anton Mesmer, in the late 1700s, also believed this and used the concept in his work. In the 1800s Baron Karl von Reichenbach called this "luminous sphere" animal magnetism. (see Appendix, under *Pioneers of Aura Research*)

Mesmer believed there was a fluid-like energy around the human body which was highly charged in healthy people, and weak or nearly absent in ill people. He recognized that this force was somehow related to magnetism, and he thought that magnets could conduct it. He called this force "Animal Magnetism" to differentiate it from ordinary iron magnetism. He found that he could produce "magnetic-like" effects in his patients by stroking the space around them with magnets or his hands. What Mesmer observed in 1800 relates to the experience of many healers that there is a healing emanation from their hands which helps people heal various ailments. I found a way to demonstrate the existence of this 'force' and to even measure it.

Detecting the Biofield

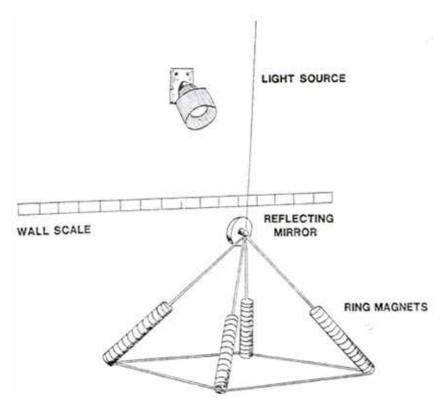


Figure 1.

In 1978, I discovered a simple device which can detect and measure a force around the body which may be what Mesmer called animal magnetism. This shows up as a spin or rotational force on a frame which is suspended over a person's head. *Figure 1* shows one form of the device used for this purpose. Although a pyramid frame was initially used, the force has no connection with so-called pyramid energy. The author was investigating the possible existence of pyramid energy when this other effect was accidentally discovered.

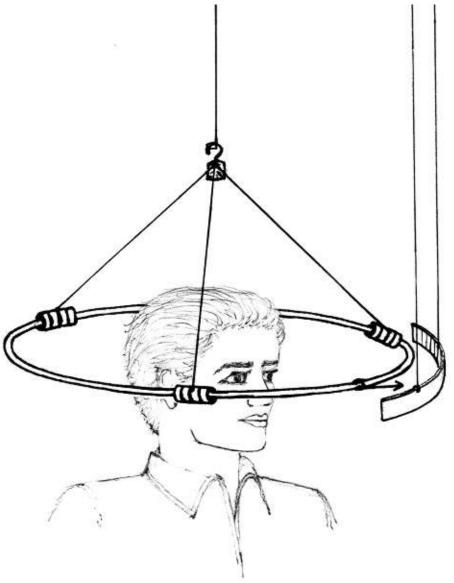


Figure 2.

The frame can be of any material; wood, plastic, or metal, and any shape. It is suspended by a nylon filament (fishing line leader). No components are critical. When a person sits under a hanging frame, it will rotate a few degrees. To

measure the degree of rotation, a mirror is glued on the nylon filament. A wall mounted spotlight will make a reflected spot on an adjacent wall where a scale serves to provide accurate measurement of movement of the spot. A lady's compact mirror which slightly focuses the spot of light works better than a flat mirror. In the apparatus shown in *Figure 1*, ring magnets were placed such that their North poles point towards the apex.

Figure 2 shows a different version of the device which uses a hanging scale. The scale, a wooden yard stick, was bent to the same curved shape as the hanging circular frame. It was carefully hung at a distance such that one inch indicated one degree of rotation of the Biofield Meter. Other versions of the device have included a spiral helix fashioned from quarter inch copper tubing, three sided pyramidal forms, large rings, and pyramids hanging inside a bottle (Figure 3). All of them worked.

Devices have been made and tested with more, less, or no magnets. In general, the more magnets the more movement, but Biofield Meters still rotate even when there are no magnets on them. The instruments are stable, and rarely move when no one is near them. Over one thousand observations have been made.

Instruments suspended in bottles demonstrate that air currents and thermal currents could not be involved in their movement. Units placed in bottles or glass cases are caused to move by placing one's hands at the sides of the case. Electrical shielding or electrical grounding of the operator made no difference, however soft iron wrapped around a bottle stopped the effect.

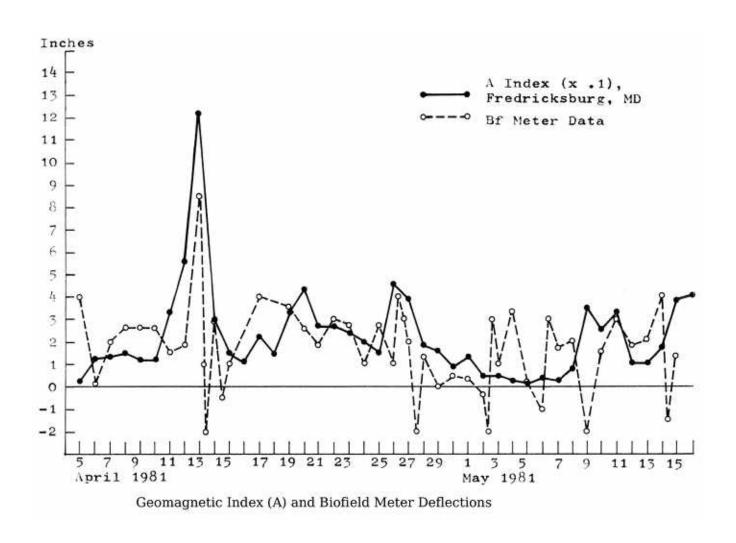
To test whether heat could be producing rotation of the larger frames, several observations were made using a hundred watt light bulb, a lighted candle, and a heat pack. No movement of the frames was observed when these heat sources were placed inside the frames. To insure that air currents produced by breathing were not affecting the movement, the breath was held as long as possible in a number of tests. The Biofield Meter always moved within five to fifteen seconds, so that factor too can be ruled out. Besides, the many observations made with units in sealed glass jars have repeatedly demonstrated that movement takes place when no air currents and only minimal heat transfer could be present. Devices in bottles have been observed to move at distances up to 12 feet from the observer during times of large magnetic storms.

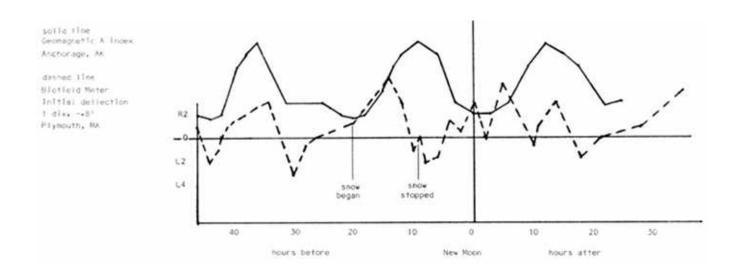
Since the body's intrinsic magnetic field measured in shielded rooms is about one billionth of a gauss, this Biofield could not be an ordinary magnetic field. The author has simply called it the Biofield, a contracting of biological energy field. Tesla, a contemporary of Edison and inventor of the alternating current motor and many other instruments, was reported to have spoken about a "higher octave" of magnetism which had not been recognized by traditional science in his time.

Whatever we choose to call it; the aura, animal magnetism, orgone energy, prana, spin force, ch'i, or the Biofield, this energy is quite large; over 100 million times as large as the body's magnetic field! If it were magnetic, the Biofield would be equivalent to several hundred gauss.

Well, then, what is the Biofield? It appears to be a genuine new force in science. It manifests as a physical force clearly observed on all types of biological matter. As of this time (1989) it appears to be a force which produces movement at right angles around the human body. It does not push or pull like gravity or electrostatic forces. It appears to be in the form of a circular or spiral force around the body. The origin of the force is not electrical, magnetic, heat, or gravitational. It is much too large to be produced by these forces. It needs a name. The author has chosen to call it simply the Biofield, and to call the instruments which serve to detect it, Biofield Meters. Descriptive equations will follow upon the development of additional and more refined instrumentation and further experimentation. New discoveries can probably be made by any reader of this book willing to construct or purchase a Biofield Meter and make careful observations.

After several months of observations it was discovered that the amount of the initial rotational deflection of the Biofield Meter varied in association with the geomagnetic field. *Figures 4 and 5* show deflections of the meter over a 40-day period (daily measurements) and a 3 day period (measurements made at 3 hour intervals). The dashed line shows measurements made with the Biofield Meter and the solid line shows data on Earth's magnetic activity provided by the National Bureau of Standards in Boulder, Colorado. At times of higher geomagnetic activity, the Biofield also showed higher activity.





The second figure shows a similar relationship for three hour variations. There is a clear connection between the two measures, although it's not appropriate to do statistical correlations since there is definitely a component to the Biofield data which varies with the emotional state or vitality of the person. When one meditates or is ill, their Biofield is of lesser amplitude. When one is excited, either angry or happy, their field is larger.

Usually the direction of the initial rotation of the frame is to the right as seen from within the frame, or clockwise as seen from above the person. At times of new or full moon or when there are large disturbances in Earth's magnetic field the Biofield often shows a change in the initial direction of rotation. Measurements of the bio field were made nearly every day.

Examination of the data for a two year period showed that 85% of the time of a new or full moon (within 36 hours), the Biofield showed a reversal in direction of a few hours. Such a reversal could have happened during the other 15% of the times but escaped the author's notice if it happened to occur between observation times. Measurements made over a seven year period on various forms of Biofield Meters showed consistent connections between their movements and solar/geomagnetic activity. This was so, even for those forms of the Biofield Meters which did not have magnets placed on them. It seems that the geomagnetic activity is the largest component of Biofield activity.

The author detected Biofields around a watermelon, a grapefruit, and several plants. The watermelon was placed under the meter, in my office. After 1½ hours the meter was still moving with the watermelon inside. Presumably all living organisms have such fields. The first device was called a Bio metre and was developed by Dr. Hippolyte Baraduc of France – a copper needle suspended horizontally by a thread from the center. A literature search uncovered reference to an article by Dr. Charles Ross published in the 1922 medical journal *Lancet*. He described an instrument which was set in motion by the proximity of the human body or by vision. In recent years a German scientist, W. Peschka, appears to have discovered a similar effect. These men did not obtain numerical data on the amplitude of the field or notice its connection with the geomagnetic field.

Dr. Frank Brown was a pioneer in the study of interactions between magnetism and living organisms (see references). He visited the author's laboratory in 1983 and observed the Biofield Meter with great interest. Among the 50 reprints of scientific papers he left as a gift were several studies on bean seeds, magnetism, and spin. He found that when bean seeds were placed near one another there was an interaction between them which could not be explained. The effect was observed by carefully measuring the amount of water which the beans absorbed.

Dr. Brown thought the interaction was due to magnetism because it was still present when electrostatic shielding was in place, but nearly disappeared when magnetic shielding was used. Although he believed the bean seeds had a magnetic field, he did not have the instrumentation to measure it. In fact, even if a magnetic field around a bean seed could be detected by ultra-sensitive SQUID apparatus, it would probably be far too small to account for the observed effects. It seems more likely that the interaction between the bean seeds was due to the presence of a Biofield or spin force. The Biofield around living organisms appears to be thousands of times larger than the magnetic field.

That the Biofield was involved, is supported by Dr. Brown's observation of a connection between rotation and bean seed interaction. He found that the beans interacted more strongly when they were rotated counterclockwise than when they were rotated clockwise. (the Biofield is usually observed as a clockwise force, as seen from above.) An experiment might be done by placing a potted plant or caged animal on a turntable, then measuring it's Biofield when no motion is present, and when it's rotating clockwise or counter clockwise and at different speeds.

In another series of experiments he placed rotating magnets near the bean seeds and observed an interaction with the bean seeds. Brown and his associates also found interactions between geomagnetic activity and rotation of worms and other small life forms.



Brown also reported on the research of R. I. Jones, who reported in 1960 that plant growth could be altered by uniform daily rotation. Clockwise rotation depressed growth. No one has been able to explain Jones' findings, but the presence of a spin force around all plants might be a factor.

Taken together, the findings of Brown, Jones, the author, and other researchers all point to connections between living organisms, spin, and geomagnetic activity. All living organisms seem to be in resonance with Earth's dynamic magnetic field. Earth's magnetic field is in turn a function of solar activity and the positions of the Moon, and at least some of the planets.

Research Possibilities for the Biofield

Since the spin force has been observed around plants, a grapefruit and a watermelon, presumably it is present around all living things. Therefore it would be possible to suspend a Biofield Meter around a plant and continuously monitor the rotation. If no magnets were used on the Biofield Meter, there should be no magnetic perturbations and the movement of the meter might accurately reflect the geomagnetic activity, whereas in the case of human subjects, emotional states and vitality factors are more variable. Such an apparatus could be set up in a draft free environment, a Faraday cage, or a magnetically shielded room.

To make measurements of a human's field in a magnetically shielded room would be an excellent way to determine how much of the Biofield was generated by the human and how much induced by geomagnetic activity.

Biofield instruments in bottles have been taken to the pyramids of Egypt, the Grand Canyon, the ruins of Palenque, the mountains and the seashore. Inside the great pyramid, there was no detectable Biofield. On top of the pyramid, movement was as usual. Differences were observed at other locations as well. In general the amplitude of initial rotation is less near the coast. Since the geomagnetic field strength varies minute by minute, thorough observations on place differences need to be made using standard instruments and simultaneous observation. Some careful experimental procedures would be necessary to make such tests.

Some other questions for research are: Does the strength of the Biofield vary with altitude? Would it diminish in deep mines? Can it be detected in a steady, high flying aircraft? How much mass can actually be caused to move by this force? The heaviest device the author used weighed about 9 pounds. However this weight was not being lifted, only rotated, so very little physical force was actually required.

How do the Biofields of individuals interact or combine? If a large ring is suspended over one person and a measure made, then will two people crowded under the ring increase the amplitude of initial rotation by a factor of two?

Suppose a Biofield Meter is hung in the center of an empty room and people quietly come in and stand around it. If the mirror system is used, a spot of light can be reflected from the mirror on the Biofield Meter to a distant wall providing a very sensitive indicator of rotation. If people surround the instrument, moving slowly, towards it, how close do they have to come before it rotates? Or will it rotate at all? How many people will be required to observe such a rotation?

How far does this force field extend around the body? How much interaction is there with the force fields of other humans? Of plants? Of animals? Although the field strength can vary from moment to moment, depending on the activity of Earth's magnetic field and on the emotional state of the human at a given moment, if these are reasonably constant, how rapidly does it diminish? Gravitational, electrostatic, and magnetic forces have been found to diminish with the square of the distance. Does this force follow the same formula? There are so many parameters to uncover! It's as if we were back in the 1800's when electricity and magnetism were first discovered--an experimenter's paradise.

A most important question is: what is the direction of this force? Is it truly a spin force, or spiral? I did not have a way to detect a spiral field. In cross section it would always appear to be circular. The formal and informal experiments and observations I made extending over many years suggest that it is a spin force, but that could be disproved by another type of experiment. The devices I built never seemed to move in another manner except rotation, but that may be because less energy is required to spin the rings or frames than move them in any other way. When a 30 ft. long suspension line was used, spinning still occurred. It did not swing or oscillate. The pyramids hung in bottles rotated when hands were placed at the sides. Is there a spin force between one's hands? This is a puzzle...

Randolph Stone, founder of Polarity Therapy, has illustrations showing a spin field around the body. One person who meditates reported to me that she experienced a spinning sensation during a meditation. Perhaps there really are whoosh birds after all! If this force were a spin force it would fit with other patterns found in nature. Laurence Badgley has found that a spiral vortex field appears around sites of injury on the body, which show interaction with magnetic fields.



The Aura, as conceived by Randolph Stone

If the force does induce rotation, it would imply that if we could place a small test object in space around a human, that object would start to rotate around the person. This experiment could not be done on Earth, but perhaps it could be done in space. If so, the spin force, or life force, is similar to magnetism, for magnetism is a spin force located in the space around a wire carrying an electric current.

Whereas magnetic forces only act on other magnets, this life force or Biofield force apparently acts on all matter. Copper, iron, aluminum, plastic, and wood have been tried, but quantitative comparative measurements have not been made. If a material were found which did not show the effect it would be a very important discovery.

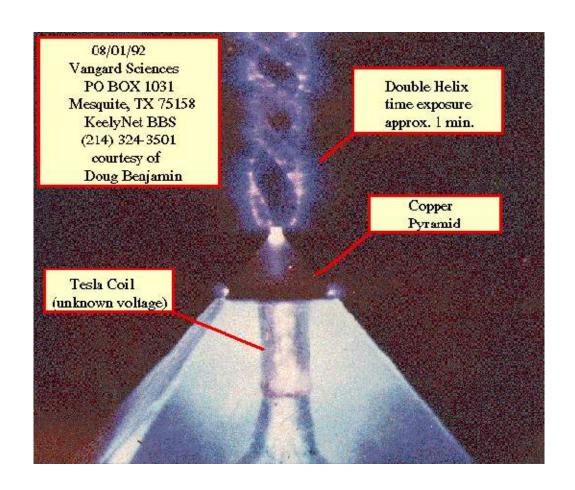
Spin, as a force, is called a vector. That is, it has both a direction and a magnitude. The direction must be referred to a reference point. For instance, spin

is considered to be clockwise or counter clockwise, as seen from a point above or below, respectively. However, I have found that the direction of the spin force around the body occasionally reverses.

Generalization of the Spin Force

Spin forces are not unique to living systems--they are omnipresent in the universe. Spin or angular momentum is associated with most subatomic particles such as electrons, protons, neutrons, etc. Apparently every body in the universe Interstellar spins! molecules spin. Stars, lanets, satellites, even entire galaxies and clusters of galaxies all are known to spin. One astronomer maintains that the whole universe spins! A German scientist, Dr. D. Ashcoff, has invented an instrument known as a spin-tester for the cells of the body. The discovery of the Biofield Meter shows the existence of a spin force around the human body and other living organisms. Perhaps it is time to assume that spin be taken as a fundamental force in its own right along with gravity, electricity, and magnetism. Spin, connects gravity and magnetism, for it is a more general type of magnetism and at the same time it complements gravity. Spin forces, if they exist around suns and planets, would help to explain the organization of solar systems and satellite systems. The existence of spin as a force would account for why the universe has not come together in clumps, for spin forces operate at right angles to gravity forces.

The initial choice of a pyramid for making a Biofield Meter may have some merit. In 2008, I came across the Kirilian photo (next page) of a double helix at the top of a pyramid activated by a Tesla Coil. (picture taken in 1992). Perhaps this ties in with an observation made one time, of a sensation felt by everyone when hands were placed at the top of the pyramid wire wound frame. A picture of it is shown below the Kirilian photograph on the next page. Even when no electricity was in the copper wire a sensation of coolness was felt at the top.





The fastest spinning Pulsar discovered, as of 2006, is rotating at 716 times per second! It's a neutron star less than 20 miles in diameter located about 28,000 light years away. [See Appendix for a more complete report] This fast spinning Pulsar was apparently formed as part of the supernova process and would be expected to start out spinning slowly and gradually increase in spin as more matter was drawn to the center. But its measured spin rate is almost 716 times per second, upsetting traditional theories. How this enormous object could spin so rapidly, apparently so soon after birth, is an unsolved mystery. However it does lend additional support to the notion that spin should be considered a fundamental force present around all matter.

Assuming the existence of spin force as a force in its own right also would bring one aspect of aliveness into the equations of physics, something that is long overdue. Spin forces might be called "form forces" or "organizing forces", for they help form complex living organisms, which abound with spirals, helixes, and circles over and over again in myriads of different ways from double helices in DNA and RNA to Whirling Dervishes.

If we consider that spin be taken as a fundamental force along with gravity, electricity, magnetism and the two nuclear forces, Table 1 (next page) can be constructed. (Actually the more precise scientific term for spin is "torque", the product of force multiplied by distance from the center of the body, human, plant, animal, planet or star.)

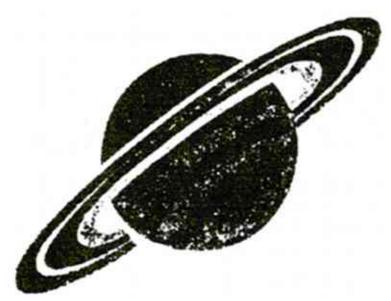
As previously mentioned, there are also two other forces assumed to exist. Called the strong and weak nuclear forces, they operate within atomic nuclei to help keep nuclear particles from dispersing due to electrical forces.

More research on the Biofield is urgently needed, and it's impossible for one person to do it, so it is the author's hope that many readers will take up the exciting challenge and enjoy the fun of exploring a whole new field.

Table 1.

THE FORCES OF THE UNIVERSE

FORCE	LEVEL OF OPERATION	EFFECTS
Gravitic	Operates between all matter.	Pulls matter together.
Electric	Only manifests between charged particles.	Pushes or pulls. Only sensed by other charged particles.
Magnetic	Manifests when charged particles move, or are internally aligned as in iron.	Pushes or pulls at right angles to the direction of motion. Causes moving charged particles to travel move in circles, spirals, or helixes.
Strong & Weak Nuclear	Operates within nucleus of atoms.	Keeps the nuclear particles together.
Spin	Present around all bodies – Much larger around living organisms.	Causes all bodies to spin around one another. Counteracts gravity. Produces complex forms or structures.



The next section contains some of the published papers on the Biofield Meter.

Section II - First Published Papers

The first published paper appeared in *The American Journal of Acupuncture* thanks to Tom Riihimaki's support and encouragement in sending it to them. At the time, I scarcely believed it was a real effect, as opposed to some quirky side effect of the shape, the magnets, heat from the subject's body, the wind, or vibration of the house.

Now I know that magnetism and the rotational force are related, although exactly how still remains a mystery.

The second published paper was in a magazine called *Magnets in Your Future*. These two papers are essentially duplicates, but the second one is a bit easier to read.

The third one was printed in a local newsletter of a planetary influences research organization called *The National Council on Geocosmic Research*. It shows the data which indicates that both the Sun's activity and the Moon's position affect the amplitude of the Biofield Meter. Please note that what was measured was the initial amplitude and direction of the initial rotational force. All references are also printed at the end of the book.



A New Device Which Detects and Measures An Energy Field Around the Human Body

Buryl Payne, Ph.D. Center Hill Road, Plymouth, Massachusetts 02360

Abstract: This device, called a "biofield meter" consists of a pyramid-shaped frame suspended by a nylon fiber. It detects and measures an energy field around the human body which is associated with the geomagnetic field. In use, a subject sits under the frame with the head just within it. Rotations of up to 40 degrees are observed. The amplitude of the rotation varies with the geomagnetic field activity. Magnets placed on the frame increase the rotational torque. The biofield is not magnetic, it is approximately one million times larger than the human magnetic field. Typical data is shown in tabular and graph form along with the geomagnetic activity. Control studies are described and suggestions for further research are given.

WHILE investigating pyramid forms and their possible connection with magnetic fields, the author discovered an apparatus which can be used to measure a field effect around the human body. This effect was eventually found to be related to Earth's magnetic field and to vary as Earth's field varied, the changes being most pronounced during magnetic storms, and at times of new and full moon.

Developments in instrumentation have often lead to new discoveries. Yogis and psychics have claimed that an aura exists around the human body, but only in the last decade have instruments begun to detect effects which could be related to such an aura. Kirlian photography seems to detect an interactive electric field. Earlier work by the author used sensitive amplifiers to detect two aspects of human "fields;" one related to transmission of emotional changes between one person and another, and the second related to some "field

effect" between two people which is enhanced if they first synchronize heartbeats. In these earlier experiments the energy transmitted could not be accounted for by known electromagnetic field effects. The detectors were first human bodies which in turn exhibited changes which could then be monitored by standard biofeedback instruments.

The apparatus described in this paper seems to measure some effect around the human body related to magnetism. The observed effect cannot be accounted for by ordinary electric or magnetic fields, however, and its exact nature remains a mystery as of this writing (February, 1982). The device has been called a "biofield meter" or more simply, a bf meter. It provides repeatable, quantifiable data and opens up the possibility for many avenues of investigation (patent applied for).

Material and Method

The edges of the pyramid are about 45 cm long. Twenty ring magnets of about 300 gauss field strength each are placed at each corner, north poles pointed towards the apex. A small focusing mirror of the type used in ladies compact sets is placed at the apex of the pyramid. A light mounted on a nearby wall is reflected from the mirror and focused on a scale mounted on the wall about one meter from the pyramid which is suspended by a

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nylon line. When a person sits under the pyramid with their head just into the frame, the spot of light will move along the scale a few inches (Fig. 1). These movements are easily observed and recorded.

Construction requirements for the biofield meter are not critical. Materials can be wood, metal, plastic, or glass, and the magnets can be of any type of strength, although stronger magnets produce larger rotations. Placing magnets along the base of the frame will work about as well as at the slant edges. Direction of polarity is not important, but the apparatus will not work unless the magnets are all aligned in the same direction. The apparatus will operate with no magnets, although the effects are weaker. Any type of frame can be made. The effects have nothing to do with pyramids or so-called pyramid energy.

The biofield meter is activated whenever a person sits in a chair under it with the head a few inches up into the frame. After a few seconds the frame will rotate several degrees. The amplitude of the initial deflection is recorded along with the time of day and comments of possible relevance such as the weather, lunar aspects, mood of the experimenter, etc. Observations are usually made around 7 a.m., as well as at other times during the day.

The biofield meter weighs over 10 kg and has a time constant of many minutes. It is not deflected by drafts and usually does not vibrate or move by itself when a person is not nearby, although the zero point shifts from day to day by a few centimeters.

Results

Initial observations were casual and nonquantitative, but more careful observations were made when it was discovered that the apparatus responded most during the magnetic storms following solar flares. Gradually the observation process was standardized.

A smaller version of the biofield meter (sealed in a bottle free from air movements) showed large responses 11 times out of 15 magnetic storms during the first six months of 1980. Observed rotations of the small pyramid

in the bottle varied from a few degrees to over 90 degrees during strong magnetic storms.

Observations made with the larger version during the month of December, 1981 are shown in Table 1.

Geomagnetic data from the Space Environment Center² was graphed along with the responses of the biofield meter (Fig. 2).

Clearly, the greatest response of the biofield meter occurs during the time of magnetic storms. Just as variations in the geomagnetic field are continuous, so are responses of the biofield meter. I would conjecture that there are daily, lunar, and seasonal variations in the data from the biofield meter along with the peaks related to solar flares. In general, variations in the response of the biofield meter are greater than the variations in the geomagnetic data as measured at Fredricksburg, Maryland (several hundred miles distant), or at Weston Observatory (70 miles distant).

The biofield meter indicates a polarity reversal every few days. This frequently takes place during magnetic storms and just before or after new or full moons.

Of a total of 640 observations including 23 new or full moon periods, the biofield meter was observed to reverse polarity 87 percent of the time. At times other than new or full moon, polarity reversals were only observed to take place about 15 percent of the time. A change in the response of the biofield meter either in direction or amplitude has occasionally been observed exactly at sunrise.

The amplitude of the initial response varies slightly among adults, and children frequently have larger responses. No systematic effects have been observed related to emotional or mental state, or sex of the experimenter, health, alertness, or any other parameter studied. However, such effects probably exist and have not yet been observed with this instrument in its present primitive design. On two occasions two different individuals have shown reversed polarity from others who were measured at the same time.

One German researcher³ reports that the presence of some individuals induces movement in a mechanical balance suspended in a vacuum. If one sits for a long time (30 minutes

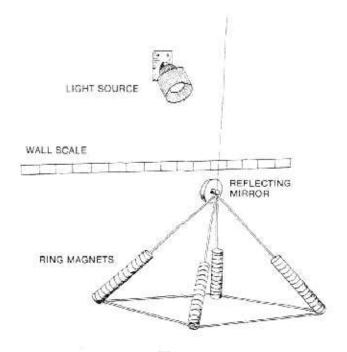


Fig. 1. The Biofield Meter.

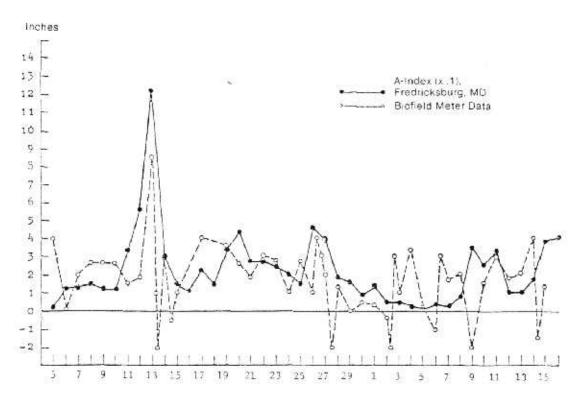


Fig. 2.

Geomagnetic Index (A) and Biofield Meter Deflections.

Table 1. Recorded observations on the Biofield Meter, December 1981.

Date	Time (Greenwich)	Intitial Deflection (cm)
12 / 09	1:24 p.m.	4.5
12 / 10	1:31 p.m.	5.0 left
12 / 11	12:13 a.m.	8.9
12 / 11	3:42 a.m.	(Full Moon)
12 / 11	8:48 a.m.	5.7
12 / 12	5:06 a.m.	3.8
12 / 13	11:30 a.m.	19.0
12 / 13	12:04 p.m.	19.0 left
12 / 14	4:10 a.m.	2.5 left
12 / 16	12:18 p.m.	0
12 / 16	4:34 p.m.	2.5 left
12 / 17	3:12 a.m.	22.0
12 / 17	4:57 a.m.	17.8
12 / 17	5:00 p.m.	6.4 left
12 / 18	2:28 p.m.	15.2
12 / 19	11:41 p.m.	1.2 left
12 / 20	6:03 p.m.	0
12 / 21	3:00 a.m.	2.5
12 / 21	11:33 a.m.	14.0
12 / 21	12:11 p.m.	25.4 left
12 / 22	12:12 p.m.	11.4
12 / 24	10.08 p.m.	1.9
12 / 25	9.42 p.m.	10.2
12 / 25	10:45 p.m.	10.1
12 / 26	2:06 a.m.	12.7
12 / 26	5:11 a.m.	(New Moon)
12 / 26	12:42 p.m.	2.5 left
12 / 26	4:14 p.m.	10.1
12 / 26	11:10 p.m.	7.6
12 / 27	4:02 a.m.	1.3 left
12 / 27	12:56 p.m.	8.9
12 / 28	1.27 a.m.	12.7
12 / 28	2:07 p.m.	26.7
12 / 29	6:08 p.m.	30.5
12 / 29	2:00 a.m.	10.1
12 / 29	8:50 p.m.	2.5 left

The average response is about 10 cm and the maximum is over 30 cm. One cm = 0.3° rotation.

or more) under the biofield meter, it will usually come to a new zero point displaced in the direction of the initial deflection and about 1/10 of the amplitude of the initial deflection. This would suggest that the biofield has a steady-state component. At other times it appears that the biofield meter never stops oscillating while a person sits under it. This result suggests that there is a time-varying or pulsing component to the biofield.

The smaller version sealed in a glass bottle is quite portable, and measurements have been made on the coasts and in the mountains of the United States, in Mexico, Puerto Rico, Egypt, and New Zealand. In general, the amplitude of rotation is less near the oceans and greater in mountainous regions. Since the Earth's field changes rapidly at times, simultaneous measurements would be helpful. Since this apparatus provides more information and more variability than the geomagnetic indices, perhaps some other aspects of the geomagnetic or solar activity fields are more closely related to this energy field around the human body.

Several individuals have smaller versions of the instrument and have reported casual observations. A large version was built in the Washington Research Laboratories in San Francisco, and by an independent researcher and former EEG analyst on Cape Cod. Both versions, while slightly different than the one used by the author, show the same general effects. A psychologist in New Zealand has built a biofield meter and reports that the direction of the initial rotation is in the opposite direction as in the northern hemisphere.

In its present form the biofield meter is comparable to the first light beam galvanometers used by early experimenters in the study of electricity. Further refinements in the instrument are obviously needed. For research purposes a form of the device has been built which consists of a copper coil wound about a pyramid frame. This form is also observed to rotate when no current is applied to the coil, more so when current is applied, and to vary with the geomagnetic storms. Current research is in progress to determine the effects of various waveform inputs to the coil.

Discussion

Many parameters and control studies were made to rule out alternative explanations. For example, different shapes were tested. Most worked, and the pyramid structure worked as well or better than most and was easy to construct. However, "pyramid energy," if there is any such energy, is probably not related to this effect.

Biofield meters suspended in sealed bottles provided proof that air currents were not responsible. In this configuration, rotation is observed when a person placed both hands around the bottle without touching it. Responses are much too fast to result from thermal effects. Electrostatic shielding did not diminish the effect, nor did electrical grounding of the subject. Magnetic shielding did stop the effect.

In one control study, four glass jars with hanging pyramids were placed about 10 feet apart on a concrete wall. One pyramid had double magnets on each corner, one had single magnets, one had the magnets alternating north pole up and south pole up, and the fourth had two heavy steel nuts on each corner, of about the same weight as the ring magnet. Double magnets increased the deflection. The unit with alternating polarity of magnets did not move, nor did the one with steel nuts in place of magnets. However, the large model of the biofield meter does rotate when there are no magnets. Magnetism must therefore be only partially related to the observed effects.

At times of intense magnetic storms the effect has been observed when the experimenter was more than two meters away from the apparatus. Rotations of up to 1/4 turn have been observed. Observations with binoculars on both the small and large instruments have repeatedly shown that rapid movements rarely take place when a person is not nearby. The zero point moves a degree or two from day to day, perhaps reflecting changes in the Earth's field and/or changes in the temperature and humidity which effect the nylon suspension line.

Since the measured human magnetic field is only on the order of 10-5 gauss,4 it could not possibly be affecting the biofield meter. The effects of a human being on the apparatus can be duplicated by gently moving a 300 gauss magnet about 15 cm from the corner of the biofield meter. Whatever the nature of the biofield, it is large and only weakly interactive with ordinary magnetism.

Suggestions for Further Research

At this time, conclusions are only tentative. These initial observations need to be verified by other experimenters. The apparatus needs to be refined and improved. Individual differences need to be carefully studied and measurements need to be taken on plants, animals, and perhaps water and other substances.

In the theoretical realm, many questions need to be addressed. For example, an English biologist5 has postulated the existence of a non-electromagnetic field around all living organisms. He calls his theoretical field the "morphogenetic field." The biofield postulated by the author may be equivalent. These are just words, after all. But if the biofield does prove to have physical reality, how is it related to classical fields of physics? Does the biofield obey inverse square laws? Is it AC or DC? Does it have a spiral structure—a vortex form? Can it be focused? Collected? Used to store or extract energy? Can it be made artificially? There are hundreds of possible experiments to do.

In the realm of biology, physiology, psychology, and sociology, there are many important connections to explore. The biofield meter clearly shows variations with solar activity and lunar phase. During solar flare activity, charged particles stream towards Earth in greater abundance, producing so-called magnetic storms. Human health and behavior, as well as animal behavior has been linked to solar activity and geomagnetic storms by many studies.^{6, 7} During magnetic storms people are more psychologically disturbed, and the weather is more likely to be severe.⁸

International battles are more likely during solar magnetic changes which take place every 22 years. The next solar magnetic change is expected around 1985. Will this change the human biofield?

In lesser ways, the geomagnetic field is often disturbed just after every new or full moon and the human biofield also undergoes a temporary polarity shift. Many studies have related destructive behavior of people to lunar cycles. 10 Research on magnetic effects on living organisms is mushrooming rapidly now and we appear to be at the threshold of many new discoveries. 11 Clearly, something is going on in this area which is important. Perhaps the apparatus described in this paper may help unravel links between the Sun, Moon, and life on Earth, giving us a greater understanding of our place in the solar system.

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BIOMAGNETISM The Aura Meter

(A page from the manual for the Aura Meter)

Types of Magnetism Structural Level

SPIN

Present around all elementary particles. Show interaction with

magnetic fields.

IRON

Present in iron and some other metals under certain conditions. Apparently manifests from spin fields that normally cancel each other out in most

materials, but not in iron.

ELECTRO

Manifests when charged particles move together in an organized manner.

ANIMAL

A special type of spin force present around living organisms which interacts with other types of

magnetism.

PLANETARY Known to be present around Earth and

possibly planets. Origin unknown,

STELLAR

Present around stars. Origin unknown.

The force is mechanical, not electromagnetic. It appears to be a type of spin force and its magnitude has some connection with changes in Earth's magnetic field. The spin force is larger, perhaps a million times larger than the body's magnetic field.

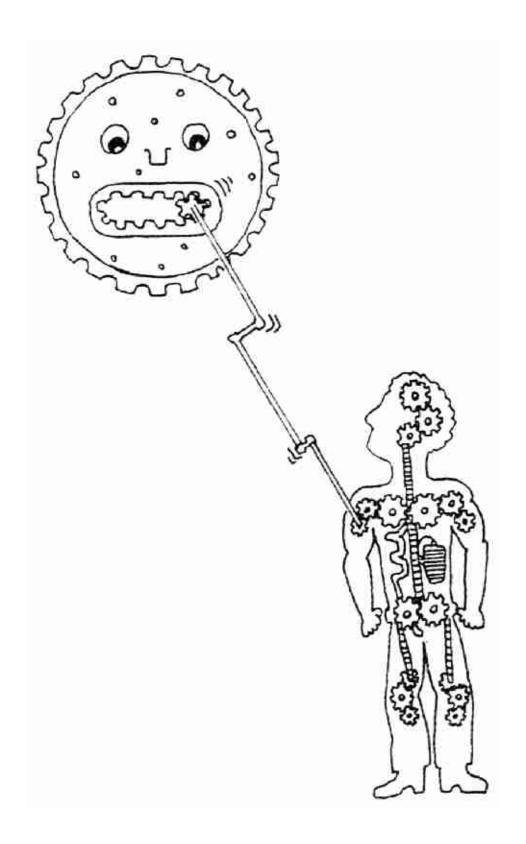
A way to measure a force around the body has been discovered. People have been looking for this force for many years with sensitive electromagnetic detectors, but it turns out to be easily measured by a simple physical apparatus.

The Forc	The Forces of the Universe				
Force	Level of Operation	Effects			
Gravitic	Operates between all matter	Pulls matter together			
Electric	Only manifests between charged particles	Pushes or pulis			
Magaetic	Manifests when charged particles move	Pushes or pulls at right angles to the direction of motion. Only sensed by other charged particles. Causes charged particles to move in circles, spirals, or helixes.			
Spin	Present around all bodies Much larger around living organisms	Causes all bodies to spin- around one another. Counteracts gravity			

by Buryl Payne, Ph.D.

Produces complex

26 MAGNETS



The next published paper is on an important finding which emerged after I had taken observations for two years. It was published in a local astrological newsletter in Boston.

POLARITY SHIFTS IN A HUMAN BIOFIELD AT TIMES OF NEW AND FULL MOON

Buryl Payne, Ph.D.

Abstract

Several years ago, a device was invented which measures a field around the human body which is apparently different from the classical fields known to physics. Called the biofield, it was found to vary in amplitude and polarity during geomagnetic storms. In this study, data was analyzed to show that there is also a polarity shift in the biofield during the 48 hour interval around the new or full Moon.

Introduction

Traditional astrological notions, folklore, and scientific studies recognize that the two or three days around the new and full Moon are more likely to be stressful or energizing for humans, animals, plants, and even the Earth itself.

The Lunar Effect by Arnold Lieber (1978) summarizes much of the literature. Harold Burr (1972) made electrical measurements of plants and humans and found clear relationships between lunar phase and voltage. A NASA publication (1978) summarizes some of the research on weather and lunar effects and the authors conclude that on a world-wide scale weather is more likely to be caim and clear prior to the new or full Moon followed by storms immediately afterwards. Authors of this NASA study also reviewed literature on the geomagnetic field and lunar position concluding that the geomagnetic field is calm prior to the full or new Moon and disturbed immediately after. The disjurbance is larger if the Moon is near the plane of the ecliptic. Nearly every person who works in public schools, hospitals, or police service knows that people are stressed and hyperactive during the period around the (uil Moon or new Moon (although effects are generally less around new Moons). Effects are often larger when there is an eclipse or when the Moon is near the Earth. Clearly something is going on which affects all life on Earth in a periodic fashion. This research forges another link in our understanding of lunar effects on human behavior.

About seven years ago, the author discovered a device which detects and measures a field around the human body which is related to magnetism, but is different from it. Called the biofield, it has been described elsewhere and may be similar to the life energy field postulated to exist by Sheldrake (1981) or to the human aura which can be perceived by some people.

Prior observations with the biofield meter have shown there is a relationship between geomagnetic storms and the human biofield. In this study, the data was specifically analyzed to see if there was a relationship between observed polarity shifts of the biofield during new and full Moon periods. In addition, the behavior of the biofield was observed in detail for one three-day interval around the new Moon.

Apparatus

Fig. 1 shows the simple form of the apparatus used in this study. The edges of the pyramid are about 45 cm long. Twenty ring magnets of about 300 gauss field strength each are placed at each corner, north poles pointed towards the apex. A small focusing mirror of the type used in women's compacts is placed at the apex of the pyramid. A light mounted on a nearby wall is reflected from the mirror and focused on a scale mounted on the wall about one meter from the hanging pyramid. When a person sits under the pyramid with their head just into the frame, the spot of fight will move along the scale a few inches.

These movements are easily observed and recorded. Construction requirements for the biofield meter are not critical. Materials can be wood, metal, plastic, or glass, and the magnets can be of any type or strength, although stronger magnets produce larger rotations. Placing magnets along the base of the frame will work about as well as at the slant edges. Direction of polarity is not important but the apparatus will not work unless the magnets are all aligned in the same direction. The apparatus will operate with no magnets, although the effects are weaker. Any type of frame can be made. The effects have nothing to do with pyramids or so-called pyramid energy.

Procedure

When a person sits under the pyramid frame it will rotate a few degrees, usually to the right as seen from within. The amount of rotation can be measured by observing the movement of the spot of light reflected on the yardstick. Observations are usually made in inches along with Greenwich time, weather and personal comments. One inch of movement corresponds to about 0.8 degrees of rotation.

Previous studies have included controls for air movements, shielding, individual differences, states of mood, and other variables. During the course of investigation it was noted that initial movements to the left occur every sevent to ten days on an irregular basis. Some of these were associated with geomagnetic storms, but it was also noticed

that left deflections, indicating a polarity snift in the biofield, were common around the time of the new or full Moon.

During the past two years, over 700 observations have been made and it was the purpose of this study to examine these previous observations to determine if it was generally true that polarity shifts occurred at the time of the new and full Moon. In addition, one new Moon period was studied in detail by making measurements every few hours. All measurements analyzed were made by the author. Preliminary observations indicate that slight individual differences in the biofield do exist.

Results

Twenty-seven new or full moon periods were included in the data. During 24 of these periods the biofield polarity was observed to reverse nineteen times before exactness and five times afterwards (plus or minus a 24 hour period). That is 88% of the time, compared with only 15% of the time that polarity shifts have been observed on other days.

Of course, there may have been many other times that polarity reversals took place, since observations cannot be made continuously. Polarity reversals have been noted to appear and disappear within an hour, presumably due to rapid fluctuations in the geomagnetic field.

Table 1 shows four typical observational periods taken from the records. By comparison, for the period Dec. 1-13, 1982, all deflections of the biofield meter were to the right.

Figure 2 shows the variation in amplitude and direction of the biofield. Measurements were taken approximately every three hours, day and night, during the interval around the full moon.

This was not a typical new moon pattern. Over one foot of snow fell locally and over much of the East coast. During the time of the actual snowfall, the area under the biofield curve is at a maximum. Around this time the new moon formed a 120 degree angie with the pianets Saturn and Pluto. This time period was predicted to be associated with a severe storm by the author several months previously.

The upper curve was plotted from the geomagnetic index 'A' available from the Space Environment Services Center at Boulder, Colorado. The A index is constructed every three hours from a complex wave form, it represents an average value of the geomagnetic fluctuations and is semi-subjective. Polarity changes are not an aspect of the geomagnetic records, but it appears that when the average geomagnetic field disturbance is low, polarity changes in the biofield are observed. In general, the two curves show remarkable similarity and are

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TIBETAN ASTROLOGY

continued from page 17

typical of previous comparisons between the geomagnetic field index and biofield measurements.

The curves in Figure 2 do not show the important fact that the biofield appears to be about 100,000 times larger than the geomagnetic field. That is, the 'energy' required to move the biofield appearants is equivalent to a magnetic impulse of about 100 gauss, whereas the geomagnetic fluctuations are less than 1/100th of a gauss.

Discussion: New Moon

Since the bioffeld has already been shown to vary with the geomagnetic field, it seems likely that the polarity shifts around new and full Moon periods are related to interactions between the Moon and the solar wind which in turn affect the geomagnetic field. Bell and Defouw (1966) found that the geomagnetic field was often abnormally calm prior to the new or full moon and disturbed afterwards. The moon has no magnetic field so its interference with the solar wind is simply a physical one, similar to the blocking of light during an eclipse.

The shadow effect is more diffuse, since the particles which comprise the solar wind do not move in straight lines and are free to fill in behind the Moon, and since the interaction between these particles and the magnetosphere of Earth is comptex. Also the solar wind consists of a spectrum of atomic particles of different velocity, type, charge, and mass, although electrons and protons predominate.

Since the solar wind takes several days to travel from the sun to the Earth, the Moon passes in front of the solar wind when it passes the place where the sun was previously. Relative to the Earth, the sun moves about a degree per day (365 days for one revolution of 360 degrees). Therefore, if the solar wind takes two or three days to reach Earth, the Moon would have to move about two or three more degrees before interfering with the solar wind. Assuming the Moon moves about 12 degrees per day, we would expect to detect a maximum interference effect from four to six hours after the exact time of the new Moon which supports the finding of Bell and Defouw that the geomagnetic field is disturbed after the new Moon. This effect may be related to the rapid oscillations of the biofield as seen in Fig. 2. More careful measurements for many new Moon periods might show a pattern.

The dynamic geometry of the Sun-Earth-Moon-solar wind interaction is not fully mapped. At least three factors are important:

1. The velocity and density of the solar wind

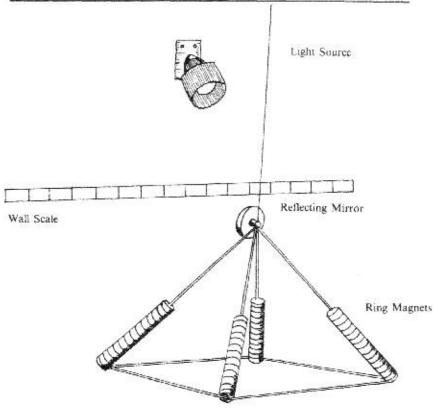


Fig. 1. The Biofield Meter

which varies from 400 to 700 km/sec.

- 2. The distance of the Moon from Earth.
- The angular distance of the Moon from the magnetic equator.

The data from the biofield meter measurements show that each new or full Moon is different; sometimes polarity shifts take place before the new Moon and sometimes afterwards. More careful measurements are needed.

Full Moon

When the Moon is full, disturbances of the geomagnetic field also take place. Earth's magnetic tail extends out beyond Earth in a 48 degree cone for several million kilometers, well beyond the Moon's orbit. It takes the Moon about four days to pass thru the magnetic tail of Earth. Bell and Defouw note that there is a calm period before the exact full Moon followed immediately afterwards by a geomagnetic disturbance. The weather often follows a similar pattern. The data from the biofield meter is not complete enough to show a clear pattern.

It's not obvious how the Moon passing thru the magnetic tail 382,000 kilometers behind Earth could affect conditions on

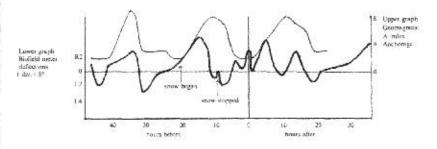


Figure 2. Geomagnetic and Biofield measurements around New Moon, Feb. 13, 12:33 a.m. Z, showing polarity changes during the great blizzard of 1983.

Earth, but that does seem to be the case. The same three factors mentioned above are probably relevant, and there would be a time delay of a few hours before the Moon passed into the most dense part of the tail just as in the case of the new Moon. The magnetic tail of Earth does not drag behind Earth, but actually appears to precede it by a few degrees. The magnetic tail has been found to have a neutral region between two magnetic polarsties. The Moon passes thru this region and this is apparently a variable region. Hence effects on Earth vary. Polarity shifts in the profield could be associated with the movement of the Moon from one magnetic potarity region to the other. It seems unlikely, but it may be a hypothesis to investigate.

Effects on Life

Psychological effects associated with the new and full Moon differ slightly and there are large differences between one new or full Moon and another one. Where the Moon is in the sky is probably a factor, related to seasonal variations in the solar wind. Lieber (1978) has observed a latitude effect for crimes of violence. Brown (1967), Gauquelin (1970) and others have found biological and psychological effects associated with lunar cycles and geomagnetic disturbances. The cycles of war (Dewey, 1970) are associated with 11 and 22 year cycles of solar magnetic activity and geomagnetic activity (the peak was expected in 1984-86).

If a link can be established between the biofield, lunar cycles, and geomagnetic disturbances at could be useful in predicting when social unrest and political difficulties are likely to occur.

Conclusion

This is only preliminary research. There are hundreds of experiments to plan and carry our in detail. Hopefully this paper will stimulate others to make their own investigations, since anyone can make a biofield meter for only a few dollars. To date it seems clear that there is a link between the new and full moon and changes in a human field which is measurable, further research could enrich our understanding of the long recognized fact that when the moon is full, dogs howl, cats fight, and people act looney!

Table 1.	Four Typical Obser	vational Periods
Relative Time	Initial Deflection	Comments
(hours)	(inches: $1' = .80$)	(local weather)
ŀ	ull Moon Aug. 15, 19	81
- 30	R 2	Sunny
- 8	R 1.5	Windy
- 1	L 4	
+ 3	L 7	
+ 9	L 1.5	
+ 19	R 2	Very heavy rain
	lew Moon Sept. 17, 19	782
- 35	R 9	Gray
- 1	L 5	Clear, caim
4 .5	R 3	Cloudy
+ 22	L 3	?
	Full Moon Nov. 1, 19	82
- 23	R 8	Few clouds
- 14	R 5	Storms appears to move in
- 9	L 2	Cloudy - moon still visible
+ 1	R .5	Cloudy
+ 35	L 2	Weather changed quickly; sligh
		headache, 2 patients upset, depressed
New	Moon Eclipse Dec. 1:	5, 1982
-25	L. 6	Calm, cool, clear
- 23	L 6	U.S.
- 21	R 2.5	
- 10	R 11	••
- 7	R 3	
- 4	R 5	ne.
+ 2	R 3.5	10
+ 27	R 13	Warm, windy, stormy looking
- 30	L 3	Very Rainy

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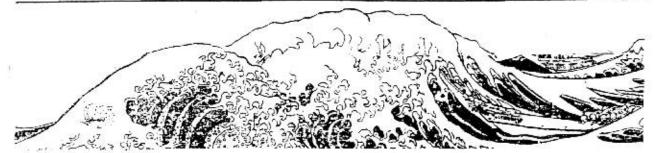
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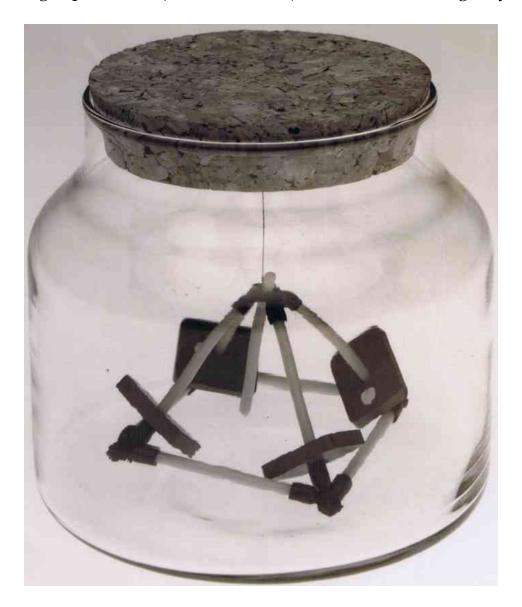
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Section III - The Psychokinetic Toy

Different versions of the Biofield Meter were made, using the pyramid shape. Some were put in large wide-mouth bottles, suspended from a cork top, by a string. These small ones also showed the effect when a person placed their hands around them.

In the late 70's a popular magazine called *The New Age Journal* published a photograph of a small pyramid in a bottle and advertised it as a psychic toy, calling it *The Psychokinetic Pyramid*, to help develop psychokinetic abilities.

Most people could not move the pyramids, unless they placed their hands around them. At first, I did not think it would be useful for teaching psychokinesis. However, later observations of the space station, *SkyLab*, and remote healing experiments (see section VIII), induce me to change my mind.



Section IV - How to Make a Biofield Meter and Make New Discoveries

Below, the making of a new instrument is described. From a few basic parts, one can elaborate without end. Other forms may help one find answers to other questions. Let's see what happens in fifty years.

This discovery opens up so many possibilities that anyone can make new discoveries.

Can it really be that simple? Yes! It's so simple to make a Biofield Meter that a 10 year old child can do it, perhaps one even younger. Only hanging it might require being tall enough. Most people think true (whatever that means) science can only be done in a laboratory with expensive equipment. Yet scientists have two major attributes: curiosity, and carefully recording observations. The world is full of wonderful, intriguing, events and structures. The person with curiosity asks:

Why and how does this happen? Why are stars moving? Why do people fight? Why do they fall, or fail, in love? Why do spiders make organized webs? Why is grass green? An endless stream of questions may come from a three year old. 'Why questions' may be hard to answer. 'How questions' can be more clearly answered. The person who takes systematic notes on events may find answers to questions. Patterns can emerge from notes that aren't obvious at first. So knowledge of structures can be formulated. The process of finding structure, order, and relations between events or happenings is called 'science'.

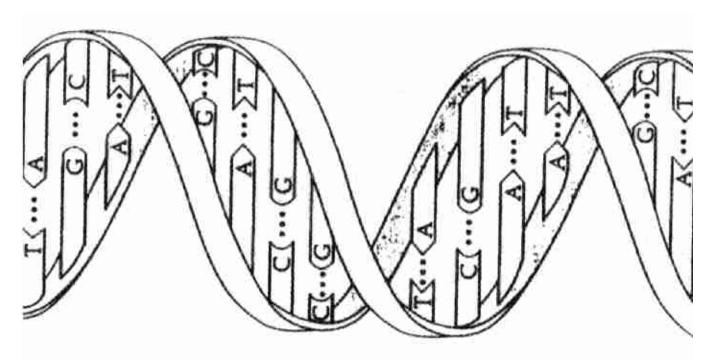
Anyone can play this game. It's fun! So with a Biofield Meter, simply made with some sticks, string, and a few magnets, one can exercise curiosity and ask a dozen questions? What makes it move? When does it move the most? Do animals or plants make it rotate? And so forth. All these questions may be answered by taking notes. Or their answer may not be found, or any apparent answer may uncover more questions. This constitutes the practice of science. It doesn't matter what the subject is, or what kind of instruments are used to investigate it. Our ordinary senses are common 'instruments'. Telescopes, microscopes, voltmeters, and so forth are called 'extraneural instruments'. In a sense, a Biofield Meter could be called an extraneural instrument. With its use something else can be explained. How does the instrument work? We, or I, don't know. But then few people know how an electron microscope works, yet they use it. Or a telescopic, or a voltmeter. Science proceeds by making new instruments and making new observations. The development of science goes on

indefinitely. That's why it's fun for a curious person, no matter how young or old.

Georges Gurdjieff, a teacher from Armenia (now deceased) was reported to have said that humans have two substances: the substance of active elements of the physical body and the substance of the active elements of astral matter. These two substances, by mixing, form a third substance. This gathers in certain parts of the body and forms an atmosphere around it, as an atmosphere forms around a planet.

A person who understands this can control their 'magnetic' atmosphere. It is like electricity, and has positive and negative parts; it can be made to flow like a current. Some humans can cure a disease or relieve the pain of an injury by placing their hands on or near the ailing person. Sick people are those who are deficient in this mixed substance (the spin force around someone who is ill or tired has been observed to be small). This substance can be seen if concentrated.

One aspect of what Gurdjieff refers to may be what is measured by the Biofield Meter. Another aspect may be what sensitive people see as a colored 'aura'. How the two are related, if at all, remains a mystery. Perhaps you'll be the one to solve it.



A small section of a twisted DNA strand.

Making a Biofield Meter The Nuts and Bolts

Materials:

- 4 Rods of any diameter (though I use 1/4") made of any material (wood, plastic, or metal)
- Pieces of flexible plastic tubing, 2" length (to connect rods together).
- 24, or more, ring magnets with holes in the centers, 1" diameter. (You can purchase ring magnets from Radio Shack or you can purchase the same magnets painted in assorted colors from PsychoPhysics Labs for the same price.) Or, any magnets may be used.
- 2 small round mirrors, about 2" diameter, glued back-to-back.
- String (yarn, kite, or fishing).
- 2 small eye hooks, for hanging.

Construction:

The rods are cut to a length to allow enough space to fit around a large human head, plus hair, about 16" or more.

I usually construct a pyramid shape. However, other shapes may be constructed as well: triangular, six-sided, eight-sided, square, round, etc...

The ends of the rods need to be fastened together with the flexible plastic tubing; or you can use some other method (glue, tape, twine). Precision is not necessary.

Put all this together as shown.



How to use:

The magnets should have the same direction of polarity around the frame; it may not matter which way. Try experimenting; take notes. Hang from a ceiling hook in a place where no drafts or people will be passing by. Center the magnets to make the Biofield Meter level. Let the meter settle for 30-50 minutes. Shine a spot light or laser on the mirrors to reflect light onto a wall. Approach it quietly, to sit under it about eye level. Be sure not to touch the frame with your hair. After 10 to 50 seconds the Biofield Meter will start to rotate. The rotation is small, only a few degrees. Sometimes it is zero degrees if the Earth's geomagnetic field is very quiet, which usually also means the Sun's activity is low.

You might wish to keep regular notes on the movement patterns of the Biofield Meter. Even if you don't make a light beam scale you still will probably find it useful to note approximately how much and in which direction the meter rotates in general terms such as ¼ of a section, or whatever. Besides date and time, it will

prove worthwhile to note how you feel, what the weather is like, or other comments or conditions, so leave room in a notebook for plenty of comments.

Notice the direction of initial rotation of the Biofield Meter when someone sits under it. Usually the initial direction will be the same for everyone most of the time. When the initial movement is in the opposite direction, it often indicates that there is an increase in the Sun's activity and a corresponding disturbance of Earth's magnetic field, or it is close to a new or full moon.

These are times to notice what happens in one's daily life and in the world, for there are more likely to be minor upsets in one's personal life or large scale disturbances such as riots, large earthquakes, volcanic activity, natural disasters, or unusual weather patterns. Geomagnetic storms may not always adverse. Sometimes it makes Gemini people act more active, energetic, or creative. It may be useful to save newspaper clippings for your notebook.

Suggestions for other Biofield Meters:

Make an outer frame and an inner frame. Hang the inner frame inside the outer frame, offset just enough to allow its own string to hang from the ceiling, along side the outer frame's string. For small rotations they might not interfere with one another.

Another experiment might be to put three hoops around the body of different sizes. They could be hung slightly off center so each could rotate independently. The Biofield might work better if living organisms were used around the frame (mice, rats, goldfish, etc...). Also, try water-filled tubes instead of magnets; glass instead of polyethylene.

You may purchase a Biofield Meter as a ready-made kit from PsychoPhysics Labs and save hours of running around to find parts.
Only \$51 + \$7 shipping & handling.

Send check or money order to: PsychoPhysics Labs P.O. Box 514 Soquel, CA 95073

Please allow 3 weeks for delivery

Section V - Different Versions of the Biofield Meter and some Observations

Different versions of the Biofield Meter, besides head sized pyramids, were constructed and tested during the years following the initial construction of the pyramid shape.



My son, Deyess Payne in the Helix with Magnets.

In one version a ¼" diameter copper tube was formed in the shape of a helix large enough to place over the head. (See Figure 1) Magnets were placed along the tube. Two versions of the meter were constructed: one spiraling one way, and the other spiraling the other way. A difference in the direction of initial movement was observed, as was a difference observed by orientating the ring magnets on the structures. Mixed orientations were not tried, however.

Some observations by people who purchased a Biofield Meter or built their own version are mentioned in the following pages.

Figure x. - Ds Payne in the Helix with Magnets

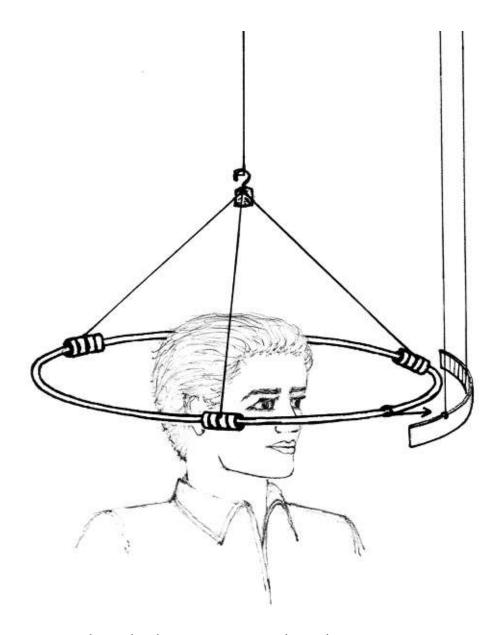
One acupuncture professional, Julian Kenyon, in England, who made his own version, found it worked, but apparently didn't have time to explore many other possibilities.

Another person who purchased a Psychokinetic Pyramid (PK) in a bottle described experiments of rotating his hand above the pyramid. He found horizontal hand rotation produced rotation of the pyramid and vertical rotation of his hand changed the direction of the pyramid movement. He also found a difference between daytime and nighttime. He placed the magnets with the magnetic field parallel to the Earth's surface, instead of perpendicular as I had done.

Another person discovered that the pyramid could invariably be made to move by coming close to it, arms at sides, clenching fists, abruptly pulling in the diaphragm, and holding his breath.



The PK Pyramid (Described in Section III)



I experimented with the PK pyramid with one magnet on each corner. More magnets produced more rotation, up to four on a side. Then their weight seemed to slow the movement. Different kinds of metal screening (copper and iron) wrapped around the bottles showed varying results. Soft iron appeared to stop the effect.

I took the PK pyramid to Egypt and South America, as well as other countries. I also took it on travels around the United States. Inside the great pyramid of Giza the PK pyramid did not rotate at all; on top of the pyramid it showed normal behavior. In mountainous regions it showed more rotation amplitude than on flatter regions, or near the sea.

Figure x. - Another Version of the Biofield Meter

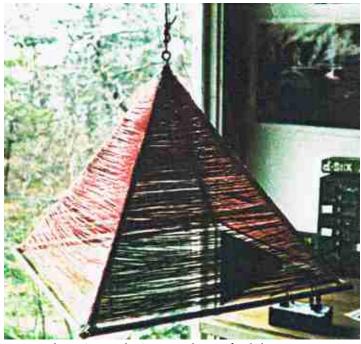
I have observed that a PK pyramid in a steel (nonmagnetic) can with a glass top will always rotate significantly when I am very close to it, whereas the other pyramids will not always move.

The figure to the left (Figure 2) shows a version of the Biofield Meter with only a circular plastic tube and with a hanging scale precisely placed to give radial measurement in inches on the curved yard stick. It worked fine, but it was difficult to precisely hang.

I noticed that a larger version (two or three times as large) seemed to show faster and larger amplitude, but I did not systematically explore it as thoroughly as Bjoorn Vlistigk (Section VII – Energy) may have done, nor did I think of extracting any force that could do work from it.

In one large version I used tiny coils on each corner. Very fine wire was hung loosely to provide external power to the coils. This worked fine. One day I forgot to turn on the power and assumed my seat within the pyramid. THE PYRAMID ROTATED JUST THE SAME!

For another version, copper wire was laboriously wrapped and glued around a pyramid (two feet on a side) from tip to bottom. It worked fine, plus some sensation, usually a 'coolness', was felt by nearly everyone at all times even when no current was in the coil.



The Wired Wound Biofield Meter.

An observation I made in 1987 involved emotion. I sat under a wooden pyramid frame with magnets and it moved about 2 inches to the left. A little later that day, I was extremely angry with someone. I beat a pillow yelling. Then anger turned to crying. I again sat under the pyramid. It moved about 7 inches to the right. That's a lot!

It was observed that the pyramid frame moves when a person stretches his arms around it (not touching it, or course). It was also observed that the Biofield Meter moved when a bowl of fruit was slowly slid under it with a broom stick.

A friend, and I, found that even partial forms exhibited the spin force. We hung the frames on a thirty foot string so that any to-and-fro movement of any significance compared to the spin force would show up. None did. Arcs of complete circles from about 40° on, also rotated.

One time I was camping in the woods and made a Biofield Meter, using sticks lying around lashed with twine. These had no magnets on them. In the morning, when the air was absolutely still, it rotated a few degrees.

An inverted circular plastic laundry tub with magnets was made by Dr. Ron Hruby which also worked. He used this in his experiments on remote healing (See section VIII).

Since the spin force was detected around some living organisms, plants and animals. I inferred that it was present around all living organisms and not around non-living materials. This is not the case. Some Russian scientists found what they call 'torsion fields' around inorganic spinning objects.

Apparently it exists as an intrinsic property of all matter, from electrons and protons on up, like gravity, electric charge, and magnetism (which seems to be a special case of organized electron spins).

Spin is everywhere! As a force it seems to travel much faster than light. Can electron spin be altered by thought? Is the Sun itself responding to mass thought? Experiments on these questions need to be done. How many people does it take to affect one electron spin? How many people are needed to alter the Sun's behavior? Every thought we think alters many thousands of molecules within our brain. Many experiments have shown that matter can be influenced by thought. See, for instance the section on remote healing (Section VIII) later on in this booklet.

Treatments with magnetic therapy have been observed to decrease the amplitude of the Biofield. When a person meditates it also decreases. Little children have larger Biofields; when a person is ill the Biofield decreases.

The Biofield Meter is a measuring device. It could serve as a new kind of biofeedback instrument for emotional vitality or psychokinesis. There are no side effects from the use of the device.

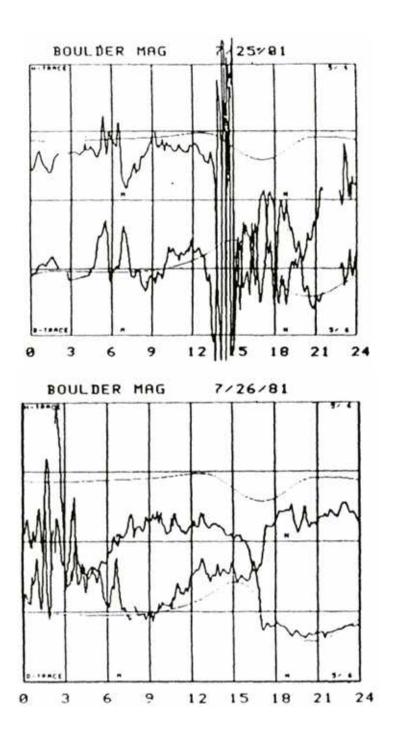
Experimental evidence also shows that apparently sunspot activity can be decreased by mass meditations. This is important as sunspot activity has been found to be related to the onset of some illness in humans, especially the onset of the mass psychosis which is called war. These experiments are described in more detail in the appendix, and in even more detail in another booklet. (See back cover for details on this booklet).



Another Helical Pyramid Biofield Meter.

Geomagnetism and the Biofield

Additional Observations



Earth's magnetic field variations over a 24 hour period. The horizontal and vertical components are shown on the same diagram.

Geomagnetism

The amplitude of the Biofield Meter rotations varies with geomagnetic activity and intensity. The baseline value of the geomagnetic field is about one gauss, and variations around this are only a few thousandth's of this value, but they are important and have been carefully studied for two hundred years. Magnetic observatories are located at many places around the globe. Sensitive instruments, called magnetometers, make continuous recordings of magnetic field variations. The data is sent to central organizations where it is summarized, stored and distributed in numerical form to researchers. The geomagnetic field varies continuously and at times these variations are so large and rapid that magnetic storms are said to be occurring. The moment-by-moment recordings are given numerical values for each three-hour interval by trained observers.

An expert body analyst Guillard (Santa Cruz, CA.) said that he noticed most peoples' pelvises to be rotated slightly clockwise and down.

The Biofield appears to be a type of spin force or torque exerted on any object within the vicinity of a human body or any living entity. It is related to magnetism, but precisely how is not known. In two non-technical, easy to read books by Lelchtman (1980, 1982) both Tesla and Einstein are reported to have commented about "a higher octave of magnetism", a nonferrous magnetism which can be found around all matter.* Since magnetism is fundamentally a spin force there does seem to be a connection, but details remain to be explored.

The discovery of the Biofield and the observation that humans are linked with the geomagnetic field provides an important expansion of our view of human nature. We can now say with scientific precision that humans and probably all living things resonate with the entire planetary magnetic field.

Considered as a living entity itself, Earth, or Gaia, may possess its own equivalent of an aura -- the geomagnetic field, or something associated with it. And just as our auras and Biofields are affected by Gaia, its field varies with the activity of the Sun, position of the moon, the planets and other large masses of matter in its proximity. Therefore, the human Biofield is connected with the entire solar system. It is in effect, our "astrophysical connection".

Studies on human behavior show that crime rates, accidents, illnesses of all types, psychotic episodes, riots and the onsets of international battles are increased or perhaps triggered by geomagnetic storms or something associated with them (see separate list of references).

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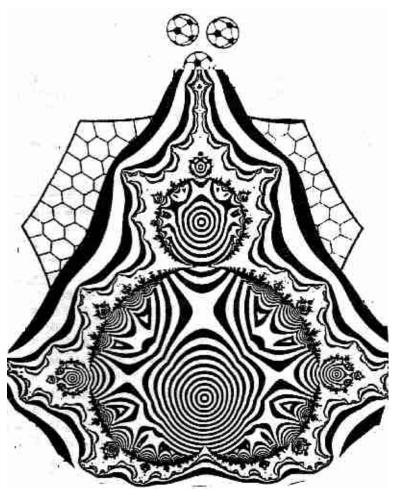
^{*} These are statements channeled by Dr. Leightman

At times of intense magnetic storms, equipment and humans or other living organisms may be directly affected. Electrical surges may be induced in power lines, computers may make errors, electronic equipment may malfunction.

In the laboratory small magnetic fields are known to affect hormone production, enzymes, collagen adenomonophosphate, calcium ions and even DNA and RNA (summarized in Ito, 1983).

When a person is in a highly emotional state, his or her Biofield appears to be larger, whether or not there is a geomagnetic storm occurring at the time. The combined influence of intensified geomagnetic activity and human Biofield activity may be enough to affect delicate machinery. Perhaps this is how some people stop clocks!

Psychokinesis, the ability to move objects at a distance using mental will, may be a result of consciously directing the Biofield.



Drawing Courtesy of Michael Sunanda

Section VI - Spin, A Fundamental Force?

"Even though the concept of spin may not be too acceptable at first as basic force, like gravity or electricity, when its many properties are explored and found to coincide with observed properties of matter, and when from these properties may be predicted the laws which we know matter to follow, the status of spin most certainly will be enhanced and with increased understanding will come greater confidence in the beautiful simplicity of the concept of space within which spin manifests as a basic force. In fact, we will find that we need no further foundations upon which to build our complete understanding of the material universe with all its glittering apparent complexity." – Wilbert B. Smith, 1964

Accepting the property called spin to be a fundamental force like gravity and electric charge is the thesis of this section. The first note in this section is one page of Samuel Goudsmit's talk. He was the man who first proposed electron spin as a necessary attribute to account for some observations in quantum theory in 1925. His talk follows on the next page.

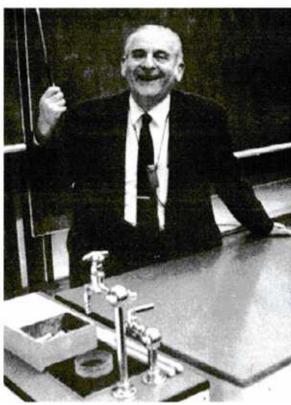


The discovery of the electron spin

S.A. Goudsmit

The golden jubilee of the Dutch Physical Society in April 1971 was concluded with a lecture by Samuel Goudsmit on the history of the discovery of the electron spin. Actually, his could hardly be called a polished lecture; it was a grandiose artistic performance, full of wit and emotional involvement. Goudsmit, then at the end of his scientific career, gave a very personal account of how chance and the guidance by Ehrenfest, their far-sighted supervisor, led him and Uhlenbeck to formulate their remarkable discovery. When, in connection with the present book [*], the question turned up how to discuss the early history of electron spin, my thoughts returned to that day, nearly twenty five years ago, when I had been impressed by Goudsmit's truly humane wisdom. After weighing various alternatives I thought: why not let the master speak for himself? Thus I came to translate Goudsmit's historic lecture. Its text was not meant to be published as a paper, but Goudsmit subsequently consented to its publication from a tape recording [1]. Apart from a few minor changes I have tried to present Goudsmit's very personal style by giving a literal translation of the words spoken in Dutch. A number of references to the papers mentioned by Goudsmit have been added.

J.H. van der Waals



Today I will talk a little about history. The history of the discovery of the electron spin by George Uhlenbeck and myself. That is tricky; I don't like the history of physics, I have always been against the way in which the historians wrote about it in earlier days. Nowadays it is better; someone like Martin Klein, that is real, he brings something new. But the earlier historians always described physics as if it had been done by three or four people and they forgot that these famous people could only do their work because of the many others who also made contributions. They can't help it since that is the way they have learnt it from the ordinary historians. You hear about a man like Hitler and they forget the millions who lent him the necessary support.

This is the first page. If you want to read more, please look up "The discovery of the electron spin" on a search engine on the Internet.

The other papers in this section were written before I fully realized the extent to which spin was already accepted by the quantum theorists and even to some extent by biophysicists who wrote about the spin of complex molecules, cells, and even organs.

Although not thought to be the same as the spin of a baseball, or other macroscopic objects, the notion is fundamental to quantum theory. Nearly every subatomic particle is considered to spin, as well as larger entities such as cells, interstellar molecules, and of course, all stars and most other celestial objects. The first paper, which I wrote on spin [unpublished], describes some astronomical observations and other events whose actions would be more simply explained by assuming there is an intrinsic spin force present rather than explanations based on traditional Newtonian physics.

One of my recent papers on spin follows:

Spin - Candidate for a Fifth Force? Buryl Payne, Ph.D (Unpublished, as of 2002)

Abstract

An easily measured force has been discovered around humans. This force is not magnetic, though it changes amplitude and direction when there are geomagnetic storms. It is called a spin force because it causes lightweight materials to spin around the body, usually clockwise (as seen from above). Spin exists around humans, plants, and other living organisms as well as around electrons, protons, molecules, stars and galaxies. It is not a superficial byproduct of matter. It is postulated in this paper that spin be considered a fifth force. This assumption may provide another step toward a unified field theory in physics as well as provide simpler explanations of certain phenomena in astronomy such as missing matter and the formation of planets and satellites.

Introduction

In physics, a force is said to exist if a body (of matter) changes its direction or speed. In other words, if something moves, a force must be moving it. You might say that the term "force" covers our ignorance. While this is true, once we have given a name to a force, we can begin to study it, designing experiments to measure how it behaves. Introducing the existence of another force into

previously established scientific theory requires some careful thought. Such a radical notion ideally should have some basis in experimental observation, should simplify and unify present observations of matter in motion, lead to some unifying theoretical constructs, be expressible in mathematical formulations, and lead to testable hypotheses. The concept of spin as a previously unrecognized fifth force does seem to meet these criteria.

Hypotheses I: A spin force exists around all matter.

A spin force (torque) was detected around living organisms by the author in 1978. A series of experiments used three versions of simple frame devices called Biofield Meters **shown in the accompanying illustration.** Suspended over a human, animal, or plant, the Biofield Meters were observed to rotate a few degrees in a consistent manner. Three aspects of the force were observed:

- 1) The magnitude and direction of the force varied with solar/geomagnetic activity.
- 2) The spin force is weaker when a person is ill, tired, or very calm.
- 3) At times of new and full moon the spin force usually reverses direction for a few hours.

Others have independently discovered a spin force. As early as 1922, the British journal Lancet published an article on the biological force of spin. A German scientist, Walter Peschka, also discovered it in the 1970s. In Hungary, George Egley discovered the effect and designed a pocket device called The Egley Wheel, which is currently on the market. In Denmark, Dr. Bjoorn Vlistigk reported he obtained useful power from the spin force around a human body. It's a big step from observing a spin force or torque around biological systems to concluding that a similar force is present around all matter. There are a number of observations in astronomy that support this hypothesis. Some are described in the following pages:

Universe

According to a note in Science News two astronomers found that the polarization of radio waves emitted by 160 distant galaxies is larger in one

direction than any other. The authors argue that this implies the presence of a rotational force (or spin), which de fines an axis for all the galaxies studied.

Galaxies

Many Galaxies rotate - their spiral forms dramatically illustrate this rotation. They are beautiful creations! In apparent defiance of the law of conservation of angular momentum, stars in the outer portions of the galaxies rotate faster than expected. Einstein had to add his infamous "Cosmological Constant" to his equations to cover this apparent anomaly, but it could also be a manifestation of the spin force at a galactic level. Astronomers studying distant, and therefore ancient, galaxies in the process of formation are puzzled by their rotation rate. Observed as they appeared when the cosmos was only 20% of its current age, these gaseous objects seem to rotate about twice as fast as would be predicted by several popular models of galaxy formation. If we think in terms of spin being a force, we may conclude that the faster rotation could be due to the presence of a spin force. The spin force would help form galaxies or stars, just as dust particles are thought to spin and coalesce to form planets.

Stars

An article in Astronomy presented data from the Hubble telescope while it was focused on The Crab Nebula. The data gave rise to the inference that there is a city-sized pulsar more massive than the Sun at the center of the nebula. The pulsar, a remnant of an exploded star's core, rotates 30 times per second and gives off as much energy as 100,000 suns! The solar wind created by this rapidly spinning pulsar streams off along the pulsar's equatorial plane, which puzzled astronomers because most theories predicted that material would stream off the pulsar in all directions. The presence of a spin force would more easily account for the observation.

In Science News, R. Cowen wrote about the supernova 1987, stating that the model of the explosion cannot explain why the material swept up by the fast wind should form rings instead of a spherical shell. Again, the concept of a spin force could be an alternative explanation for this observation. Spin forces operate only in one plane. In another issue of Science News, R. Cowen wrote about a black hole, which supposedly drags space-time around it since it is so massive and spinning so rapidly. It seems simpler to assume the presence of a spin force to account for the observed effect.

Planets

Planet formation continues to be a fascinating field of study for astronomers. A newspaper article by R. Cowen in the science section of the Christian Science Monitor reported that astronomers studying Hubble images of the star Beta Pictoris (50 light years away) were surprised to find that "something is...twisting the disc" (of dust and gas) around Beta Pictoris. Could a spin force be operating to help form spinning planets?

Within our solar system, outer planets spin faster around their axes than the inner ones, except for Pluto. Mercury and Venus hardly spin, while Earth whirls around once a day at 1,000 miles per hour. Mars spins once around in about 20 hours, and giant Jupiter, Saturn, Neptune, and Uranus all spin around in about ten hours. Pluto apparently has a spin of about 6.3 days, exactly synchronized with the rotation of its satellite, Charon. Spin is everywhere; about one out of every eight asteroids have been found with little moons spinning around them. At times of intense solar and or geomagnetic activity, the rotation rate of Earth changes. These changes are usually ascribed to changes in wind velocity. However they could also be due to spin force changes. (The spin force around humans sometimes reverses.)

Einstein considered the explanation of Earth's spin and its associated magnetic field to be one of the major unsolved problems. A recent finding would have intrigued him: "Hurricanes within Earth's Core" was the title of a Science News note describing the amazing finding that Earth's inner core spins faster than the rest of the planet. A satisfactory theory has yet to be constructed.

Sunspots, Planetary Spots, and Storms

Some sunspots seem to be whirling vortices, as does the former great red spot on Jupiter, and a spot on Neptune. Earth's cloud cover manifests local spin fields in the form of vortices (hurricanes and tornadoes) on a continual basis. Hurricanes and tornadoes may be analogs of sunspots, spinning vortices in the atmosphere. These are usually explained by the differential spin of the planet from pole to equator, but another spin factor may be operating. I've observed for years that sunspots form when two or more planets align with the Sun.

The Sun appears to rotate more rapidly where the sunspot area is small. Also, it appears to rotate about .5% faster during periods of lesser sunspots, such as the Maunder Minimum.

Also, during the quiet phase of solar activity?

What is the relationship between spin and sunspots? Sunpots or flares change the angular momentum of the sun. They are actually something like spin quanta which are released. The Sun is constantly regulating its spin. A kind of homeostatic process as a living being would be expected to engage in. As a fundamental force, spin is also quantized, or comes in discrete lumps, though gigantic in size compared with the quanta you know of in light.

All stars and planets are constantly changing their spins by tiny amounts, and constantly absorbing and emitting spin quanta or spin changes.

Subatomic Particles

At a much lower level of structure, protons have a property called spin, as do electrons, and all other subatomic particles. Collections of protons and neutrons called atomic nuclei are assigned spin numbers. In Science News, Elliot Lieb, a mathematical physicist at Princeton University, is quoted as saying: "In some sense it is a miracle that matter doesn't collapse and explode. Why matter is stable has not been adequately explained." The introduction of a spin force could account for the observation that electrons don't rush in to annihilate with their proton partners. In a later issue Emlyn Hughes of the California Institute of Technology, who is one of many physicists trying to explain where protons get their spin, said: "Spin is a quantum number and a property of matter; we do not understand where it comes from or why it is there." Gravity is a property of matter too.

Spin changes may propagate at a greater velocity than light, or in some other way transcend space-time as we currently conceptualize it. Such a possibility may account for the puzzling observations that the change of spin of one particle appears to alter the spin of another one at a distance greater than can be accounted for by light speeds. Experiments with linear accelerators produce particles and antiparticles with opposite electrical charges and spins. Quantum theory indicates that one particle of a newly created pair appears to respond instantly to what the other is doing, even if the two are far apart. But, in fact it takes a very minute amount of time (less than four ten-billionths of a second) to respond, which is very small but not zero. This suggests that the spin velocity is super, super fast! Spin force velocity, compared with the speed of light, may seem like the difference between the speed of a jet plane and the speed of a growing plant. Current research is being done to use spin force velocity as a basis

for quantum computing, which will be extremely fast. There's a whole field of electronics being developed, called "Spintronics".

Could all this provide an alternative explanation for Bell's theorem and other quantum theory paradoxes?

It seems reasonable to tentatively accept Hypothesis I, that spin be considered another force, and seek ways to measure its magnitude, and velocity and weave it into the fabric of theoretical physics.

Hypothesis II: Magnetism may be perceived as a special case of spin force.

What has been called magnetism is known to be a manifestation of the alignment of the spin of some electrons in iron atoms. It is the alignment of these few electrons that makes the property we call magnetism apparent to our instruments. We could replace the term "magnetic force" by the phrase "aligned electron spins." All electrons have this property called spin, but only some of the electrons, mostly in iron, freely change their spin axes when a magnetizing force is applied from an external magnet, an electric current, or from the magnetic force (Spin Force) of the Earth. The so-called magnetic force detected around a current-carrying wire is observed when other electrons come near the wire (as in a compass needle, where they are spin organized) or in the movement of electron beams (as in a TV screen). Wherever the terms magnetism or magnetic force are used, the term spin, or aligned spins may often be substituted.

Most planets and stars spin, and have magnetic fields. For spinning planets the direction of the magnetic force at the poles is sometimes, coincident with, but not always, to the axis of spin. Yet when objects on Earth spin, such as a piece of plastic, or a rubber ball, no magnetic forces are observed. Spin seems to be a more general term. What we call magnetic forces may be a subset of spin. Obviously this whole area of physics needs careful reformulation. Maxwell's equations were constructed before electrons were discovered.

A connection between molecular spin and magnetism was published in Science News: "In recent years, chemists have synthesized a variety of large molecules that behave like miniature magnets. One such macromolecule is manganese acetate, which includes a cluster of 12 manganese ions and 16 acetate ions. Each macromolecule is in a single magnetic state, generally described as its spin state. When a large number of these manganese clusters aggregate into a single crystal, the spin state of each cluster points in a random direction. The application of an external magnetic field, however, can bring these spin states into alignment,

giving the crystal itself a definite magnetic field, or spin." So again we see that socalled magnetic forces result from aligning spins, but of molecules, not electrons.

Hypothesis III: Spin force complements gravity.

That there is a connection between gravity and spin force is supported by four reports of relevance known to the author - there may be more.

- 1) Two Japanese engineers found a change in weight of a gyroscope spinning in the vertical axis. One direction of spin showed a weight decrease, although the other direction did not show a weight increase.
- 2) Australian researcher, Thom Watson, found a change in weight of a free spinning wheel, depending on which direction it was spinning.
- 3) By aligning the nuclear spins of some protons, aerospace engineer Henry Wallace obtained small gravitational effects. He had to use elements and isotopes that have an odd number of protons since all the numbers0 pair up in couples in the atomic nucleus. Only the odd protons can be induced to change their spin and then only by a slight amount. They do not flip around like some electrons can in iron atoms. He aligned the spins by rapidly spinning disks of the materials with uncoupled protons and detected gravity changes by measurement of a transverse voltage in a semiconductor crystal.

Spin does not imply anti-gravity - rather it complements gravity. Centrifugal force, as it has been called, counteracts gravity, so planets don't fall into the Sun. But the spin effects discussed above seems to be another force added on or combined with the more well known centrifugal force of classical mechanics. It's hard (requires energy) to get objects to crash into the Sun and hard to get electrons to "fall" into protons and annihilate one another.

Hypothesis III will be confirmed when people replicate the three experiments discussed above or devise new ones that show changes in gravity related to spin. For example, can the rate of fall of a spinning body be measured? In 1985 Ephraim Fischbach of Purdue University obtained experimental evidence of differential rates of fall for objects made of different materials. Perhaps his different objects had different spin forces around them; minute, but significant. Is the force of gravity the same for living organisms as for inorganic matter? When

we learn to systematically alter weight by aligning proton spin, we may develop some useful technologies.

Discussion

Based on more experimental work, and in view of the above considerations, it may be possible to bring one aspect of life into the equations of physics. Spin may be one clear and definite measure of aliveness, which can be connected with the other forces of physics. Healthier, more alive, or more organized forms of life may have more of their hydrogen protons organized, and hence larger spin fields around them. In general organic matter has a larger proportion of hydrogen protons than inorganic matter. Hot stars, being made up of mostly hydrogen, also may have stronger spin forces around them than more dense, burnt out stars.

Summary

The following four statements summarize the ideas presented here that spin be considered a fundamental force:

- 1) All objects have a spin force around them that could be measured by some more sensitive version of the instrument currently used to measure the spin force around the human body.
- 2) The term magnetism may be replaced by the phrase "aligned electron spins" or, in some cases, "molecular spins."
- 3) In some special cases, spin forces offset the force of gravity.
- 4) Spin, magnetism, and gravity have a common thread.

These notions lead to some testable predictions although it is premature to write mathematical formulations:

1) If a mass is present in the vicinity of a much larger mass, it will experience a force at right angles to a radius vector from the center of the larger mass, in addition to the traditional force of gravity. At large distances the force of gravity may be less than the spin force.

- 2) If a mass is free to move in space, it will begin to rotate about its own axis.
- 3) Given any distribution of particles present in space, they will begin to revolve about their own axes and to revolve about a common center of gravity. These last two predictions could be tested from a space station.

Spin was pretty much unknown to people at the time of Newton, Maxwell, and Einstein's publication of the special theory of relativity in 1905. Building on the hypothesis of the Bohr model of an atom, wherein electrons were thought to circle a central nucleus, like planets circling a central star, Goudsmit hypothesized that electrons both orbited around a central nucleus, and revolved around a polar axis. Later, electron spin was believed to be different from the spin of a baseball, although the actual structure of the electron is still not completely known. However, the discovery of a spin force around a living organism, and acceptance of spin as a fundamental property from sub microscopic to the universe as a whole adds to our conceptions of universal laws and physicists' attempts to explain everything in terms of a few fundamental principles.

Electrons moving in a wire, distort space around the wire, according to some physicists. They induce free electrons outside the wire to move in spirals around the wire. This induced spin is called a magnetic field. It is more simply explained by assuming the presence of a spin force around the moving electrons.

In special rocks, called lodestones (iron ore), enough electrons in the rock have their spins aligned so a 'magnetic field' is said to be present. It is probably present around one electron, although not large enough to be apparent to our senses or instruments.

The key to accepting spin as a fundamental force rests upon data based upon easily validated experimental procedures, and the awareness that 'magnetism' is a special case of spin. Even the notion of spin itself is incomplete. The more general term might be 'spirals', or 'vortices'; an old notion introduced in physics, more than one hundred years ago, although not fully accepted.

The table that was presented in Section I could be revised to include spin instead of magnetism.

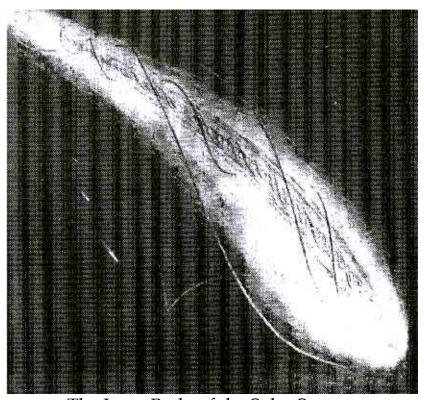
FORCE	LEVEL OF OPERATION	EFFECTS
Gravitic	Operates between all matter.	Pulls matter together.
Electric	Only manifests between charged particles.	Pushes or pulls. Only sensed by other charged particles.
Strong & Weak Nuclear	Operates within nucleus of atoms.	Keeps the nuclear particles together.
Spin	Present around all bodies - Much larger around living organisms.	Causes all bodies to spin around one another. Counteracts gravity. Produces complex forms or structures.

Many references to spirals and spins are scattered throughout the literature.

The force around the body may not be simply rotational. Because the Biofield Meter can only rotate does not mean that the force around the body is only a circular motion. It may be a spiral force either inwards or outwards. A differently designed apparatus might show this, although one must recognize that 'reality' is largely a function of the observing instrument. Spirals, or vortices, are a more general case of circles. Vortex theory was used in physics before Einstein's theory and the Quantum theory. The force around living organisms may be spiraled in nature probably spiraling inwards, as it appears to be around Earth. For Earth's inner core is now thought to be spinning faster than the outer surface, and high clouds apparently move around the Earth at a different rate than lower ones, or the surface.

The planets appear to us to be in elliptical orbits around the Sun, but on a very large scale, beyond our present awareness, they may be slow spirals, or move in steps, like how electrons are thought to be moving around atoms in orbits. If the Sun were to give birth to another planet or capture a Mercury sized asteroid, perhaps the other planets would jump out to a larger orbit. Earth would quickly cool off freezing many life forms. The Sun might increase its radiance to compensate.

James Oschman, in his book: *Energy Medicine*, mentions that many of the key molecules in living organisms have helical structures. These include DNA, Keratin, Collagen, Actin, and Myosin. The helix, or spiral, shape appears commonly in nature. Planets appear to us to have elliptical orbits, but to an observer in space, the Sun is moving rapidly and the planets moving with it trace helical orbits, or more complex patterns, as the Sun twists and turns in its path around the galactic center.



The Long Body of the Solar System From Rodney Collin's book, *The Theories of Celestial Influence*

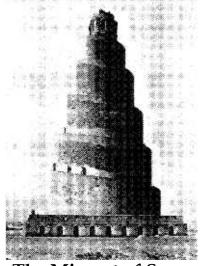
Spiral patterns are often evident in trees, in sunflower sprouts, and other growing plants. Spirals have been carved or painted on temple walls, used in ceremonies, or to serve as blueprints for buildings for centuries. I have published a short article about spirals. (see references)

Below are some illustrations, used in that article from Jill Purce's book, *The Mystic Spiral*.



Carving on temple in Bhutan





Spiral Stone Ball

The Minaret of Smarra

The last paper in this section, although it was written in 1986, is on gravity and spin. If spin were taken as a fundamental force, like electricity, then how does it relate to gravity, if at all? The experimental evidence with gyroscopes and weight reduction suggests there is some connection. Could it be that there are different kinds of spin with different properties? Electron spin, proton spin, atomic spin, molecular spin, etc. all the way up the scale to galactic spin? In a living organism, perhaps a larger percentage of the proton spins are more aligned than in a rock. Yogis who practice meditation may be better able to align

more of the proton spins in their body. In some way could this be related to flying, or at least momentarily becoming lighter?

A biofeedback instrument, to help develop weight reduction during meditation as a prelude to flying, is under development at PsychoPhysics Labs.

One of my recent papers on spin follows:

Subtle Magnetism - A Fifth Force? Experiments and Theories Buryl Payne, Ph. D.

A number of experiments have been done by many people which show that another force besides classical electromagnetism exists, especially around living organisms. Although the individual experiments seem anomalous and fragmented, partially because of different terminology, they do form a coherent whole and substantiate the existence of a fifth force related to magnetism, but different from it.

Animal Magnetism was the name given it by Anton Mesmer centuries ago. He knew it was something different from the magnetism connected with lodestones. He also thought there was something akin to animal magnetism around the Sun and planets which affected humans and plants. Called 'chi', 'prana', 'vital force' and a variety of other names in other languages, it has tantilized researchers for years, challenging them to detect and measure it. People have looked for this subtle force with tools used for detecting the known electric or magnetic forces. This has been misleading; an attempt to put it into the classical framework when it is different. Small forces have been detected, but the subtle magnetic force is perhaps a million times larger and is easily detected with a simple device.

One of the earliest published articles on subtle magnetism appeared in the English medical journal, Lancet, in 1922. Dr. C. Ross, a physician in England, described an instrument which reacted to the proximity of a body or was set in motion by vision.

In 1977 Walter Peschka in Germany presented a paper at a symposium describing a force he found present around the body which couldn't be explained by classical physics. He used a torsion balance and called it a kinetobaric effect.

In the late 70's the writer found that a simple frame hung by a thread about eye level over a person's head would rotate a few degrees. Initially the frames had magnets on them and it was noticed the magnitude of the force was larger when more magnets were used. It was also observed that the frames rotated more during geomagnetic storms, more for children than adults, and more for healthy person than one who is ill. In general, healers induced more motion to the hanging frames. Small hanging frames in glass bottles were also constructed which showed this effect. My observations showed a spin force to be present around plants as well as humans.

Various models of this device, called 'The Biofield Meter' were put on the market in the 80's; demonstrations were made at several scientific meetings or conferences, two local newspapers gave it a full page coverage and two TV stations showed the device demonstrated in action.

In the 80's a Hungarian physicist, George Egely, discovered a light weight 'wheel' mounted on a low friction pin bearing, would rotate when people put their hands around it. He markets this device as the Egley wheel.

In the 80's a Danish scientist, Dr. Bjoorn Vlistigk, reported he had discovered a 'human energy spin field' surrounding all living persons. He built a huge pyramid structure, geared it's rotation up, and obtained useful energy from the spin force, according to the account published in a newspaper.

In 2001, Ron Hruby, a retired NASA engineer, made his own version of a Biofield Meter and found that when a small group ten miles distant, concentrated on healing a subject sitting within the meter, changes in the amplitude of rotation occurred 18 times out of 18 trials, or 100% correlation!

Some Russian scientists also discovered the presence of spin forces around rotating inorganic objects which did not fit in with the current notions of electromagnetism. They call these forces, 'torsion fields! There are over 70 references to experiments, mostly in Russian. One experiment indicates a propagation velocity of torsion fields as being very much faster than light. There is even a torsion field generator that could be purchased from a Russian company. (Apparently they haven't been able to make it operate reliably and it has been withdrawn from the market as of 2007.)

Given these, and other experimental observations not mentioned in this brief article, what can be said towards formulating a sensible theory?

First let's unmask the words. The term 'magnetism' was acquired centuries ago. Now, in the 21st century, more sensitive instruments, and many other discoveries suggest more descriptive terminology. When some electrons in iron atoms align their spin axes, the phenomena we call magnetism becomes manifest. It is always there, but not observable by our everyday devices, such as a compass, magnetometer, or a rotating coil.

The direction of the force from a magnet continuously changes at different places around a magnet. The force does not change, only the DIRECTION changes, although technically, the term 'force' as used in physics, includes direction as well as amplitude. This change in direction will cause a tiny magnet, or electron or other charged particle, if near a much larger one, to twist on its axis to align with the larger one and, if moving, to spin or spiral around the larger one. Free electrons, moving nearby a number of spin-organized electrons (a big magnet) will be diverted off course, or even caused to move in an orbit or spiral around. It's as if the organized spins of electrons on their axes, act at a distance to bring nearby electrons into a macro spin or orbit around the magnet.

Physicists made up the term 'field' to simplify their calculations, but this is a further abstraction from the term "force', a handy word to cover ignorance. A more descriptive term for magnetism might be "organized electron spins".

Einstein and others postulated that space-time is dragged around a current carrying wire. Known as the Einstein-Thirring effect , it seems awkward and difficult to prove.

The direction of the force is into the surface at one end and out of it at the other of a chunk of iron that has some of its electrons in the iron atoms magnetized. These two end directions are called north or south magnetic polarity. The force directions elsewhere around a piece of 'magnetized' iron are not named.

Now what about subtle magnetism? In my experiments I have observed a rotational force around the body for any kind of frame that is hung over the body. Lightweight objects free to move (dangling by a string) near the body also will rotate or attempt to do so, if the string is long enough. One astronaut is

reported to have said that when he was outside the space craft small objects rotated around him.

Therefore subtle magnetism may be another type of spin, perhaps more general than electron magnetism. Does it diminish with distance in the same manner as iron magnetism? Apparently not; it may follow a different mathematical rule than the inverse square formula. And it also may travel faster than light, as some Russian experiments seem to indicate. The existence of a force which travels faster than light will require a revision of Einstein's theories, and a rethinking of some of the experiments based on quantum theory, now interpreted as showing non-locality effects, or instantaneous action-at-a-distance. Perhaps subtle magnetism could be equivalent to spin around protons, atoms, or molecules. Tesla spoke about a higher octave of magnetism and stated that magnetism was present around all matter.

Subtle magnetism appears to be another kind of spin, perhaps spin around protons, atoms, or molecules? In the human body and other living organisms, atoms and molecules are organized to a high degree. This may appear as a spin force around the body as a whole. Usually the spin force moves objects clockwise as seen from the top of the head looking down. Near the new or full moon and at times of geomagnetic storms the direction reverses.

Does the planet as a whole have a spin force? Does this resonate with the spin force or subtle magnetism of people? Observations with hanging frames tend to support that inference, but more experimental work needs to be done.

Does the Sun possess a subtle magnetic field? Probably, Anton Mesmer thought so. Subtle magnetism may also be another term for a vortex. Vortex theories were popular in physics over 100 years ago.

It may be that a vortex pattern comes first, and a living entity is guided by it. When one is ill, the organization is disrupted. Ordinary magnetic forces seem to help a person reorganize cells and tissues that have lost their naturally healthy or proper form. This too, suggests a connection between ordinary iron magnetism and subtle magnetism. Hands on treatment, directed intention, or sometimes merely the nearby presence of another person who is in good health' helps an ill person regain the healthy organization they formerly had. This may be a result of direct transfer of information or force from the subtle magnetic aura of one person to another.

When subtle magnetism is called a spin force, it is immediately noticed that every particle from electrons to galaxies spins. Spin is a universal property of matter, perhaps larger in amplitude in living organisms.

Spin, taken as a fifth force, is a complement to gravity (not antigravity), is connected with electric forces, and with living matter. All matter, having spin, may be alive to some extent by this definition.



The accompanying table shows a possible relation between the spin force (subtle magnetism) and the other forces of physics.

THE FORCES OF THE UNIVERSE

	LEVEL OF	
FORCE	OPERATION	EFFECTS
Gravitic	Operates between all	Pulls matter together.
	matter.	
Electric	Only manifests	Pushes or pulls.
	between charged	
	particles.	
Strong	Operates within	Keeps the nuclear particles together.
& Weak	nucleus of atoms.	
Nuclear		
Spin	Present around all bodies – Much larger around living	Either attracts or repels depending on the direction of motion. Causes all bodies to spin around one another. Produces
	organisms. Can be stored in iron and other ferrous	complex forms or structures, such as circles, spirals, or helices. Partially counteracts gravity.
	materials.	0)

The last article in this section, although written in 1986, contains some intriguing novel approaches to gravity.

Gravity, BioEnergy, and Spin Buryl Payne, Ph. D.

Summary

A type of spin force or field has been discovered to exist around living organisms. This force was found to be related to magnetism but different from it. Consideration of the experimental results and their possible connection with the neo-classical force fields of physics led to the postulation that spin might be considered a fundamental force in physics. Links can then be made between spin and gravitational forces, spin and magnetic forces, and possibly spin and electric forces. Such a postulate leads to some specific experimental predictions and some directions for experimental research.

GRAVITY, BIOENERGY, AND SPIN

Gravity has been difficult to understand or connect with the other forces of physics--nuclear, electric, and magnetic. It is the thesis of this paper that a connecting link between gravitational and electromagnetic forces may be made by introducing spin as a fifth fundamental force. Spin may also serve as a link between living organisms and the other forces of physics.

Rationale

All bodies in the universe spin as far as we know. The Earth spins on its axis and revolves around the Sun which in turn spins on its own axis. All the other planets and their satellites also spin. The Sun revolves around the center of the galaxy and the entire galaxy is also presumed to rotate, as well as all other galaxies in the Universe. How galactic rotation got started is one of the great mysteries of astrophysics and it has been proposed that the entire universe rotates and transmits some of its rotation to all objects within it.

Atomic nuclei, electrons, protons, and other sub--atomic particles all have spins associated with them. Although these spins are different from the spin of planets about their axes or about the Sun, there is at least one common element between sub--atomic spin and the spins of planets and stars--magnetism. Those celestial

bodies which spin usually possess magnetic fields and in general, the faster they spin, the larger their magnetic fields for equivalent masses. Some rapidly spinning pulsars have enormous magnetic fields.

Entire spinning galaxies are observed to have magnetic fields. Sub--atomic particles, too, have their own tiny magnetic fields. Wherever we look, at any level, where there is spin, there are usually magnetic fields; throughout the universe these two go hand in hand. Electron spins contribute to the generation of magnetic fields which are observed when electrons move in wires, and when wires are formed into coils the revolving electric currents produce large magnetic fields. So-called magnetic fields appear to be present when spin fields are organized in special ways.

Spin as a Fundamental Force

Some equivalent statements about spin as a fundamental force are:

- I. If a mass is present in space in the vicinity of a much larger mass, it will experience a force at right angles to a radius vector from the center of the larger mass. That is, it will revolve around the larger mass (or a common center of gravity).
- II. If a mass is free to move in space it will begin to rotate about its own axis.
- III. Given any distribution of particles, present in space, they will all begin to revolve about a common center of gravity and rotate around their own axes.

Spin and Gravity

The forces of gravity and spin would be expected to always appear together in the universe. Where there is a mass, there will be both spin forces and gravitational attraction. Spin and gravity are complementary forces. In classical mechanics the centrifugal force may equal the gravitational force as a special case. In general, however, the spin force may be a function of the magnitude of the masses involved, their axial spin already present, material composition and organization.

The formation of the solar system, the presence of satellites, planetary rings,

comets, and differential rotation rates of the Sun's atmosphere or the atmospheres of the gas giant planets all could be accounted for by assuming the presence of a universal spin force. The rotation of galaxies too could be accounted for by this postulate.

Biological Energy and Spin

Recently the presence of a heretofore unrecognized type of biological energy field was detected and measured. This biological field was found to vary in amplitude with variations in the magnetic activity of the Earth. However, it is not a magnetic field, nor any electrostatic field, for it is about one million times as large in amplitude as the body's intrinsic magnetic field.

The device used to detect it consists of a frame or coil suspended around the upper torso of a human body. When a body is present, the coil will rotate from 2 to 12 degrees. Field have also been detected around plants, and presumably all living organisms have such fields. Anyone can replicate the simple and inexpensive device used in this research.

Although more research needs to be done to establish the spatial distribution function of the field intensity, it appears at this time to be a torque or spin force and could be connected in some fashion with the spin force postulated to be present around all material bodies. In fact, it was the results of this experimental research which led to the thesis of this paper that spin should be considered as a fundamental force in physics.

Some Suggestions for Experimental Research

Ephraim Fischbach of Purdue University has recently (1985) proposed the existence of a counter gravitational force which he calls hypercharge. Weaker than gravity, this force could account for his experimental evidence of differential rates of fall for objects made of different materials. Gravitational forces may prove to be spin-dependent. Perhaps a different rate of fail would be observed for organic or inorganic materials.

Living organisms are highly organized. Just as an iron magnet consists of organized iron domains with electron orbits and spins aligned, so a living organism could have the spin forces of its organic molecules aligned to produce a large overall spin field which could interact in some way with gravity.

It might even be possible to construct a living magnet. Maybe a number of healthy organisms with strong spin fields could be aligned by some external field much like iron domains are, and fixed in the aligned position. Such a living magnet might have some novel properties.

There have been reports of people who have levitated, such as the Tibetan Yoga, Milarepa, and the founder of Transcendental Meditation has claimed to teach students how to levitate in recent years. IF THIS COULD HAPPEN IT MIGHT BE EXPLAINABLE AS AN EXTRAORDINARY ALIGNMENT OF ALL SPIN FORCES IN THE BODY IN SOME MANNER AS TO TEMPORARILY OPPOSE GRAVITY. A person might have to focus on being in the exact center of the vortex of the spin field.

Physicists who hold that particles can explain all the forces of physics might devise some new experiments to search for spin particles, although if the spin force were more like a plasma, it might be possible to collect, store, or focus it.

Some Experimental Predictions

Since there appears to be some connection between spin, magnetism, and gravity, and since the spin force around a living organism increases when there are solar flares and subsequent geomagnetic activity, some definite predictions may be made:

- 1. At times of intense solar and/or geomagnetic activity the Moon's motion might slightly change. At these times the motion of Earth might change as well.
- 2. Different stars of the same mass might have different gravitational field strengths depending on their spin fields and/or composition.
- 3. All objects have a spin force around them and it could be measured by some more sensitive version of the present instrument used to measure the spin force around the human body.

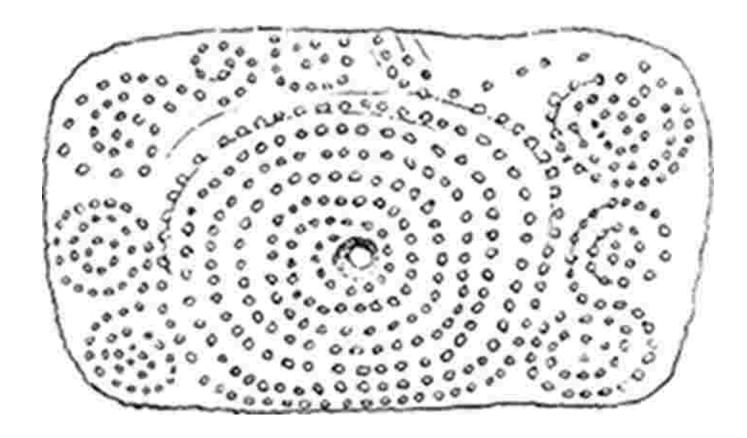
Some Theoretical Possibilities

Maxwell's equations could possibly be rewritten or expanded to incorporate spin. Perhaps magnetic forces can be reformulated in terms of special types of spin vectors and gravitational forces can be described as some type of "anti" spin or complementary spin forces. Spin may be a restrictive term; spiral or vortex motion may be more suitable in general.

Based on more experimental work, and in view of the above considerations, it may be possible to provide a way to bring life into the equations of physics. Spin may be one clear and definite measure of aliveness which can be connected with the other forces of physics. More healthy, more alive, or more organized forms of life may have more aligned and hence larger spin fields around them.

Conclusion

Introduction of spin as a fundamental force along side the present forces used in physics could help to explain astrophysical phenomena, link magnetism and gravity, and possibly even one aspect of life. This brief paper is only a beginning, meant to stimulate some new thought in new directions. March 7, 1986



Section VII - How can energy be obtained from the Spin Force?

I don't know. Maybe some reader will figure it out. Here are a few of my thoughts about it and I certainly will be experimenting on it for many years, so keep in contact with me at buryl@buryl.com.

When an object changes its velocity, energy is said to be produced. Energy \mathbf{x} Time = Action. Force = Mass \mathbf{x} Acceleration.

That is, Newton's Law: F = MA, but it's not a law.

Well forget all that stuff and the words too, and consider what's wanted: To produce something that will heat homes, drive vehicles, and run factories.

Usually we think that would be electricity. It could be hydrogen. Once steam was used. Could it be spin?

Spin is not in the electromagnetic spectrum. What could it be? How could it be amplified? Stored? Easily transported? Used to produce electricity?

Spin is fundamental. All motors spin. Electric generators spin. Iron can exhibit a large spin force (magnetism), if treated by exposing it to another larger spin force. The Earth's magnetism, or spin force, is large. When iron in the molten state cools some electrons lose their heat, or molecular agitation and align with the Earth's spin force. Therefore, iron stores the spin force. How can it be easily removed from iron? Heat will remove iron spin storage, perhaps magnetized iron could be a heat source by slowly removing the magnetism.

What else could be a spin storage system? Flowing water? Electrons in a superconductor?

How about some plastics? (Plactics - The subset of plastics that can store the spin force). Living organisms?

Perhaps spin can be stored in the protons, rather than the electrons? Or molecules (plastics)?

Clearly, means of storing spin and extracting large amounts of force are desirable.

Extracting Energy from Earth's Spin

How could spin force be obtained from the Earth's spin force?

The center of Earth is now thought to be spinning faster than the crust. The equator of the Sun is observed to be spinning faster than the polar regions. According to ancient vortex notions of the planets, they are at the center of

spinning vortices, which spin faster at the center. Matter (planets and suns) condenses out of these vortices. Living organisms have spinning vortices around them too. Maybe even all matter. Electrons are not particles. They are the denser part of vortices.

Can we obtain energy from the spin of the Earth?

The geographic poles of the Earth are relatively stationary. They wander about 6 meters a year. This wandering is named the Chandler Wobble, after the man who discovered it over 100 years ago.

Perhaps the flow of electrons, which continuously come from the Sun and more copiously strike the Earth in the Polar Regions, could be captured and directed to flow as a current on their way to recombine into orbits around protons.

Or perhaps the spin force is greater at the poles and can be geared up to run a generator.

This is a challenge to creativity, thinking outside of the limitations of the so called 'laws of physics' which aren't all laws after all.

Some baby ideas on collecting Earth's spin energy.

Since the force is small a large collecting system is needed spanning the pole. Also since the exact pole point shifts around a little bit a large collecting system will swamp out central perturbations.

- Imagine a conductive liquid, it could even be salt water [with antifreeze) which circulates around the pole. As seen from the center, the conductive liquid on one side would be perceived as going in one direction and the liquid on the other side would be moving in the opposite direction as seen from the center. How could energy be tapped from this perceived difference? Readers are invited to post their ideas
- To tap into the spin force of the Earth, Edgar Cayce notes. Use a spiral antenna, set up at the pole or aligned with the pole. At noon, or when the Sun is aligned with the pole or...?

Perhaps two rings with magnets suspended on them passing over coils.
One direction the magnets would move easier than the other due to the
added force of Earth's spin. The difference in rotation rate might be used to
generate a small voltage at very low frequency which could be transformed
up to produce usable power.

Spinning Gyroscopes

- A gyroscope has a tendency to maintain its direction in space. A large gyroscope with good bearings and a vacuum enclosure would continue to spin with minimum loss of energy. If the world turns underneath it, power could in theory be extracted from its motion relative to Earth.
- The late professor, Eric Laithwaite in England showed the property of spinning gyroscopes to have the property of reduced weight. He showed that a gyroscope weighed about one pound whereas the stationary, or non-spinning, gyroscope weighed nearly 50 pounds! He was looking for a way to extract energy from the spin radiation from the stars 20 years ago. He suggested that spin radiation comes from everywhere in space and could be detected with the appropriate antenna. Part of one of his articles is reprinted in the appendix.
- An unusual approach to magnetism and spin was taken by Pier Luigi Ighina, an Italian scientist, now deceased, who worked with Guglielmo Marconi, inventor of radio. He developed the notion that there were entities called 'magnetic atoms'. He hypothesized that with the union of the positive and negative magnetic atoms he could create an eternal source of energy by utilizing the magnetic rotation (spin force) of the Earth. I couldn't understand his work clearly enough to duplicate it. Perhaps some reader can.
- Alexander Shpilman, a Russian physicist, has designed a spin field generator. He considers spin to be different from magnetism, whereas I maintain that magnetism is a special case of spin. Spin is apparent mostly in iron atoms, where their outer electrons are free to change their spin. When a number of them align, they exhibit the property, which is commonly known as 'magnetism', a word historically applied in Greece, but

He also states that velocities faster than light are prohibited. But that prohibition, which comes from Einstein and Lorentz equations, is not a limiting 'law'. It has even been shown to not apply by the experiment of another Russian researcher reported elsewhere. Shpilman uses the term 'field'. "Every substance creates a spin field around it", he says. As I have written earlier, the term 'field' is a linguistic abstraction, constructed to make the mathematics easier; it is not a physical reality. Russians use the term 'torsion' instead of spin, but make the same mistake when they write of 'torsion fields'.

Shpilman's means of producing a spin force is to rotate an object at high speeds. Shpilman rotates magnetic polarized substances; soft iron, called ferrite, where the magnetic polarization is at a different angle than the spin axis of rotation.

If spin force is created by something other than electrons, (perhaps protons) aggregates of molecules in iron called domains, or crystals, his work could provide some new information about what structures possess a spin force around them.

Shpilman's report is reproduced in full in the appendix.

One man who followed up on Shpilman's work was Robert Boyd.

Dr. Boyd used a spin generator purchased from Russia designed by A. A. Shpilman. He transmitted the spin field through a flat dish of alcohol into pure water. The water absorbed the intoxicating effects of alcohol without any hangover or other toxic effects when taken by several subjects.

Boyd speculates that the spin field can be described as propagating helical vortices which carry the chemical pattern of the alcohol into the water via particles too small to be detected.

(This explanation merely says that the alcoholic properties of the alcohol were observed in the pure water, apparently transmitted by the spin field.) So if the inebriating properties of alcohol are transmitted, why not the toxic properties as well? Boyd explains this by saying that the toxic qualities of alcohol occur when the alcohol is broken down by the body's chemistry, and it doesn't operate on pure water. Boyd said the exposure time was ten minutes and the irradiated water 'was like a respectable shot of 80 proof liquor, and the subject-volunteers experienced no toxic effects'.

Reduction of Physiological Effects of Alcohol Abuse By Substitution of a Harmless Alcohol Surrogate Created by Application of a Spin Field

(c) Robert Neil Boyd

Robert Neil Boyd, Ph. D.
Presented for consideration to:
The National Institute of Health, Alcohol Abuse Center

Abstract:

It has been found through empirical experimentations that the spin field causes various properties of a vast array of materials to be transferred, with varying degrees of intensity and various degrees of impermanency, into other various materials. This is most dramatically demonstrated when application of the spin field transfers the inebriating properties of alcoholic beverages into pure deionized water. When this treated water is assayed, it is found to be chemically pure water, yet, when consumed, it has all the properties of an alcoholic beverage, with none of the damaging side effects, such as cellular damages, hangover, or a tendency to generate obesity. We find that this result is related to the memory property of water, and indeed to the memory of space itself, which memory is transferred by application of the spin field. It is suggested that further experimentation and clinical trials should be performed to investigate the possibility of applications of spin-altered water in alcohol abuse programs.

Theory:

The spin field is described rigorously by R. M. Kiehn: [1] [2] [3] From a topological viewpoint, Maxwell's electrodynamics indicates that the concept of chirality is to be associated with a third rank tensor density of Topological Spin induced by the interaction of the 4 vector potentials {A, phi } and the field excitations (D, H). The distinct concept of helicity is to be associated with the third rank tensor field of Topological Torsion induced by the interaction of the 4 vector potentials and field intensities (E, B). The 4-divergence of the topological Spin is equal to the first Poincare Invariant of classical electromagnetism. The 4-divergence of the topological Torsion is equal to the second Poincare Invariant. On space-time domains where either Poincare Invariant is zero, the closed integrals of the Spin (respectively, Torsion) have values whose ratios are rational. That is, both the objects of topological torsion and topological spin can be quantized by the deRham theorems.

However, when the 4-divergence of Topological Torsion is not zero, the second Poincare invariant, E · B, is not zero, and parity is not conserved. New time dependent wave solutions to the classical homogeneous Maxwell equations in the vacuum have been found. These waves are not transverse; they exhibit both torsion and spin; they have finite magnetic helicity, a non-zero Poynting vector, E x H and a non zero second Poincare invariant, E dot B.

Two, four component, rank 3 tensors, constructed on topological grounds, in terms of the Fields and Potentials, are used to define the concepts of Torsion and Spin, even in domains with plasma currents. The divergence of the spin pseudo vector generates the Poincare invariant equivalent to the Lagrangian of the field,

B dot H -D dot E -(A dot J - rho phi).

The divergence of the Torsion pseudo vector generates the second Poincare invariant, E dot B. The Poincare invariants have closed integrals, which are deformation invariants, and therefore can be used to define deformable coherent structures in a plasma. When the second Poincare invariant is non-zero, there can exist solutions that are not time-reversal invariant.

Put in simpler terms, the spin field can be described as a series of propagating helical vortices observed as carrying a dense interstitial flux of an array of particles, possibly ranging down to the sub-quantum, in size. [4] This flux of particles and the spin field helices act together, in some not well understood manner, to temporarily copy the physical properties of substances into other substances. It is this flux of sub-quantum particles, which seems to be responsible for the copying ability of the spin field.

In relation to positively charged particles, such as the proton, the motion of the spin field energy is directed from the periphery to the center. For negatively charged particles, the field is directed from the center to the periphery. A spin field disturbance moves along a helical path in space, with a propagation velocity which is typically, significantly less than the speed of light. Propagation velocity is determined by the longitudinal moment of the impulse, and those parameters of the environment which the change the density of the winding of the helix of the spin field. For the spin field created by the spin field generator, as designed by A. A. Shpilman in 1995, [5] the longitudinal momentum of the spin field impulse is equal to the impulse of a proton, with an energy of 300 electron-volts in air, and 3 electron-volts in ferrite. The spin field helices are very sensitive to the magnitude and direction of the magnetic vector potential. The helices are guided in the direction of the vector potential, but not in the direction of the magnetic field! Spin

fields of protons are guided in the direction of the Poynting vector. The space between the spin field helices is saturated with particles, which are similar to the neutrino, having energy at rest of an electron-volt or less. These particles are apparent as threads, composing closed toroidal knot-like structures, having various rest masses, topologies, characteristic sizes, and a broad spectrum of resonant frequencies. Apparently, the rules of gas dynamics apply to the interstitial particles associated with the spin field helix.

The spin field and the torsion field have only recently begun to be investigated in this country. However, spin and torsion fields have been studied globally for many years. These studies have been particularly intensive in Russia, where the spin and torsion fields have been investigated for some 50 years. There is now a fairly substantial literature on the spin and torsion fields by some prominent physics researchers, such as H. Kleinert,[6]

R. M. Kiehn, [7] [8] [9] V. Poponin [10], J. Sarfatti [11] [12] [13], A. Jadczyk [14], A. A. Shpilman [15], A. Shipov [16], B. Page [17], A. Frolov [18], S-P Sirag [19], A. Akimov [20], T. Smith [21], and A. Mishin [22], to name only a few. For example, here are some excerpts from an article by Yu. V. Nachalov and A. N. Sokolov. They link a variety of related and unusual observations, over a 40 year period, to spin and torsion fields:

The experimental results obtained by various researchers in the period 1950-1990 are discussed. Since all experimental results under consideration could not be explained in the framework of existing theories, these results were placed under the category of "experimentally observed phenomena." It is shown that all of the experiments considered here, have demonstrated a manifestation of spintorsion interactions.

Over the course of the 20th century, various investigations in different countries, representing a variety of professional interests, repeatedly reported the discovery of unusual phenomena that could not be explained in the framework of existing theories. Since these authors could not understand the physics of the observed phenomena, they were forced to give their own names to the fields, emanations and energies responsible for the creation of these phenomena.

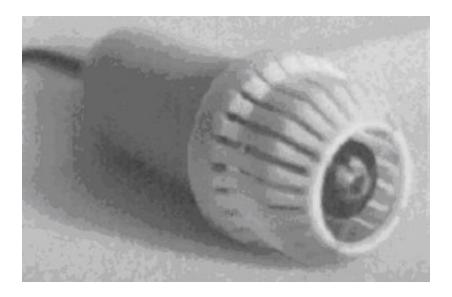
For instance, N. A. Kozyrev's "Time Emanation", W. Reich's "O-Emanation" or "Orgone", M. R. Blondlot's "N-Emanation", I. M. Shakhparonov's "Mon-Emanation", A. G. Gurvich's "Mitogenetic Emanation", A. L. Chizhevsky's "Z-Emanation", A. I. Veinik's "Chronal field" and "M-field", A. A. Deev's "D-field", Yu. V. Tszyan Kanchzhen's "Biofield", H. Moriyama's "X-agent", V. V. Lensky's "Multipolar Energy", "Radiesthesietic Emanations", "Shape Power", "Empty

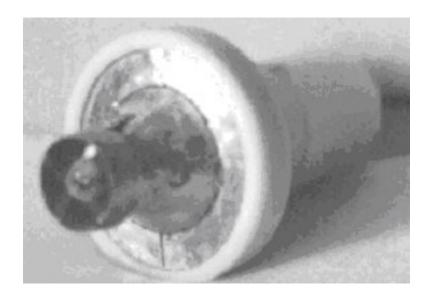
Waves", and "pseudomagnetism", H.A.Nieper's "gravity field energy", T.T.Brown's "electrogravitation", "fifth force", "antigravitation", and "free energy". This list can easily be continued...

Experiment:

Rather than involving ourselves exclusively with studies of the mathematical theory of the spin and torsions field, or getting involved with the more esoteric energetic properties of spin and torsion fields, we have initiated a series of empirical experiments designed to verify the properties of the spin field, and its effects on organic living matter, and on inorganic materials. We have been particularly interested in observations, which have shown that the spin field has the remarkable property of copying certain attributes of materials into other materials [23], and laboratory results which have shown that application of the spin field causes increases in the organization density of materials and structures, for example, hardening stainless steel by some 30% beyond all known hardening techniques [24].

Our spin field generation experimental apparatus has been imported from Russia, with the generous assistance of A. A. Shpilman. (See patent, Republic of Kazakhstan N5366, G01N23/00, Bull.N4, 15.10.97)

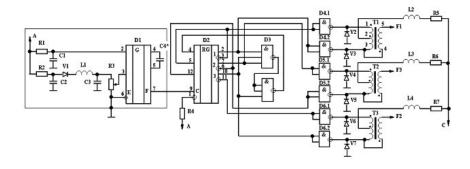


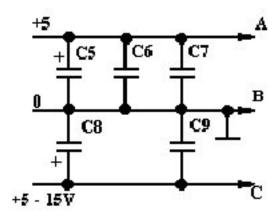


We have recently obtained a new, Model G, spin field generator:



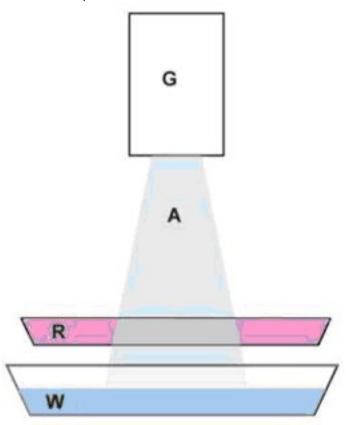
This is the device we have been using in our most recent experiments. It has a more stable and powerful output than the previous models. There is also a three phase model, with the schematic as shown:





At this stage in our researches, the three phase device is not designated as a required apparatus, as the model G spin field generator has proven adequate.

We set up an experiment to test whether the transference of the inebriating properties of alcohol, into water, could be accomplished, as claimed by some of the Russian investigators. Very simply, we placed a food-grade plastic-coated paper container filled with alcohol, on the vertical axis above a container filled with pure de-ionized water. We arranged the spin field generator on the vertical axis centered above both containers as in the diagram below, with the generator at G, the alcohol at R, the water at W, where the spin field is denoted by the light blue cone, A.



We irradiated the stack of containers for the recommended 10 minutes. We tested the water for purity. It was exactly as when we had put it in the container. We then drank the water. We were astounded to discover that the spin field treated water had an intoxicating effect! As the writer is inordinately sensitive to alcohol, he was surprised to discover that there were no observable side effects. This result was later duplicated with several volunteer test subjects, to ensure the objectivity of the results. These volunteers reported no hangover symptoms after having consumed enough of the water to be the equivalent of a respectable "shot" of an 80 proof liquor. Based on these limited trials, in this simple experimental sequence, we have determined that the inebriating properties of the alcohol were indeed transferred into the water, where the energetic signature of the alcohol was stored, as though a memory, with none of the toxic effects of actual alcohol.

Discussions of Results:

While this transference of the inebriating quality of alcohol into pure water might seem astounding, water memory is well known in the practices of homeopathy, but it is poorly understood how the homeopathic memory of water functions. Brian Josephson, the Nobel Laureate, in a letter to the New Scientist, http://www.newscientist.com/ns/971101/letters.html (expired link) savs: advocates of homeopathic remedies attribute their effects, not to molecules present in the water, but to modifications of the water's structure. Simple-minded analysis may suggest that water, being a fluid, cannot have a structure of the kind that such a picture would demand. But cases such as that of liquid crystals, which while flowing like an ordinary fluid can maintain an ordered structure over macroscopic distances, show the limitations of such ways of thinking. There have not, to the best of my knowledge, been any refutations of homeopathy that remain valid after this particular point is taken into account. ..."

According to the Encyclopaedia Britannica, "... The water molecule is not linear but bent in a special way. As a result, part of the molecule is negatively charged and part positively charged. It is thus a highly polar molecule. Hydrogen atoms in water molecules are attracted to regions of high electron density and can form weak linkages, called hydrogen bonds, with those regions. This means that the hydrogen atoms in one water molecule are attracted to the non-bonding electron pairs of the oxygen atom on an adjacent water molecule. As a result, water molecules associate strongly. In an ice crystal, the association is a highly ordered but loose structure.

http://www.valdostamuseum.org/hamsmith/Sets2Quarks5.html

When the ice melts, this orderly arrangement breaks down partially and the molecules pack more closely together. This makes the liquid denser than the solid, which is why ice forms on top of liquid water. The associative force, however, is still strong enough to prevent water molecules from separating completely even at room temperature. This continued association in the liquid state accounts for the high boiling point of water. The structure of liquid water is believed to consist of aggregates of water molecules that form and re-form continually. This short-range order, as it is called, accounts for other unusual properties of water, such as its high viscosity and surface tension. The polarity of the water molecule plays a major part in the formation of aqueous solutions...."

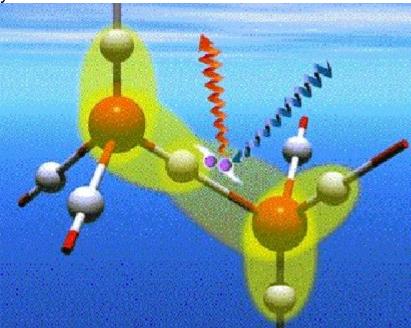
We believe, as T. Smith, that water retains some crystalline properties, even beyond the boiling point. Apparently, due to this property of water, Jacques Benveniste, Yolene Thomas, and others claim to have established experimentally a "Memory of Water". http://www.oxytherapy.com/mail-archive/aug96/103.html (expired link).

According Keith Johnson, in physics/9807058, to http://xxx.lanl.gov/abs/physics/9807058clusters of water molecules exist optimally in certain Magic Numbers and in configurations such as Buckyball pentagonal dodecahedral structures with a closed, ideally icosahedral symmetry formed by 20 hydrogen-bonded water molecules, with their oxygen atoms at the vertices of 12 concatenated pentagons and with 10 free exterior hydrogen atoms. Coupling of these delocalized oxygen orbitals with the low-frequency cluster vibronic modes via the dynamical Jahn-Teller effect may make water buckyballs catalytic electron reservoirs and oxygenates in fuel combustion and active agents in biological systems. The broad electronic and unique low-frequency vibronic spectra of water buckyballs may explain certain diffuse interstellar bands (DIBs) and far-infrared, ultraviolet and x-ray cosmic background radiation.

D. L. Marrin http://www.zynet.co.uk/imprint/Tucson/4.htm - Water's memory notes that the tetrahedral Hydrogen bonds of water are not 'fixed' in time and space. Even in frozen water Ice, the tetrahedral bonds from Oxygen to Oxygen are each half covalent and half Hydrogen, unlike the purely covalent Carbon-Carbon tetrahedral bonds of Diamond. The tetrahedral Hydrogen water bonds are able to re-shuffle at the rate of about a trillion times per second. The manner in which this re-shuffling occurs is described by a probability function and may be represented by a random binary network, similar to that of a computer. From the perspective of cybernetics, the Hydrogen bond network in water may be considered a self-organizing system that behaves chaotically. Water molecules that are in contact with other surfaces (e.g. air) or with solutes (e.g. salts, organic molecules) arrange themselves into a variety of geometries that impart changes

to the network. In this manner, water is capable of discerning 'self" from 'non-self' and interacting with its environment. Recent findings suggest that the breaking and forming of Hydrogen bonds between macromolecules and surrounding water molecules substantially influences the 3-D structure of proteins and nucleic acids.

According to Physics News Preview http://www.aip.org/physnews/preview (link now broken) and Physics News Update (Number 410) of the AIP, Isaacs, Shukla, Platzman, Hamann, Barbiellini, and Tulk, in the 18 January 1999 issue of Physical Review Letters, "... [study] the properties of many Compton-scattered photons ... to measure ... [the] ... ground-state electronic wavefunction [of ice] ... The ground-state wavefunction in ice indicates that there is a quantummechanical overlap of the electrons on neighboring H2O molecules, i.e., that the hydrogen bond is partly covalent. ... the weak hydrogen bonds between H2O molecules in ice get part of their identity from stronger covalent bonds within the H2O molecule. ... The two relatively strong electronic bonds that make up the H2O molecule itself are represented in the figure by the darker yellow clouds ... While the intermolecular bonds, or hydrogen bonds, are primarily electrostatic in nature, in which the molecules are attracted by means of separated electric charges, [they] found that the bond is in part quantum mechanical, or covalent in nature, in which electrons are spread out and shared between atoms. The quantum-mechanical or wavelike aspect of this bond is depicted by the lighter yellow clouds.



... Figure courtesy of Bell Labs/Lucent Technologies... Delocalization also plays an important role in determining the behavior of superconductors and other electrically conducting materials at sufficiently low temperatures. ... ".

In a March 1996 seminar held at Cranfield University in Bedford, U. K., it was determined that applications of radio frequency E/M propagations to water result in changes in the rate of formation of scaling in plumbing by "hard water". It was demonstrated that this behavioral change, resulting from application of radio frequency propagations to water, persisted for as long as five days after the water had been exposed to low frequency R.F. This observation has been attributed to the memory of water. http://www.aewt.com/tech/science.html (Also see: "Influence of Ca²+ in Biological Effects of Direct and Indirect ELF Magnetic Field Stimulation" from Electro- and Magnetobiology, Journal of the International Society for Bioelectricity, Volume 20 Issue 3, 2001, ISSN: 1061-9526, http://www.bion.si/research/Ca.htm

To further explain the remarkable ability of the spin field generator to transfer properties between materials, we shall invoke the experimental results of V. Poponin, which show that even the vacuum, space itself, has this property of having a memory. http://twm.co.nz/~sai/DNAPhantom.htm

V. Poponin's experiments at Lebedev University in Moscow, and at the Heart-Math Institute in Arizona, have shown that the electromagnetic signature of a hermetically sealed sample of DNA will persist in a vacuum chamber for periods as long as 30 days, after the sample is removed. According to Poponin, the memory of the vacuum can be described as a localized excitation in a Fermi-Pasta-Ulam lattice. The FPU lattice is the Hamiltonian of an n-dimensional system of loosely coupled (anharmonic) oscillators.

These experimental data suggest that localized excitations of DNA phantom fields are long living and can exist in non-moving and slowly propagating states. This type of behavior is distinctly different from the behavior demonstrated by other well known nonlinear localized excitations such as solitons, which are currently considered to be the best explanation of how vibrational energy propagates through the DNA.

It is a remarkable and striking coincidence that a new class of localized solutions to anharmonic Fermi-Pasta-Ulam lattice (FPU), Nonlinear Localized Excitations (NLE), which have been recently obtained, demonstrate very similar dynamical features to those of the DNA phantom. Nonlinear localized excitations predicted by the FPU model also have unusually long life-times. Furthermore, they can exist in both stationary and slowly propagating forms. In Figure 3, one example of a NLE is shown which illustrates three stationary localized excitations generated by numerical simulation using the FPU model.

It is worthy to note that this NLE has a surprisingly long life-time. Here, we present only one of the many possible examples of the patterns for stationary excitations which are theoretically predicted. Slowly propagating and long lived NLE are also predicted by this theory. Note that the FPU model can successfully explain the diversity and main features of the DNA phantom dynamical patterns. This model is suggested as the basis for a more general nonlinear quantum theory which may explain many of the observed subtle energy phenomena and eventually could provide a physical theory of consciousness.

According to our current hypothesis, the DNA phantom effect may be interpreted as a manifestation of a new physical vacuum substructure which has been previously overlooked. It appears that this substructure can be excited from the physical vacuum in a range of energies close to zero energy provided certain specific conditions are fulfilled which are specified above.

Furthermore, one can suggest that the DNA phantom effect is a specific example of a more general category of electromagnetic phantom effects. This suggests that the electromagnetic phantom effect is a more fundamental phenomenon which can be used to explain other observed phantom effects including the phantom leaf effect and the phantom limb.

From this, we think that the spin field is acting as a carrier of the non-linear excitations of the vacuum, by way of the previously described species of subquantum particles in the interstitial spaces internal to the spin field helices. What we are saying then, is that due to a memory mechanism similar to the description by V. Poponin of the memory of the vacuum, that the spin field is transporting the actual particles that comprise the FPU lattice, into the volume of effect the spin field, thereby transporting the memory of the vacuum which resided in that first location, into the volume and any materials which are present at the second location.

Thus, we feel that the spin field is duplicating the electromagnetic 4-vector patterning, which was contained in the volume containing the alcohol, into the volume containing the water, where it should remain for some time. We intend to determine at a later date, the latency of the memory medium, which is imparted by the spin field into water. At this time, our preliminary results have shown that the memory thus imparted to the water will last for approximately 14 days.

The most important application, we feel, for this remarkable property of spin field memory transfer, is in the treatment of alcohol abusers. Because, although the alcohol memory imparted into the water structure has the capacity to cause inebriation, at the same time, preliminary sample testing has shown that the water so treated does not engender any hangover. This is obvious, since we know that the hangover is a by-product of the breakdown of the alcohol by the systems of the physical body, while pure water has no such effect. Additionally, because this is just pure water, prolonged and dense consumption of spin field treated water will apparently not result in any physical damage to the body systems, such as jaundice, which can result from alcohol toxicity. There is no physical toxicity in the physical body related to ingestion of standard levels of pure water.

We are concerned however, whether the toxic properties of the alcohol can be transferred in any degree, however minute, into the water, by application of the spin field. Because no hangover results from the treated water, and because the volunteers have stated that the alcohol-like exhilarations ceased in about an hour, relative to the normal eight hours which would be expected in the case of the consumption of actual alcohol, we think that there will probably be no toxicity found due to the treated water. Also, because it is just water, prolonged consumption of spin field treated water should not be expected to result in any increase in obesity. We also expect that the common symptom of desiccation in alcohol abusers will be greatly alleviated, if not eliminated, when spin field treated water is substituted for actual alcohol. We expect incidences of hospitalization due to the toxic effects of alcohol on the human physiology will be greatly reduced when this spin field derived ersatz alcohol is used to replace actual alcohol. We expect that the overall health of alcohol abusers will be substantially improved when spin field treated water replaces alcohol consumption. This regimen would then reduce the concomitant economic and emotional burdens on the State, and the families of alcohol abusers, while prolonging the life expectancy of abusers who use the water substitute.

We think that it is possible that the treated water will alleviate some of the more dramatic effects of alcohol detoxification. We think that it is also possible that the treated water may eliminate or reduce alcohol dependencies, particularly physical dependencies. These two possibilities should be examined experimentally.

We suggest that a series of standard clinical trials should be performed to verify these various preliminary results of consumption of spin field treated water in alcoholics and to substantiate the positive potentials for health improvements which may result by this application of the spin field in the treatment of alcoholics. We further suggest that the spin field and its potential for additional medical applications should undergo intensive experimental study. Special thanks to Tony Smith for providing many of the references on water memory.

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Could spin be obtained from the Sun?

If Earth's core is spinning faster than the outer Earth, are clouds around the Earth moving more slowly? The moon orbits around the Earth slower than the Earth's rotation around its own axis. This is called 'conservation of angular momentum'. Is Earth the place where a vortex changes from an invisible rotation in some [to our instruments] intangible invisible 'ether', to more dense [to our senses] forms? If so, initially an atmosphere composed of gases, like oxygen and nitrogen would form. Thin clouds, composed of water vapor, would gradually become denser as one gets closer to Earth's surface. At the surface, even denser substances, like oceans, sand, and solid rocks collect. Under the Earth's surface (the crust) a core of molten iron, molten silica, and then finally back into hard, dense solid form again.

All the elements are mixed up in the solid-seeming Earth. Living organisms [the biosphere] mostly inhabit the semi-solid region.

How can we tap this powerful vortex or spin force? Can we temporarily stop it or make it do work? Perhaps at the North or South poles? If big iron balls were magnetically levitated and allowed to roll on a circular track around the polar axis would such balls move faster or slower, relative to the center? Would there be enough difference in the motion to extract energy?

Could a fluid be used instead of iron balls? Or, the precession of a giant gyroscope?

[The polar axis is not an exact point, but moves about six meters a year]

More ideas would be welcome. Please send them to buryl@buryl.com.

The magnetic pole does not coincide with the polar axis, which is similar to Alexander Shpilman's spin force generators, wherein the electron spin alignments are different from the induced spin force alignment of other elements.

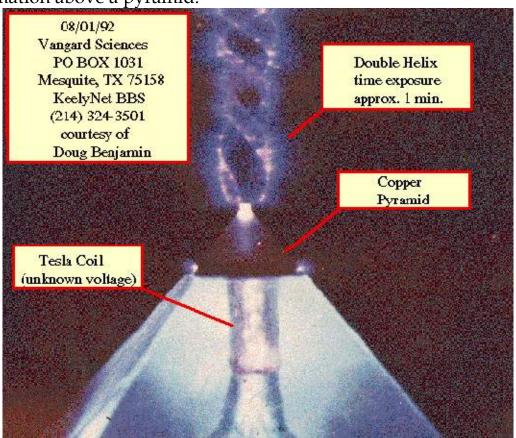
Can the difference between the magnetic pole and the polar axis be used to generate work?

In a few reports I've read about flying saucers, the saucers were described to be spinning, or some segment of the circular shaped vehicles were spinning, and this was a source of power. Perhaps there is a connection between spin and power.

One book about flying saucers described a conversation heard by someone who was onboard a saucer. A jocular remark was overheard between two flying saucer people: One remarked on the spinning wheels of automobiles and another said it would be better if the wheels were horizontal. The writer/observer only recorded this. I don't know why, or remember the exact words or source. However, to me, it was another clue about the power source of flying saucers possibly being related to a spin force.

The choice of a pyramid, the original form of the Biofield Meter, was based upon the observation that pyramids were special. Now, in 2008, I came upon this Kirilian photograph made in 1991 that shows a remarkable double helix (double pair) formation shows a pyramid.

spin) formation above a pyramid.



Many years ago I read about a man named Abrahamson, from Bellingham, Washington, who claimed to have channeled information about future conditions on Earth. One comment that I remember was about power being extracted from the Earth's spin which involved setting up power stations at the North and South Poles of the Earth. Could this mean tapping into the Earth's spin force somehow? I don't know, but an experiment that needs doing is to measure the spin force around people at the poles of Earth, as well as the equator.

The following article from The Associated Press, about Bjoorn Vlistigk was sent to me anonymously some years ago, and a brief paper I wrote ten years ago follows.

Danish Scientist Harnesses "Human Energy" Field

COPENHAGEN, AP

During a press conference held here on the occasion of the fifteenth Conference of Paranormal Science, a Danish scientist, Dr. Bjoom Vlisngk, reported discovery of what he calls a burnan energy was led beneath a pyramid shaped superstructure, from which bung several spherical permanent magnets at varying heights. As soon as the subject was seated, the entire superstructure began to revolve, ultimately reaching a rotational speed



'spin' field' surrounding all living persons. Moreover, Dr. Vlistigk purports to have harnessed this force, thereby tapping a virtually limitless supply of mechanical ener-

The Conference, held at the prestigious Haaversfeldt Clinic near Copenhagen, was the site of a quite dramatic demonstration of Dr. Vissigk's discovery. In a spacious room, well shielded from any extraneous electrical or magnetic fields, a subject, chosen at random,

of approximately four revolutions in one minute.

Attached to the apex of the pyramid was a series of gears, in turn driving an electric generator. This source of electric power was able to illuminate a total of one hundred So-wart lamp bulbs to full brilliance. Per the calculations of several physicists in amendance, this represented nearly one bookenower of potential energy. Though more information was not imprise "Jon Field," pop 11)

Use of Spin Force to Possibly Obtain Energy

Buryl Payne, Ph. D.
PsychoPhysics Labs
(Unpublished)

Introduction

The search for a unified field theory in physics has been of continual interest since James Clerk Maxwell formulated his equations unifying electricity and magnetism. Another step towards unification may be possible by including spin as a possible fifth force. Spin exists everywhere, from electrons to galaxies. It is not a superficial by-product of matter. It has been discovered around humans, plants, and other living organisms. Perhaps it's now time to give it full status as a fifth force. Recognition of "spin" (or more technically, "torque") as a fifth force may provide simpler explanations of some astronomical observations such as why outer stars in a galaxy move faster than expected, why planets form, why pulsars don't radiate evenly in all directions, why the universe seems flat, etc. It is proposed in this brief paper that this 'force' could be harnessed to obtain energy.

Background

In physics, a force is said to exist if a body (of inorganic matter) changes its direction or speed. In other words, if something moves, a force must be moving it.

While this is true giving something a name, such as 'electricity' to a force acting on matter doesn't tell us much. However, when a name is given, people can begin to design experiments to measure how it behaves, and thereby form a body of information called science.

A spin force was detected and measured around living organisms by the author in 1978. A simple frame device suspended over a human, animal, or plant was observed to rotate a few degrees in a consistent manner. After several years of observations three aspects of the force were noted.

- 1) The magnitude and direction of this force varies partially as a function of solar/geomagnetic activity, often temporarily reversing at times of intense geomagnetic storms.
- 2) The spin force is less when a person is ill, tired, or very calm. The spin force is larger for children or increases when a person is excited.

3) At times of new and full moon the spin force usually reverses direction for a few hours.

The spin force has been independently discovered or verified by others who have read the author's published materials. As early as 1922, the British journal LANCET published an article on a biological force of spin. It was also discovered by a German scientist, Walter Peschka, in the 1970's. In Eastern Europe George Egley discovered the effect and designed a pocket device called The Egley Wheel which is currently on the market.

None of these investigators noticed the connection between the spin force and geomagnetic activity since that data was not readily available.

Technology

The existence of a spin force can be verified by anyone. It can be readily detected and measured with commonly available materials, as simple as a set of tinker toys, a hula hoop, sticks of wood, metal, or plastic, a few magnets (optional), and some string.

The magnitude of the spin force is fairly large, perhaps equivalent to a magnetic force of a few hundred gauss, if it were magnetic. **It is not magnetic.** It has been detected up to 12 feet from a human.

It's a big step from observing a spin force around biological systems to designing some clever apparatus to direct the force to do useful work such as spin a rotor, boil water, or lift a weight. Although the term 'spin' is a common attribute of "matter", at every structural level, from the smallest known particles to the largest galaxies, the 'thing' 'spin' may be different for these different structural levels, therefore we might wish to distinguish between electron spin, proton spin, molecular spin, cell spin, and organism spin. Beyond that, we may wish to use the words 'planetary spin', 'stellar spin', and 'galactic spin'. Careful linguistic differentiation may help us create new technologies.

Spin of electrons and protons is stated to be different from mechanical spin, yet the so-called magnetic force around a wire carrying a current shows up as a spin or spiral of charged particles that move in the vicinity of the wire. In traditional physics the term 'torsion field' has historically been used, especially by some Russian physicists. One interpretation of Einstein's general theory of

relativity stated that spinning bodies twist space-time. Known as the Lense-Thirring effect, it was proposed by Austrian physicists in 1918. This effect was also called the Einstein-Cartan Theory, or Riemann-Cartan Theory.

From another angle, the spin force may be considered another variation on ether/vortex theories of Kraft-Ebbing and others formerly discarded but currently being revived by some theorists. Regardless of it's name or the mathematical physics involved, it's of more practical interest to see if useful energy can be extracted from such a force.

Applications

During the course of investigations carried out over many years, the author noticed that a four or five foot pyramid frame of wooden rods seemed to rotate more than a smaller one when a person was sitting inside it. This parameter was not investigated. But in Denmark, one person apparently did some research in this direction. An AP clipping, sent to me many years ago, is headlined "Danish Scientist Harnesses Human Energy Field." The AP clipping is reproduced at the beginning of this section. Only one page is available.

Several years later the author tried to contact Dr. Bjoorn Vlistigk, but no trace of him could be found. (if any readers know anything about him, please communicate.)

Another device to harness a spin effect is called the N-Machine, an effect discovered by Michael Faraday a couple of hundred years ago. It is based on the observation that when a magnetized metal disc is spun like a record on a platter, a voltage difference exists between the outer edge of the disc and the center. The voltages are so low in amplitude that it's been hard to get useful work from the effect. Brushes used to tap current flow from the spinning disc have friction which eats up most of the useful power.

Another researcher, Henry Wallace, also did some intriguing research on spin forces. By aligning the nuclear spins of some protons, he obtained small gravitational effects. He had to use elements and isotopes which have an odd number of protons since they pair up in couples in the atomic nucleus. Only the odd protons can be induced to change their spin and then only by a slight amount. They do not flip around like some electrons can in iron atoms. He aligned the spins by rapidly spinning disks of the materials with uncoupled protons and detected gravity changes by measurement of a transverse voltage in

a semiconductor crystal.

Don Reed, in an elegant mathematical formulation on torsion fields, proposes that certain special combinations of polarized electromagnetic wave patterns could couple to a torsion field. It will probably take some experimental floundering to find out what works.

In a more simplistic, mechanical way, it is possible to load a frame Biofield Meter with permanent magnets or current carrying coils. When these move by stationary magnets, weak currents will be produced. These would not power even one LED, but then neither would Galvani's frog legs. We must start somewhere.

Building on the research of Wallace, the vanished Danish scientists, along with the technology of N-Machines, perhaps enough power can be generated to start freeing hydrogen from water (two volts).

I once used a 60 ft. spiral 1" diameter copper tube to detect some kind of emanations in water. (See the article in the appendix)

Perhaps these unknown 'emanations' are spin radiation effects which affect the hydrogen protons in water.

Perhaps some kind of 'treated' water can store spin force? Such water might have therapeutic effects. The emanations do affect the taste of the water.

Well, lots of ideas could be generated. Perhaps you can find others that would even work!

One secret to creative thinking is asking "how" questions.

A second one is no prejudgements (prejudice). A third one might be "shut up and listen". Listen to your High Self, Intuition, God, or Saint Hisp. Its fun. Its easy.

PsychoPhysics Labs will engage in research in this direction as soon as possible. Readers of this magazine are invited to share information and knowledge or participate in the research. A participation plan has been formulated. No patents will be applied for. Information will be shared and technology published as soon as it's available. This is too important to keep secret.

Let us know your thoughts, and observations. Perhaps we'll post them.

Section VIII - Remote Healing and the Biofield: The Amazing Experimental Discovery of Dr. Ron Hruby

Everyone has produced some rotation of the hanging pyramids in bottles. However, healers produced more rotation. Nearly all healers who tried produced rotation during remote healing experiments.

Therefore any number of group healers might produce a larger Biofield Meter rotation during a remote healing experiment. This might be an all important experiment to try.

Also, since solar activity coincides with larger spin amplitudes, healing might work better at such times, given that the Biofield is probably increased. However not all solar activity has the same effect on the Biofield.

Sometimes a reversal of the Biofield happens.

How, if at all, does this relate to healing power or effectiveness? Are humans amplifiers of the Sun's energy in this ability as well other endeavors such as artistic inspiration, business confidence, the onset of illness, and the start of wars?*

This section contains two papers on remote healing by Ron Hruby, retired NASA engineer and one by me validating Ron Hruby's work. His unique contribution and application to my discovery is a good example of how the mind of a scientist works at its best. The area of remote healing has been stymied for years: How can remote healing possibly work? What's going on? What structural events are changing? What parameters can we measure?

To validate Dr. Hruby's pioneering experiment, I invited healers from around the country to try their remote healing skills on subjects in California who sat underneath a Biofield Meter at the time of the healing. I obtained excellent results. The experiment is described in this section.

An important mass healing experiment, called the Global Peace Meditation, may be related to the spin force.

In the 80's a healing of the Earth was attempted by organizing global peace meditations 6 times a year for 3 1/2 years. Results showed that the sunspot numbers consistently declined after each peace meditation. This was important because previous research indicated that high solar activity was associated with the start of international battles. This was certainly a kind of remote healing.

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^{*} See www.buryl.com for information on solar activity and the onset of international battles.

Could the spin force have been involved?

Perhaps there is some resonance between the spin forces around people and the spin force around the Sun. It has been observed that when one meditates in a Biofield Meter, there is less amplitude than usual. When several million people quiet down their Biofields the Sun also quiets down. Sunspots are vortices in the Sun's atmosphere.

A brief detailed report is in the appendix section.

The final page of this section is a description about one healer and the Biofield Meter changes.

What are the implications for remote healing?

Dr. Ron Hruby's experiment opened up a brand new line of inquiry. He should get a Nobel Prize for it. How remote healing can possibly work has puzzled many, yet it works. There have been many studies confirming this wonderful healing technique. If the spin force truly does travel faster than light, and if it can be focused or directed what's going on? Gurdjieff and others have claimed (without any proof) that there is a substance around the body which is kind of fluid-like and can be collected and directed by a person who knows how to do it.

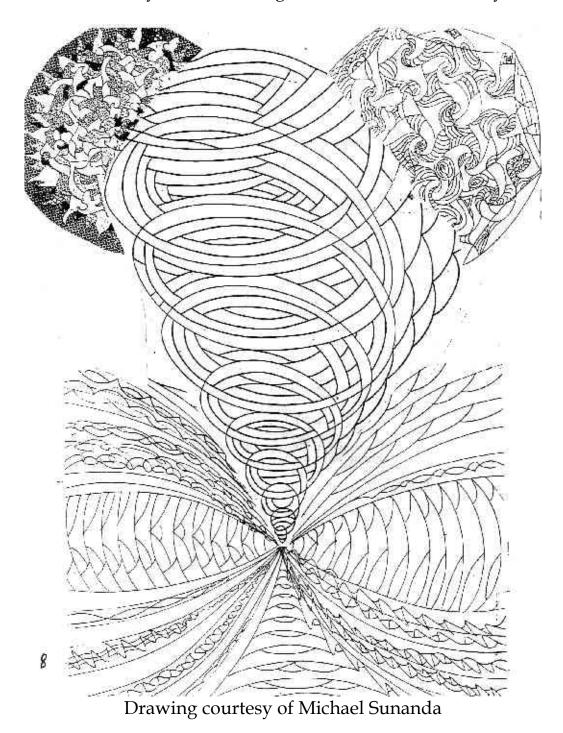
When I had a little pyramid in a bottle, a friend, who was a Rolfer with magical healing hands, could produce movement of the pyramid simply by pointing his hand at it from 6 or 8 feet away. At a conference once, I had a display with the little pyramid in a bottle set up on a table and a man came along with a small group of psychokinetic children, as they were called, who came from England, on a tour displaying their Psychokinetic skills in the U.S. They simply glanced at it, after being told what it was for, and it rotated wildly!

So what? What's probably so is that if some people can influence a Biofield Meter to move at a distance, they can also influence atoms, molecules, and/or cells in another body to move or improve their functioning, if so directed. No proof, of course; simply a hint for guiding some interesting research.

One thing such interesting research could lead to is miraculous healing that will stretch the credulity of most people. If thoughts are directed to another, and if a device that indicates the Biofield suddenly changes and could alert the wearer, like a ringing cell phone, this could be a signal that a person is being called.

If both 'sender and receiver' donned a *Brain Harmonizer* (see Products section in back of book) thereby enhancing telepathic communication, a conversation could ensue, surpassing the need for phones (someday). Total strangers (telemarketing) would not be able to use this system (we hope!).

Ron Hruby showed that the amplitude of the Biofield around a subject responds to the directed thoughts or emotions of others at a ten mile distance. In this instance several people affected one person's Biofield. One individual may alter the Biofleld of many others, although I do not know of a study on this.



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THE BIOFIELD AND BIOTELEPATHY

Buryl Payne and Ron Hruby PsychoPhysics Labs Unpublished paper

Introduction and Background

That thought is a force like the other forces of physics has long been suspected and even stated by many spiritual teachers. Now we can verify the truth of this notion.

Some years ago a biological force was accidentally discovered by Buryl Payne, a physicist/psychologist, while investigating another topic. The force was measured by suspending a frame with magnets over a subject's head. The frame was observed to rotate a few degrees. Initially, the rotation was thought to be an artifact, possibly due to random air currents, or vibrations of the building. But careful observations showed the rotation to be always in the same direction (to the right as seen from within). Small frames, laden with small magnets (magnets were eventually shown to be not needed the Biofield is not magnetic) were placed in airtight bottles to eliminate the possibility of wind currents. When subjects placed their hands around the bottle, rotations were consistently observed. Healers and young children usually produced greater rotation. The direction of rotation of the frames was found to temporarily reverse when the Moon was new or full, or there were solar flares and geomagnetic activity. Solar activity in turn was found to be related to the positions of the planets. Therefore this biological force, which is over one million times as large as the body's magnetic force, shows that humans are connected with events of the entire solar system. We are not isolated groups of cells of protoplasm, nor are we merely passive passengers on 'Spaceship Earth'; we are part of a dynamic, interacting solar system, and perhaps even more, as our Sun surely responds to emanations from other stars and probably the Galactic Center as well.

The discovery led to a world wide meditation/visualization experiment to see if people could raise the Space Station Skylab to a higher orbit as it was about to crash into Earth. At this time Biofield Meters were made in small bottles and sold for home experimenters.

A Biotelepathy Experiment

In 2000, Dr. Ron Hruby carried out experiments showing that the amplitude of this spin force (as measured by a version of Buryl Payne's device) could be influenced by people sending compassionate love to a subject. In eighteen trials, he obtained 100% correlation between times of visualization on the subject's health and times of marked change of the Biofleld. Essentially Dr. Ruby showed that **loving thoughts have a measurable force.** This was an amazing discovery.

The Biofield or spin force may be related to what people have called the aura. Healers can apparently direct this spin force towards the bodies of others. Healers, working at a distance, are known to produce effects, as are groups of people praying for one ailing person. Dr. Hruby may have discovered a mechanism.

Furthermore, this work does not depend on expensive, arcane, complex devices or fancy electronic instruments. The presence of the Biofield can be verified by anyone in a few hours using ordinary materials; a piece of string, a few sticks of wood, metal, or plastic, and perhaps a few magnets, though the magnets aren't even necessary.

These discoveries form a foundation for a new way of thinking about human beings; how they are connected with each other, and how they are connected to the solar system.

Dr. Payne and Dr. Hruby would like to further develop the initial findings in two directions:

1) The first step would be to build a self contained portable unit with data encryption electronics that would be amenable to computer analysis and would also be highly visible to a viewing audience. When developed, such a device would be available to any interested researcher to verify the original research or to do other research on this new force. There are many possibilities for original research in this exciting new area. Dozens of Ph. D. theses could be done with simple and inexpensive equipment.

Some of the initial research could be done on a plant, thereby removing some of the human emotional and thought patterns which could confound the data. Initial experiments are expected to confirm earlier findings that this force is linked to solar activity and planetary positions. 2) The second phase of the research would be to replicate Dr. Hruby's initial experiments that prayer and/or compassionate love affects the Biofield of a subject.

Implications

This biotelepathy experiment would probably show the power of synchronized love in a measurable fashion; something not accomplished before. The implications are important for humanity faced with plagues, pollution, energy shortages, etc. It seems reasonable, based on a foundation of the discovery of the power of synchronized thought, that some of these problems will be solved by 'spiritual' or 'loving thought force'.

Dr. Payne showed in previous research that enough people meditating together could apparently quiet solar activity, an important effect, since research by others had shown that solar activity is a triggering factor in international battles.

In 1996 a world wide meditation was organized to see if people could influence the AIDS-HIV virus to mutate into a more beneficial form. Effects were not clear and this project needs to be repeated on a regular basis as were the Global Peace Meditations.

This work and these experiments, if positive outcomes continue to be found, will provide a basis for spiritual cooperation transcending national boundaries and a basis for moving beyond technology to the use of the mind for solving some problems. This could be a next step in human evolution. Are we ready for it?

A letter of Dr. Hruby's, published in 'Townsend Letter for Doctors & Patients' about his work is reproduced on the next page. Then a paper I wrote on Remote Healing follows, supporting Hruby's work:



Remote Healing Measured by the Biofield Meter

Bury! Payne, Ph. D.
Psychophysics Laboratories
P.O. Box 514, Soquel, California
Unpublished

Abstract

A force around the human body different from electric, magnetic, gravitic, photic, or thermal has previously been discovered and was used in this research. Originally called a 'Biofield' and now called a 'spin force', it was found to vary in amplitude with lunar phase, solar activity, vitality of the subject and other factors. It was found to vary in amplitude with intended remote healing attempts in 17 out of 20 trials in this pilot study (and 19 more out of 19 trials), with healers from 50 to 3,000 miles distant.

Introduction

It is known by experience that prayer and other means of visualization at a distance enhance healing, although no satisfactory explanation has been found to explain this effect. This study shows the operation of a different type of force may be involved. Called a spin force, it is hypothesized to exist around all living organisms¹.

Biological spin force was accidentally discovered by the author while investigating 'pyramid energy' in 1976. The author's device, called a Biofield Meter, displays a spin force when placed around an organism. It was found to exist around every human tested, a couple of plants, a grapefruit, watermelon, a bowl of fruit, cat, dog and horse. Presumably it exists around all living organisms and its existence has been observed by other researchers. The amplitude of rotation of the Biofield Meter varies with solar and geomagnetic activity, changes direction temporarily at times of new and full moon and varies to some degree with the health of the subject".

Several researchers have observed some physiological changes in humans as a response to remote healing. Ron Hruby, a retired NASA electrical engineer, made his own version of the Biofield Meter and hypothesized that it might

respond to distant healing attempts on a subject. He found this to be the case. In 18 trials with four subjects, he found 100% correlation of changes of the Biofield Meter amplitude of rotation with attempted healings by a small group ten miles distant from the subject.

This study expands upon the work of Ron Hruby and verifies his results, using greater distances between the healers and the subjects. Ron Hruby used 4 healers, while I used between 1 and several hundred (through a radio station audience).

Materials and Methods

The Biofield Meter consists of a square frame, made of 0.25 inch diameter wood dowels, 16 in. on each side. Six ring magnets are centered on each dowel and 16 in. long strings are attached in the center of the six magnets on each dowel. The strings angle to a center where a set of two mirrors of 1.5 inch diameter are glued back to back. A hook and additional string is used to hang the apparatus over the subject's head at eye level. The device looks like a pyramid frame.

In practice, the Biofield Meter rotates a few degrees after being placed over a subject. Given an initial impulse, and because it is a string suspension, the torque on the string, or winding force, limits continuous rotational movement. It winds up and unwinds, in other words, oscillating back and forth for a few minutes. The number of degrees of initial rotation was used as a measure of spin force around the body.

Subjects were asked to sit quietly under the Biofield Meter for 5 to 10 minutes so the meter would respond to their force and quiet down and then respond to the distant healer's intention.

This experiment was conducted in Santa Cruz, California. Twenty trials were conducted May to June, 2005. The first trial was completed with a small group of remote healers in Sheffield, Massachusetts, a distance of 3,000 miles from Santa Cruz. Three Biofield Meters were set up around three subjects. The subjects' first names were supplied to the distant healers. The healers chose one subject for the healing attempt, which was unknown to the observer. A start time was determined for the healing attempt, and observation of the biofleld meters began at that time. Movements of the three Biofield Meters were measured and

recorded during the trial period. Following the trial period, the name of the chosen subject was revealed to the observer.

In addition to this initial trial, seventeen other remote healers were invited to attempt distant healing on one of two subjects chose by the experimenter. Seventeen subsequent trials involved one to three separately tested subjects and one to four remote healers. It was not feasible to repeat tests using multiple subjects, as it was too difficult to coordinate them. Two more trials were conducted on a radio show called 'Out of Time' in Hot Springs, Arkansas. On this show the author invited the listening audience to attempt remote healing on a subject sitting next to him. There were two main subjects who where involved in most of the trials.

Results

In the first trial, one of the three Biofield Meters rotated more than 720 degrees, (more than 2 complete rotations). Later phone communication showed that this was the subject chosen for the healing attempt. The subject did not report any sensations or feelings at the time of the attempted healing or on the following days.

In seventeen out of twenty trials, the Biofield Meter showed deflections from about 3 degrees to four full turns (1440 degrees) around the subject chosen for healing. These seventeen included the trials involving the radio show audience.

In addition there are several other trials which showed Biofield Meter rotation changes when healing was attempted. For example, a chiropractor in Oklahoma did a number of trials for several weeks. All of them showed a change in the amplitude of the Biofield at the time of the healings.

No obvious 'healing' effects or sensations were observed by one of the two main subjects. The other subject felt sensations four times which resulted in some healing one time. In three trials, when it was offered, the remote healers correctly identified problem areas for one subject.

Discussion

In the 1980's, the author's initial observations of Biofield amplitude used a different version of the Biofield Meter (heavier with more magnets) and showed rotations of only a few degrees. In this experiment the maximum observed was 1440 degrees. The lighter version of the Biofield Meter used in this experiment may be more sensitive than the heavier version.

This experiment shows remote healing at distances of up to 3,000 miles can be indicated by the Biofield Meter. However, the foregoing results need to be replicated with trials in which Biofield Meter rotations are measured more accurately. A scale or rotation counter, perhaps measured in 1/8 rotations would improve measurement.

Another factor to take into account would be the subjects own intrinsic Biofield. A control measurement could be made where the subject would sit quietly for at least 5 minutes to allow the Biofield Meter to come to rest. In addition, it would be better to schedule experiments at times of quiet solar/geomagnetic field activity. This can now be predicted to about 70% accuracy. Solar flares can be predicted even more accurately.

Russian Scientists apparently discovered a similar force to that which is measured by the Biofield Meter. They called it a 'Torsion field' and did not notice that it was present around living organisms. One Russian researcher found possible evidence that torsion fields appear to propagate significantly faster than the speed of light. He designed a device which could detect the Torsion Field from stars and found that the effect was larger when he pointed his device at the place where the star would be today rather than where it was when the light left the star some time ago. This possible high velocity of spin field could be a factor in healing at a distance.

Theoretical revisions may need to be made as a result of this discovery, if it is verified. If the spin field travels much faster than light, this will require a slight revision in the explanations of electron spin experiments which have puzzled physicists for many years.

From the results of this experiment, one can hypothesize that healers have a much greater influence on the Biofield than other effects, such as phase of the moon, solar storms, the proximity of some planets, vitality of the subject, or willful intention of the subject (psychokinesis). Many studies can be made both on the Biofield and on remote healing.

This experiment did not distinguish between non-healers (the radio audience) who focused on the subject or people who identified themselves as remote healers. One future study could be on the ability of an individual to affect the Biofield of the subject simply by focusing their thought on the subject, without attempting to heal.

Conclusions

In summary this pilot study shows the ability of a simple instrument to detect spin force around humans and opens up a large variety of speculations and possible experiments. Several future studies should be conducted to expand this new area of research.

Acknowledgments

I would like to give many thanks to all the healers and subjects who freely donated their time and services to this project.

See back of book for references.

One Remote Healer's Experience

Remote Healer Behrooz Danadoost Healing Renaissance Clinic 785 Rowland Blvd. Novato, CA 94947 Sept 8, 2005 9 pm

About 10 minutes before the scheduled healing, I, Buryl Payne, the subject of the healing, for a balance problem, sat under the Biofield Meter. It scarcely moved for about two minutes. Then, about 8 minutes before 9pm it rotated rapidly more than two full turns. The usual movement is around 1/8th of a turn. By 9pm the movement had ceased. The healer called and I left the Biofield Meter to speak briefly on the phone. We set a time five minutes ahead for the healing. I returned to the meter and sat quietly. No movement of the apparatus was observed and no sensation felt.

Several hours later I felt strong sensations in the eyes and ears, both senses have been diminished in acuity and both are related to balance. After a few minutes the sensations ceased. I had the clear impression that balance could not be regained until hearing and vision were cleared up. The sensations were so strong that it kept me awake for several hours past the usual time I go to sleep.

There was no noticeable improvement in balance, vision, or hearing the next day. Upon questioning, it was stated that about 8 minutes prior to 9pm, the healer had taken the photographs previously supplied out of a folder to examine.

Maybe the Biofield Meter does not correspond to remote healing, which may be a rare occurrence, but to the initial attention or focus on the subject. This may be a precursor to telepathic communication. The present Biofield is a most rudimentary device. If a more sensitive device could be made such that information could be extracted from it, perhaps communication between people at a distance could be established.

Section IX - Suggestions for Further Research

First a note on terminology and general semantics based on Alfred Korzybski's work. One of the important fundamentals in creative thinking, I've found, is to ignore, cancel, or drop words about the subject of interest. As Allan Watts, famous Zen philosopher, once said: "Words get in your eyes". When exploring new territory, new research, or new thinking, it is useful to drop words like, 'force', 'field', 'energy', 'magnetism', 'electric', 'charge', etc.

It is also a good idea to be aware that the grammar of our language subtly molds, or shapes, our thoughts along certain patterns and certain views of how the world is put together. These grammatical 'thought paths' may not conform in the best way to the real world. Our world is often based on two-valued thinking: black or white, off or on, true or false, us or them, good or bad, living or non-living, etc...

In the mathematical language of probability, or n-valued logic, better conformation to many world events, things, or structures, is possible, if it's used. Computers use the two values of 0 and 1. Sometimes by using many 0's and 1's, it is possible to bridge from two-valued thinking to n-valued thinking, where 'n' is a very large number.

People who wish to be creative researchers ignore so-called laws of physics, laws of chemistry, etc., as well as anybody who says "that's impossible" or "It will never work". New discoveries are often made by people who ignore old 'impossibilities' and think outside the ancient boxes. It's not easy to escape our semantics, but worth the effort to do so in my experience.

The Spin Force & Astrology

Coming from all the stars, galaxies, meta galaxies, galactic clusters, planets, moons, and asteroids, spin radiation may be part of the physical mechanism influencing people.

I did find out by experimentation that H_2O (water) is affected by the planets, but I do not know the mechanism. Also, hydrogen protons are affected by the spin force, called magnetism. Perhaps in all living organisms the precession rate, or change in rotational axes, of hydrogen protons are affected by solar and planetary spins. What about the Moon? Its position has a large influence on human behavior, although it has essentially no spin. The light reflected from sunlight may be related to spin.

Spin radiation, if there is such a thing, would be coming from everywhere, only rising above the background radiation when planets are nearer the Earth, or when the Sun is just rising or directly overhead.

If there are clouds, the water vapor, that is hydrogen protons in the water, would absorb the spin radiation and be expected to weaken the effects. This fits in with my personal observations that when I lived in frequently clouded Seattle, astrological influences were muted. Water is a unique substance. Besides the emanations focused by the Moon Gun, radiations coming from the hands [see section II - The Psychokinetic Pyramid] by magnetism, some frequencies of light, and probably other frequencies of the electromagnetic spectrum.

Maybe water's properties [perhaps measured by MRI instruments] could serve as spin radiation detectors. Humans are mostly water, so this may be important. Maybe down in a mine or far out in a spaceship people will 'feel' psychologically free, although a lot more physically confined.

The paper on Detecting Emanations from Planets is only a pilot study, a first foray into new ground. There are many unanswered questions for further research such as:

- 1. How much does cloud cover attenuate the effects?
- 2. How long, and how, can the exposed water be stored?
- 3. Can effects be detected from the outer planets even if the apparatus can be aimed at them?
- 4. Do the positions of moons of Jupiter, Saturn, or Uranus make a difference?
- 5. Precisely what is chemically or atomically altered in water?
- 6. How is this chemical alteration, if there is any, different from planet to planet? Or star to star?
- 7. Etc...

So how's this apply to research on spin? Well, is something spinning or not spinning? Is the electron really spinning? The galaxy? The universe, even if it only revolves once in a billion years?

One day I was meditating and received the following speculations:

How is electron spin related to the more general spin around all matter, which I have observed?

The term spin is itself misleading. It is only a slim approximation of the nature of the property of those entities you call electrons, protons

etc... They arise from assumptions and experiments that bring out that aspect. Whatever one imagines to be present, and looks for, one gets. Like all of reality, it is created by human thoughts. Experiments follow the thoughts, and the two factors work together, mutually reinforcing one another to form the reality that you perceive.

You must recognize thought as a separate force, that is, imagination. You imagine first, then perceive what your experiments or ordinary senses perceive.

Electrons are basic building blocks of matter, as you think it is, that is, as you imagine it to be. In quantum theory electrons are thought to be probability density clouds; fuzzy spinning clouds.

Electrons with their many possible shapes form many parallel realities. Thoughts shape electrons so electron shapes are carriers of thoughts, a more general term for spin.

So, it is important to do the experiments you propose, to see how electrons can be shaped by thought. This will be a landmark experiment in physics.

Shape changes appear to be quantized. That is, change in discrete steps. Spin is only one kind of shape.

General spin forces are manifested from different patterns of shapes. Experiments, combining thought power and electrons, will be the true psychophysics at last.

Here is another one of my thoughts:

To detect spin radiation, hydrogen protons in water might serve. The hydrogen proton will not flip like an electron. It will change its precession rate. This can be detected, using equipment similar to MRI (Magnetic Resonance Imaging), but more simply implemented, and amplified to produce a sound. A focusing apparatus, like the Moon Gun., might show differences in water samples exposed to the Moon, the Sun, Jupiter, or other stars.

What is spin anyway? How can space-time spin? How can a non-material object spin?

As a force it seems to travel very much faster than light. Can electron spin be altered by thought? Or is the Sun itself responding to mass thought? Experiments on these questions need to be done. How many people can affect electron spin? How many people are needed to alter the Sun's behavior? Every thought we think alters many thousands of molecules within our brain. Many experiments have shown that matter can be influenced by thought. See, for instance the section on remote healing (Section VIII)

With that brief background, here are a few of my thoughts, and other people's, on what else could be done with the simple device I've used. What about more complex devices to measure the spin force around living organisms? Scarcely, a week passes without my imagining another experiment or device. I'll never get around to doing them all. It's your turn, dear reader.

An experiment might be done by placing a potted plant or caged animal on a turntable, then measuring its Biofield when no motion is present, and when it's rotating clockwise or counter clockwise and at different speeds.

It's important for scientists to

- 1. Validate that the present apparatus works.
- 2. Devise other types of spin detectors.
- 3. See if sunspots or solar vortices emit spin radiations.

Unraveling the connections between solar emanations and human psychophysiology is extremely important. The author has already unraveled a connection between solar activity and the start of international battles.

PARAMETERS OF THE SPIN FORCE QUESTIONS THAT NEED ANSWERING

What factors contribute to the amplitude and direction of the spin force?

Human Factors

- 1) What might the Biofield measurements be like when a person is on a sugar high, a meat diet, or inebriated?
- 2) If death occurs what happens to the Biofield? Is it proportional to the mass of the individual?
- 3) Do different parts of the body have different spin amplitudes and directions?
- 4) How can we measure the spin force of animals?
- 5) Do all living organisms have a Biofield?
- 6) Does the complexity and mass of a living organism relate to the amplitude of the spin force?
- 7) What is the Biofield like in a space shuttle where Earth's magnetic field is different and rapidly changing? Are there differences related to health? Emotional state? Tiredness? Do psychotics, or psychopaths, have different Biofields from other people?
- 8) Are there male-female differences? Testing several hundred subjects, I only observed one case where the spin force of a female was consistently in the opposite direction from everyone else. The direction is usually to the right as seen from within the frames.
- 9) Do Psychics have larger fields than *normals*? Are there Psychics or groups that can more readily *will* Biofield Meter deflections? Pilot studies showed healers and other special people had a larger Biofield than average. One man could repeatedly cause the little pyramids in bottles to move simply by pointing his hands at them from a distance of several feet.

- 10) Given two identical Biofield Meters will individuals show differences for readings taken at nearly the same time?
- 11) The direction of rotation of Biofield Meters reverses direction for a few hours at times of new or full moon. What happens at the exact times of polarity shifts? How long does it last? What, if any, kind of feelings does a subject have at these times?
- 12) Does the strength of the Biofield vary with altitude?
- 13) Would it diminish in deep mines?
- 14) Can it be detected in a steady, high flying aircraft?
- 15) How much mass can actually be caused to move by this force?
- 16) How do the Biofields of individuals interact or combine?
- 17) If a large ring is suspended over one person and a measure made, then will two people crowded under the ring increase the amplitude of initial rotation by a factor of two?
- 18) If people surround the instrument, moving slowly, towards it, how close do they have to come before it rotates? Or will it rotate at all? How many people will be required to observe such a rotation?
- 19) How far does this force field extend around the body?
- 20) How much interaction is there with the force fields of other humans? Of plants? Of animals?
- 21) Although the field strength can vary from moment to moment, depending on the activity of Earth's magnetic field and on the emotional state of the human at a given moment, if these are reasonably constant, how rapidly does it diminish with distance? Gravitational, electrostatic, and magnetic forces have been found to diminish with the square of the distance.

The Physics

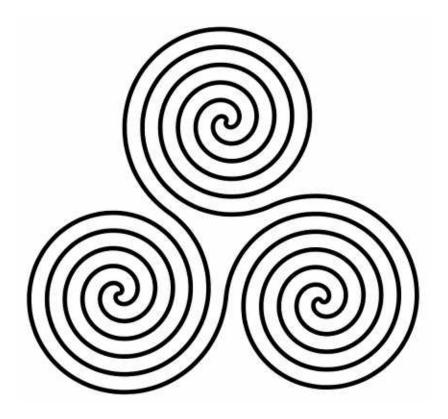
- 1) How does the Biofield amplitude vary as a function of solar activity. Does this change occur immediately (within 8 minutes) as well as 2-3 days later when the solar wind hits Earth and creates changes in its geomagnetic activity? Would changes in the spin force on the Sun (perhaps from solar flares or coronal holes) appear sooner than 8 minutes around a subject (light speed)? If so, this would be an important discovery.
- 2) What percent of the deflections of the Biofield Meter are not related to the Geomagnetic field?
- 3) Is angular momentum conserved? That is, if the spin force produces a rotation in external objects around a human, or other living organisms, will that central object rotate the other way a small bit to conserve angular momentum?
 - This might be tested by hanging a Biofield Meter, and a large fruit or small plant on another Biofield Meter from two ceiling hooks separated by only an inch or so. The fruit could be hung such that it could be carefully raised into the Biofield Meter, thereby producing a spin, and observing the hanging fruit to see if it rotated in the opposite direction. If angular momentum were conserved, this would be the case.
- 4) How much energy can be extracted from a Biofield Meter.

 Dr. Bjoorn Vlistigk of Denmark made a frame filling a large room and claimed it moved enough to extract energy from its motion. He seems to have disappeared. If anyone knows him, please put us in contact ASAP!
- 5) Does the Earth have a spin force?

 If so we might tap into it for energy. It probably does; most of the planets and all the stars seem to have such a force as well as the galactic centers, now believed to be black holes.
- 6) Are there power points around the Earth where the spin force would be weaker or stronger?
- 7) Is the spin force stronger at higher altitude? More variable?
- 8) Would the Biofield be less in a deep mine?

- 9) Would the Biofield diminish in an electrically shielded room? In a magnetically shielded room?
- 10) Is there a daily variation in the Biofield?

 Is it characteristically different at night? During winter?
- 11) How fast does the Spin Force respond to external influences?
- 12) Is the spin force a steady or a rapidly pulsing one; faster than simple frames can respond? Is it an alternating force or some combination of direct and alternating? If alternating, then what frequency?
- 13) Does the Spin Force follow the inverse square law?
- 14) If the spin force radiates as conjectured, can it be used to carry information? Electrons with different spin orientations may do this. A field of electronics, called Spintronics, based on spin, are being designed and built, and are rapidly coming into manifestation using spin effects. Maybe one day high frequency cell phones will use this technology to transmit signals.



Section XI - Beyond the Spin Force

Matter seems to be forever evolving towards more complex forms. The material world seems to us, with our limited neural perceptions, to be composed of solid objects moving about, driven by mysterious influences we call forces. When one looks at these so-called forces, they can be arranged in a simple manner.

Gravity pulls all matter together. If this 'force' alone existed, all matter in the universe would eventually clump together into one big ball. Fortunately, clever experiments and extra neural instruments have shown that another 'force' acts upon the universe: **electricity**, which has two aspects called positive and negative. This force pushes, or pulls some matter so it does not all clump together. Electric forces help matter form more complex structures such as atoms and molecules.

Besides gravity and electricity, **spin force** also operates (magnetism being a special case). Electricity and gravity operate in conjunction with the spin force to help form even more complex structures. Matter is shaped into complex forms which are stable and do not collapse into a clump with a big bang, as some cosmologists have speculated. Perhaps so-called positive and negative electric forces are manifestations of different aspects of spin, such as spin from the outside in or spin from the inside out. Or spin as seen from a pole and spin as seen from the side or....?

Physicists have also conjectured that there are two other 'forces' called **strong and weak nuclear**, which hold atomic nuclei together. Are these related to Spin Force?

Both electrons and protons are assumed to possess spin and anti-spin. Protons with opposite spin directions couple whenever possible. Spin may be the fundamental property of matter, from which most all else can be derived. It is instrumental in structuring matter.

Furthermore protons and other so called elementary particles are presumed to be made up of things called quarks which also are assumed to have spin.

Yet, this is not all. Matter seems to be becoming ever more complex. There seems to be a progression from simple cells to the complex structures that form a whale, a dolphin, a human, a family, social group, a country, and a global consciousness, which humans are steadily moving towards, as observed by Teilhard de Chardin a half century ago. Like the property called magnetism, which emerges as a detectable force when enough electrons have their spins aligned, consciousness seems to emerge when the complexity of a structure is large enough. Humans, whales, and dolphins are highly complex with large brain/mass ratios. Are they conscious? A study made at Princeton University showed that when lovers work together they exhibit two times higher 'psychic' abilities than random couples. Have they formed a synergistic unit?

Social groups potentially show amazing abilities such as the experiment to influence the Sun (described in the Appendix). A compelling argument could be made (In the old language habit of dividing the world into things and influences on those things) that an organizing 'force' exists. An intrinsic property of all matter seems to be the compulsion to form ever more organized structures from which new properties emerge.

A measure of organization or complexity was developed by the author in his Ph. D. thesis at the University of Washington. Analogous to Einstein's theory of relativity; and Heisenberg's Uncertainty Principle, complexity is relative to the observer's means of measuring. Einstein's special theory of relativity is based on the finite speed of light used to measure length. Heisenberg showed that momentum depends upon the mass of the measuring tool. The author found that a measure of complexity of a pattern is based upon the limiting structure of the language used to describe that pattern whether it be a work of art, a piece of music, an organic molecule, or a group of interacting people.

Whatever name this important feature of the physical world is called, it clearly exists.

Everywhere we see the different 'pieces' of matter organizing themselves into greater and more complex forms. Protons and electrons form matter, atoms form molecules. Stars form galaxies, galaxies combine with other galaxies to form super galaxies, and super galaxies form super, super structures, hardly visible to our telescopes, and so far, way beyond our ordinary comprehension. Probably without end.

Last Word

If spin could be increased, some interesting things might develop. Different types of motors, or levitation devices, perhaps.

Now consider a model based on spin forces. Some electrons in some atoms (oxygen, especially) will not align with an external spin force. They actively resist each other.

It is interesting to note that Oxygen is the most diamagnetic substance, and Iron is the most paramagnetic.

Iron, at the center of the hemoglobulin molecule plays a key part in the blood oxygen transfer system. Heavy iron is of the Earth, light oxygen is of the air.

Oxygen and Iron, the yin and yang, female and male, spin and anti-spin. Diamagnetism must be as different from magnetism as male is from female. Yet they are also alike in some way.

And they are attracted to one another. The Earth is liberally covered with iron oxide and this was the case even before we began filling the countryside with old cars. Iron is the heaviest element made naturally by our Sun. In that sense it is at the top of the chain. Without iron to center and ground hemoglobin, we could not exist. Nor could we live without oxygen, the carrier of the Sun's energy to our cells.

Perhaps there is a mystery here; some discoveries yet to be made about magnetism and diamagnetism....

So at this fascinating place, on the verge of the unknown, like Don Juan exhorting his student to jump off the cliff, I, the author, Buryl Payne, end this book, (but not my work) wishing you, dear spirit, love and light in finding your own way on.

Appendix

This appendix contains several of my unpublished articles related to the spin force, and a few articles by others related to this subject, or may be related as more research is done on the spin radiation.

What is war?

It is the result of planetary influences. Somewhere up there two or three planets have approached too near to each other; tension results. For them it lasts perhaps, a second or two. But here on Earth, people begin to slaughter one another, and they go on slaughtering maybe for several years. It seems to them at the time that they hate one another; or perhaps that they have to slaughter each other for some exalted purpose; or that they must defend somebody or something and that is a very noble thing to do; or something else of the same kind. They fail to realize to what an extent they are mere pawns in the game. They think they can decide to do this or that. But in reality all their movements, all their actions, are the result of planetary influences. And they themselves signify literally nothing. Then the Moon plays a big part in this.

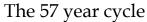
The teachings of Gurdjieff, as related in: *In Search of the Miraculous*, By P.D. Ouspensky p.24, E.P. Dutton, 1942. NY.

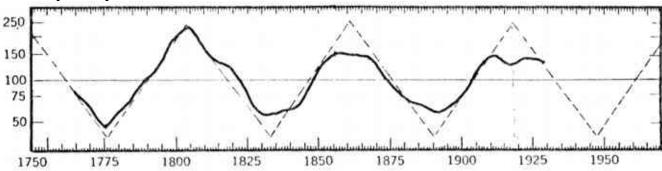
It is my speculation that the planets and the Sun (all stars) have a spin force (Biofield) around them, like living organisms. Some people consider that the planets are living organisms. The planet's spin, therefore may affect the spin force around people. This is all unexplored speculations until we get better measuring instruments.

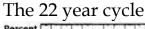


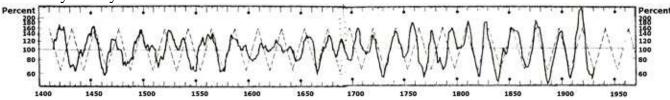
Cycles of Wars from the work of Dewey and Wheeler

The cyclic nature of international battles, extending back 2,500 years at least, was discovered by Professor Raymond Wheeler, historian at the University of Kansas. He wasn't looking for war cycles; he was just studying history. The patterns emerged from the data. Another man, from a later generation, Edward Dewey, proved mathematically, the validity of the presence of regular cycles.

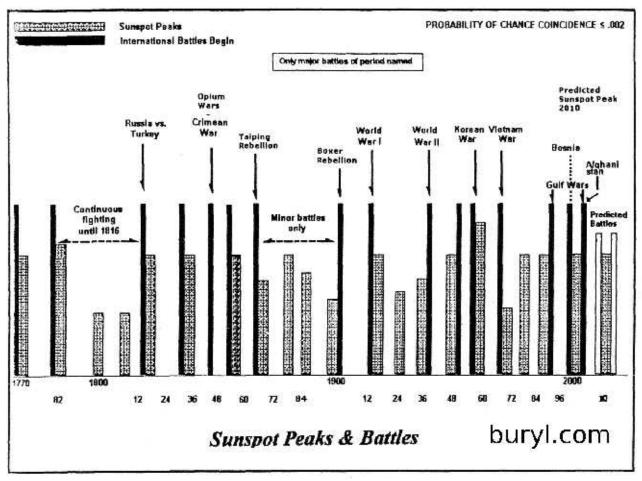




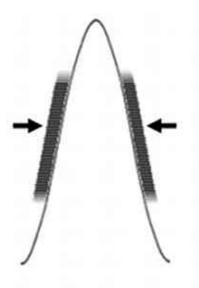




From Wheeler's data, I extracted the times when international battles started and plotted it with solar activity peaks. This bar graph is shown below. (from 1972 to 1991 I did not have any data)



Please look carefully at the figure. The black bars mark when international battles started. The white bars show the year when sunspots reached a peak. Battles usually start as sunspot activity is rapidly increasing or as it is decreasing. **Never at the peak of sunspot numbers.** That's about twice every 11 years. Once battles start they may continue on for years or fizzle out in a few months, depending on human/political factors. That's why it seems that wars are always going on.



Above is an example of a solar peak. Times battles are most likely to start, occur at around where the arrows are. The geomagnetic field is more active.

Dewey passed on in the 50's and there is some uncertainty in the bar graph for a couple of solar cycles until I began observing it. Now a generation later, I found the war cycles match sunspot cycles and discovered that planetary positions can be used to predict many sunspot increases. However, not all solar activity increases trigger international battles. Different sunspots produce different geomagnetic patterns; a factor often overlooked by others who have tried to correlate sunspot activity with events on Earth. With the help of an astrologer, I've tentatively identified the key planets and planetary positions which most often are associated with the start of international battles, and some patterns that are usually indications of good times.

Anyone can predict when upsets, or good times are likely to occur with our software program: *The Dynamic Solar System*. A text on the disc explains how to use it to make predictions of difficult and good times for everyone. See products section.



This is a screenshot image of the Dynamic Solar System software.

April 2, 2012 is a likely time of stress for humanity, not Dec. 21, 2012, as some people may think. This is because Mars, Mercury, and Venus are close to Earth.

What can be done about it?

Knowing that warring behavior comes in cycles, and therefore is predictable, is an important step. Two decades ago, when global peace meditations were largely unknown, the Academy asked people doing these meditations to synchronize the times of the meditations. A $3\frac{1}{2}$ year study, calling for 6 meditations per year, showed that solar activity decreased the day after the meditations. This amazing result was predicted to be possible by Edgar Cayce, a psychic whose work has become well known in the United States. A brief report on this experiment is described below.

The mechanism to account for this is unknown at this time, but may involve the coherence of the Bioflelds (Spin field) of many individuals which has some resonance or influence on the possible Biofield of the Sun itself. People are now systematically studying the healing effects of directed healing meditations or prayer, acting at a distance. Global meditations do work. Other ways to avoid war might be to treat or shield sensitive individuals, if possible, or actively engage in diversionary activities around predicted times of geomagnetic storms during ascending or descending times of solar activity.

The area of group Biofield interactions is an important one for additional research.

Is there a synergistic effect of a group doing an attempted healing? Or is there a simple linear effect, or hardly any group effect, just the thought power of a few talented individuals?

The following pages tell of the results of one large experiment in group meditations which had clear numerical data showing the results.

THE POWER OF THOUGHT TO INFLUENCE THE SUN

Turning Point for Humanity? The Academy for Peace Research

A four year study has just been completed by the Academy for Peace Research to test whether or not humans can alter solar and geomagnetic activity by meditating, visualizing, or praying.

Preliminary analysis of the data indicates that this is possible. If so, the implications are awesome!

Why influence the Sun? Research by Professor Raymond Wheeler (deceased) at the University of Kansas uncovered the fact that international battles wax and wane at nearly regular intervals of about 11 years. Wheeler's data extended back 2,500 years and was extensively analyzed by Edward Dewey. Buryl Payne, a physicist/psychologist who directs the *Academy for Peace Research*, was able to correlate the onset of international battles with sunspot peaks for the past 200 years. Prior to that, sunspot data is not available, but presumably humans have been responding to this influence indefinitely into the past.

Crimes, riots, accidents, psychotic episodes, many types of illness, and just plain grouchiness have all been found to increase at times of solar activity and/or geomagnetic disturbances. This is not a theory; diverse studies by many researchers in different countries over many years have supported the same general conclusion.

The link appears to be: Solar flare -> solar winds (sprays of electrons and protons) -> disturbances to Earth's magnetic field -> hormone changes -> mood changes.

Men may be more affected than women, since warring behavior appears to be a male activity and Buryl hypothesizes (no experimental evidence as yet that testosterone production in males increases at times of certain types of Magnetic disturbances. Increased production of testosterone in males under 40 is known to produce irritability and aggressiveness. Buryl calls this MMS or Male Macho Syndrome and suggests that warring behavior be considered a new type of social disease.

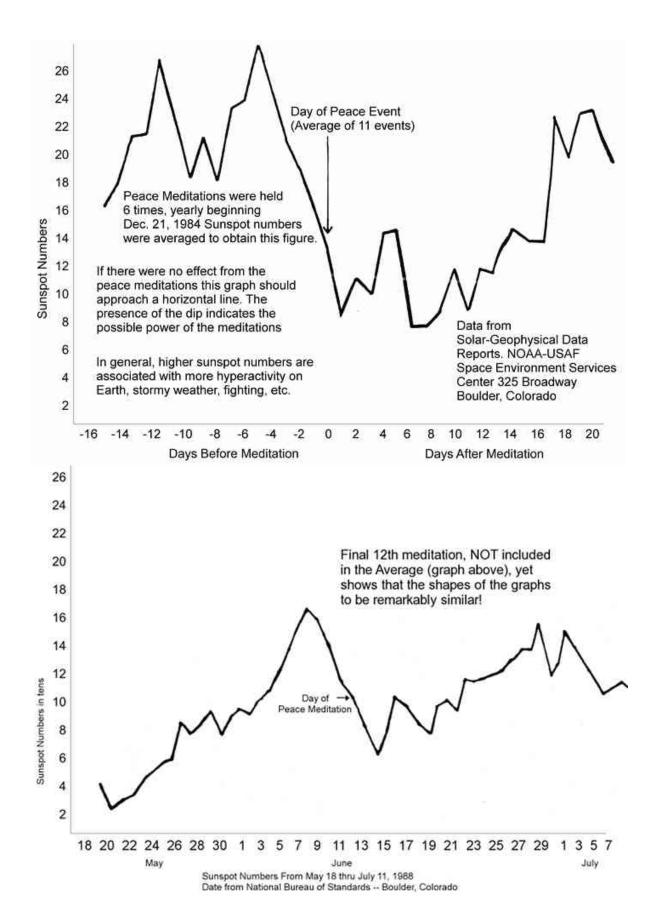
When people learned of this research they proposed that peace meditations could have a beneficial and calming effect on solar activity. Edgar Cayce had said this would be possible many years ago. The hypothesis was formalized in the design of an experiment called: THE GLOBAL MEDITATION PROJECT. People were invited to meditate at six dates each year (the Solstices, Equinoxes, etc.). A

3-1/2 year study culminated in June 1988 with the alignment of six planets close to the Galactic Center. Normally such an alignment would have been expected to trigger a large increase in solar activity, and an increase in international battles. Although there was an increase in solar activity there was actually a dip around the time of the largest peace meditations. (There were few world upsets and a number of positive international steps taken towards peace in June, a wonderful turning point occurred. The cold ware ended.) Such dips were also observed during the first two years of the experiment, the only times that the data has been analyzed so far. On the average the effects of several million people meditating appears to have resulted in a decrease in solar activity of 30% for a period of 7 to 10 days following the meditations.

This remarkable result will help unify science and religion and perhaps provide humankind with a new way to maintain peaceful conditions.

How people can possibly influence the magnetic field of Earth or the Sun is a big scientific mystery. However, one possible link might be related to a biological energy field (Now called a *Spin Field*) which Buryl discovered how to detect and measure. This energy field, which has been discovered and rediscovered in the past, is not magnetic, but it varies with variations in Earth's field. It could be considered a type of spin force and if it were magnetic it would be more than one million times as large as the body's intrinsic magnetic field and about 100 times as large as the Earth's magnetic field strength. When people calm down, this field also quiets. Perhaps when enough people meditate they quiet down Earth's field by some unknown resonance mechanism. The Earth in turn, could be in resonance with the Sun and hence a quiet Earth could result in a quieter Sun.

The implications of the possibility that humans can influence the Sun are tremendous and suggest a number of other international peace projects that could be developed in the new few years.



The Journal of Borderland Science 1989

Personal report of Biofield Meter experiments

Undertaken by Shemaya Laurel and friends, 2006 Holyoke Massachusetts

Equipment used:

Basic Biofield Meter from Buryl Payne. We added yarns from the central mirror to each corner of the square dowel frame, to prevent the frame from twisting out of its square shape. Previous to this addition, the dowels tended to move out of their horizontal plane, with opposite corners raised or lowered, and each dowel at an angle. Due to complications with the available space, we did not use a scale on the wall to measure degree of twist observed.

Observations made:

Observations were made whenever convenient, at times when the Biofield Meter was observed to be completely stationary. These moments were somewhat rare, most likely due to air currents from individuals moving about the house, and drafts in this old building when the air moves outside.

Four different individuals participated in testing the meter, depending upon who was available when the meter was stationary. Results varied depending upon who sat under the meter. All four individuals were women, varying in age from 24 to 52. In total, approximately 50 tests were made, over approximately 2 months time.

One individual, age 24 and quite healthy, had the strongest response from the meter. Three times, with no bumping of the meter while moving her head into position underneath it, the meter moved substantially, approximately 1/8 turn, or 45°, in a clockwise direction. One time, with that individual, the meter moved counterclockwise, less than 45°. Sometimes there was no movement, or only slight movement, which was unclear if it was related to the process of getting positioned beneath the meter.

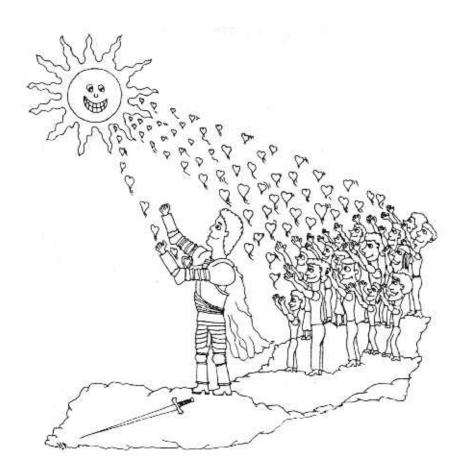
Another individual, myself, experienced movement sometimes, and other times none whatsoever. Once the movement was dramatic, close to 90° clockwise, but generally the movement was subtle, perhaps 10 to 15°. Generally clockwise, sometimes counterclockwise. At the time I was age 48, with substantial long-term health problems.

The third person was striking in that one time the meter moved counterclockwise, 10 to 15°, but generally it would not move at all. That

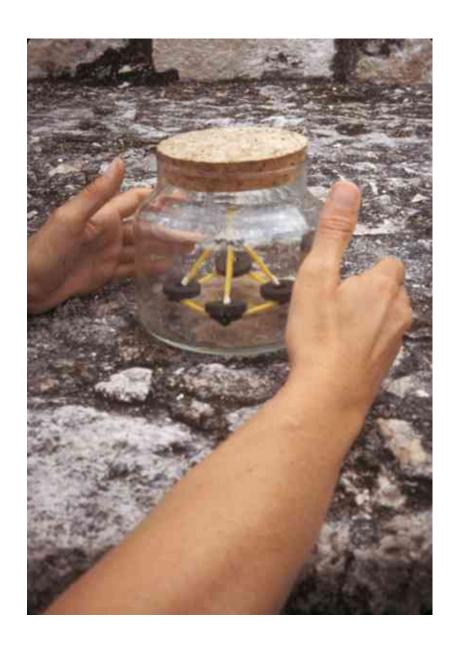
individual was in good health, age 52.

The fourth individual experienced no movement, but was only available for one attempt.

I have been concerned about both air currents and bumping of the meter influencing the action of the meter. Even small strands of hair, as people are positioning themselves underneath the meter, have been enough to completely interfere with a measurement, causing obvious movement from the mechanical interference. However, the striking thing about this series of experiments was that there were several instances where it was absolutely clear that there was no outside interference, and the presence of the person's head underneath and within the meter correlated with substantial movement of the meter, when previous to the person being in the meter there was no movement whatsoever. This was truly stunning. I look forward to pursuing further work with the Biofield Meter, including setting up an arrangement that stops airflow while allowing somebody to position themselves beneath the meter.



Tinker Toy and Stovepipe Science Buryl Payne, Ph. D. PsychoPhysics Labs Unpublished



Introduction

Nowadays science is often done with extremely sensitive instruments, powerful computers, and complicated computer software programs to analyze data, or make mathematical predictions.

But it doesn't have to be done that way. Science at heart is a kind of linguistic puzzle. It's a game played by people, like myself, who enjoy the puzzling question, "what is reality?". It's basically the process of putting words on observed events to form a somewhat organized framework. To obtain more clarity the language of mathematics can be useful.

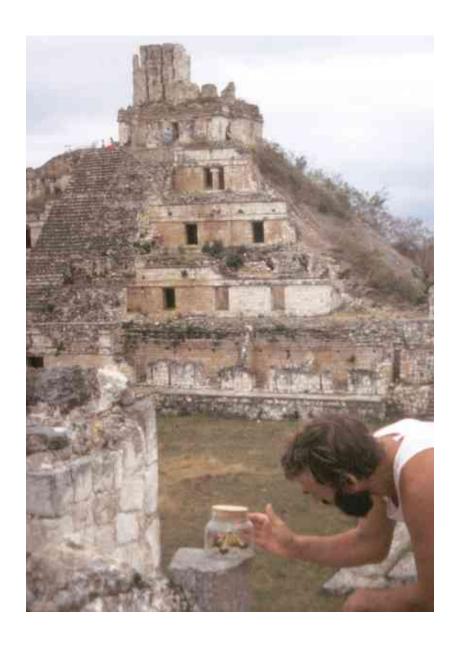
The study of how things work; curiosity, making measurements, taking notes, are components useful for someone who wants to be called a scientist. From those notes, a pattern may emerge which will be useful to somebody. Science is a game that anyone can play.

Hanging Pyramids

Discovery of a Nonvibrational Force

While fooling around with pyramids, an accidental discovery was made. It was really a rediscovery, as eventually, I found an article in Lancet Journal from the 1920's describing this phenomenon.

A pyramid frame with magnets at the corners and hung by a string was observed to consistently rotate a little bit when suspended over a two year old child. Eventually, this device, now called a Biofleld Meter, evolved into a set of tinker toys: a few ring magnets, a light, mirror, and a yard stick. It is a simple device, yet what it detects and measures may fundamentally expand our views of human beings. It took a few years before I thought it was a real effect and now I realize, twenty years later, that it is a fundamental discovery that could help to develop a more unified field theory of physics, which includes life as well as inorganic matter.



How It Works

A pyramid frame with 6 ring magnets on each side, large enough to easily fit over a person's head, is observed to rotate when that person's head is positioned just inside the pyramid. The whole frame is suspended by a string. By gluing a mirror on the frame at the top of the pyramid and shining a fixed light on the mirror small rotations can easily be observed.

This device can be used to detect and measure what I now call a "spin force" around the human body. What is measured is not electrostatic, magnetic, thermal, or gravitational. It is apparently something different, related to magnetism, but different from ordinary iron magnetism. Subtle magnetism is a term used by some writers. Magnetism is a word used to describe an "organized spin force", most noticeable in iron, but present, to a tiny degree, in most other elements. The human body has practically no magnetic field. However, this spin force appears equivalent to over a one hundred gauss of conventional magnetism, a million times as strong as the body's intrinsic magnetic field.

Tesla was reported to have mentioned a higher octave of magnetism present around all matter, yet it wasn't observed in his time. Perhaps this "spin force" is it.

Over the years here's what I have found:

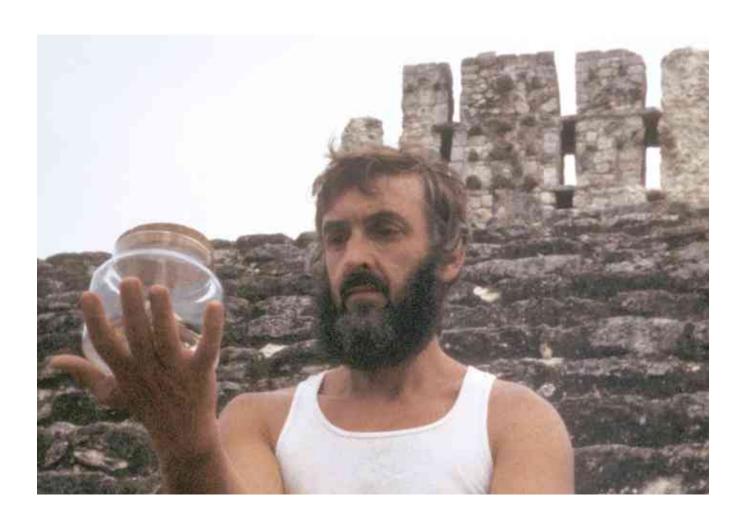
- 1) The direction of the rotation of the Biofleld meter usually is clockwise as seen from above.
- 2) It is larger around children.
- 3) It is smaller when someone is ill or meditating.
- 3) It reverses direction for a few hours, plus/minus 36 hours around the new or full Moon.
- 4) It temporarily reverses direction during a magnetic storm. (This usually happens when solar activity increases, which has been found to be associated with planetary positions about 75% of the time).
- 5) The amplitude of the Spin Field changes when other people are meditating, visualizing with intent to heal, or intensely thinking of the subject seated under the device. This significant discovery was made by Ron Hruby, Ph. D., a retired NASA scientist who lives in Campbell, CA. A paper is available, describing his remarkable observations.

These findings indicate that we are linked by the "spin force" to the Sun and planets, and also linked with one another by this same force.

Anyone can verify the existence of the *spin force* by making a Biofield Meter in an hour or two with materials likely to be found around the house, plus a few magnets obtained from Radio Shack. With a new device like this there are many things yet to discover. One Danish man, Bjorn Vlistig, claims to have obtained 5,000 watts of electric power from a giant room sized pyramid suspended over a person and geared up to run a generator. Perhaps the spin field does not follow the usual inverse square law of diminished force with distance.

I have made small versions of a Biofield Meter in a glass jar. It rotates a small amount when a person holds their hands around it. I have taken such portable versions to the Grand Canyon, up in the mountains, inside the Great Pyramid at Egypt, to Palenque in Mexico, etc. It works everywhere, though less so by the seashore, and not at all inside the Great Pyramid.

Additional information might be obtained by making measurements in space, at the poles, in deep mines and under the sea. Now let's turn to another set of observations with a simple device that might be related to the spin force.



Stove Pipe Experiments

Detecting Emanations from the Planets and Stars

The Stove Pipe device, called the Moon Gun by my friends, is simply a six foot tube of six inch diameter stove pipe available at any large hardware store. In use, it is mounted on a tripod and pointed at a celestial body. One end of the stove pipe has a funnel with a flexible spout wired to it to direct the emanations into water bottles.

Emanations, radiations, vibrations, light waves, spin vortices, or what ever one wishes to call them are apparently emitted by heavenly bodies. When the Moon Gun is pointed at the Sun, Moon, or visible planets, sometimes there is a noticeable change in taste of water collected in a bottle hung at the end of the funnel. Sometimes drinking the water produces psychological effects. The full Moon water does not taste good, Sun water makes people sleepy, Venus emanations produce happy, tipsy, or mildly erotic effects. Jupiter emanations taste of sulfur and appear to have healing effects.

In the beginning I used a homemade tripod. Later I purchased a 6 inch refractor with a sturdy stand and clock drive. I mounted the stovepipe right on top of the telescope and used the telescope to help align the moon gun on the planets of interest. Changes in the water occurred in about twenty minutes. Different versions of the Moon Gun were made. All of them worked.

Years later I discovered a company in Boulder, Colorado that sells star 'elixirs' or homeopathic patterns of water treated by light or emanations from specific distant stars. People at this company used an ordinary telescope to focus light into water and claimed they channeled, or received, the idea from Hilarion, a well known anchorite who lived in Palestine between 291-371AD.

These two simple devices show that we are influenced by the positions of the planets, directly from their emanations and indirectly by solar/geomagnetic activity associated with their positions. We resonate together. Our moods are connected with one another and probably every living organism near us as well. We are all in "Mrs. Murphy's chowder pot".

Astronomers Discover Fastest-Spinning Pulsar

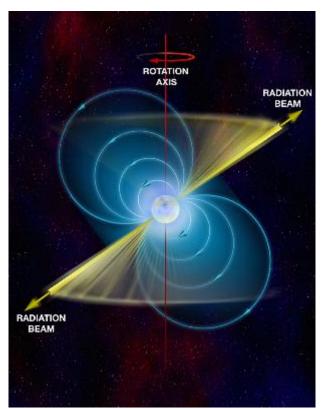
Dave Finley, Public Information Officer Socorro, NM (505) 835-7302 dfinley@nrao.edu

Graphics: How Are Millisecond Pulsars Formed?

Astronomers using the National Science Foundation's Robert C. Byrd Green Bank Telescope have discovered the fastest-spinning neutron star ever found, a 20-mile-diameter superdense pulsar whirling faster than the blades of a kitchen blender. Their work yields important new information about the nature of one of the most exotic forms of matter known in the Universe.

"We believe that the matter in neutron stars is denser than an atomic nucleus. but it is unclear by how much. Our observations of such a rapidly rotating star set a hard upper limit on its size, and hence on how dense the star can be.," said Jason Hessels, a graduate student at McGill University Montreal. Hessels and his colleagues findings presented their the American Astronomical Society's meeting in Washington, DC.

Pulsars are spinning neutron stars that sling "lighthouse beams" of radio waves or light around as they spin. A neutron star is what is left after a massive star explodes at the end of its "normal" life. With no nuclear fuel left to produce energy to offset the stellar remnant's weight, its material is



Pulsars Are Spinning Neutron Stars

CREDIT: Bill Saxton, NRAO/AUI/NSF

compressed to extreme densities. The pressure squeezes together most of its protons and electrons to form neutrons; hence, the name "neutron star."

"Neutron stars are incredible laboratories for learning about the physics of the fundamental particles of nature, and this pulsar has given us an important new limit," explained Scott Ransom, an astronomer at the National Radio Astronomy Observatory and one of Hessels' collaborators on this work.

The scientists discovered the pulsar, named PSR J1748-2446ad, in a globular cluster of stars called Terzan 5, located some 28,000 light-years from Earth in the constellation Sagittarius. The newly-discovered pulsar is spinning 716 times per second, or at 716 Hertz (Hz), readily beating the previous record of 642 Hz from a pulsar discovered in 1982. For reference, the fastest speeds of common kitchen blenders are 250-500 Hz.

The scientists say the object's fast rotation speed means that it cannot be any larger than about 20 miles across. According to Hessels, "If it were any larger, material from the surface would be flung into orbit around the star." The scientists' calculation assumed that the neutron star contains less than two times the mass of the Sun, an assumption that is consistent with the masses of all known neutron stars.

The spinning pulsar has a companion star that orbits it once every 26 hours. The companion passes in front of the pulsar, eclipsing the pulsar about 40 percent of the time. The long eclipse period, probably due to bloating of the companion, makes it difficult for the astronomers to learn details of the orbital configuration that would allow them to precisely measure the masses of the pulsar and its companion.

"If we could pin down these masses more precisely, we could then get a better limit on the size of the pulsar. That, in turn, would then give us a better figure for the true density inside the neutron star," explained Ingrid Stairs, an assistant professor at the University of British Columbia and another collaborator on the work.

Competing theoretical models for the types and distributions of elementary particles inside neutron stars make widely different predictions about the pressure and density of such an object.

"We want observational data that shows which models fit the reality of nature," Hessels said.

If the scientists can't use PSR J1748-2446ad to do that, they are hopeful some of its near neighbors will yield the data they seek. Using the GBT, the astronomers so far have found 30 new fast "millisecond pulsars" in the cluster Terzan 5, making 33 pulsars known in the cluster in total. This is the largest number of such pulsars ever found in a single globular cluster.

Dense globular clusters of stars are excellent places to find fast-rotating millisecond pulsars. Giant stars explode as supernovae and leave rotating pulsars which gradually slow down. However, if a pulsar has a companion star from which it can draw material, that incoming material imparts its spin, or angular momentum, to the pulsar. As a result, the pulsar spins faster. "In a dense cluster, interactions between the stars will create more binary pairs that can yield more fast-rotating pulsars," Ransom said.

The great sensitivity of the giant, 100-meter diameter GBT, along with a special signal processor, called the Pulsar Spigot, made possible the discovery of so many millisecond pulsars in Terzan 5. "We think there are many more pulsars to be found in Terzan 5 and other clusters, and given that the fast ones are often hidden by eclipses, some of them may be spinning even faster than this new one," Ransom said.

"We're excited about using this outstanding new telescope to answer some important questions about fundamental physics," he said.

In addition to Hessels, Ransom and Stairs, the research team includes Paulo Freire of Arecibo Observatory in Puerto Rico, Victoria Kaspi, of McGill University, and Fernando Camilo, of Columbia University. Their report is being published in *Science Express*, the online version of the journal *Science*.

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PIONEERS IN AURA RESEARCH

by Karen Mutton © 2007

Paracelsus (1493-1541)

Philippus Aureolus Theophrastus
Bombastus von Hohenheim was a
16th-century alchemist and
physician. He later titled himself as
Paracelsus ("greater than Celsus" of
Rome). To esoteric scholar Manly Hall,
Paracelsus was an Hermetic philosopher
who was acknowledged by occultists as

the greatest physician of all

At the age of sixteen, Paracelsus entered the University of Basle where he studied alchemy, surgery and He travelled medicine. extensively throughout Europe and is said to have visited India, where he discovered the pain-killing properties of opium. Later he returned to the University of Basle as a professor of medicine and surgery. Paracelsus followed no particular religion but was impressed by Martin Luther, who started the Reformation. He was widely acknowledged the Pather Pharmacology, having introduced opium, mercury and various minerals into medicine as well as having discovered the element hydrogen. His radical medical theories and practices aroused the ire of the more conservative physicians who still followed the medical tenets of Galen.

Attacked as an eccentric—or worse, a lunatic—Paracelsus

believed that humans exude a "vital force" which surrounds the body like a "huminous sphere". He was a harsh critic of contemporary medicine, and his comments alienated him from his fellow physicians: "You poison the people and ruin their health, you are sworn to use diligence in

your art...but all your boasted science is nothing but an invention to cheat and deceive." (Regush, p. 3)

He also believed that human beings are composed of seven distinct principles, with the elementary (physical body) being the first, the sidereal (or astral body) the second, and others including intelligent, rational and spiritual bodies.

According to Paracelsus, all organic functions are caused by the activity of one universal principle of life called



Philippus Aureolus Theophrastus Bombastus von Hohenheim ("Paracelsus"), 1490–1541

archaeus. This is a spiritual essence, ever present and invisible, which may cause or cure a disease according to the body's condition. The archaeus, or liquor vitae ("life fluid"), constitutes the invisible man, "the invisible nutriment from which

the visible body draws its strength". (Regush, p. 9). The vehicle for the archaeus is the mumia, and the most universal form of the mumia is the aether, although plants, animals and other substances can also act as conveyors of the life force.

"The archaeus is of a magnetic nature, and attracts or repulses other sympathetic or antipathetic forces belonging to the same plane. The less power of resistance for astral influences a person possesses,

the more will he be subject to such influences. The vital force is not enclosed in man, but radiates (within and) around him like a luminous sphere (aura) and it may be made to act at a distance... It may poison the essence of life (blood) and cause diseases, or may purify it after it has been made impure and restore the health." (Paracelsus, Paragranum; translated by Franz Hartmann)

The archaeus is an essence that is contained in the nature and character of all beings and is equally distributed throughout the human body. It contains the elements of all cosmic influences (stars, planets, Sun, Moon, etc.) and therefore enables these cosmic forces to influence the invisible body of man.

"All diseases, except such as come from mechanical causes, have an invisible origin, and of such sources popular medicine knows very little... Some (physicians) poison their patients with mercury; others purge them or

bleed them to death. There are some who have learned so much that their learning has driven out all their common sense, and others who care a great deal more for their own profit than the health of their patients." (Regush, p. 10)

According to Paracelsus, control of the

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mumia of an animal or plant enables a person to divert the flow of archaeus to its own uses. These "lower life-forms" often assimilate the disease of humans, thus relieving the patient. When the lower life had either assimilated the foreign mumia from the patient, or itself died from this mumia, complete recovery resulted. Many years of investigation were needed to determine which herb or animal most readily accepted the mumia of each disease.

Paracelsus also discovered the occult properties of the magnet and founded the School of Animal Magnetism. These ideas would come into fruition centuries later with the theories of Dr Mesmer.

In the 19th century, Paracelsus's theories on the seven bodies of man and

the liquor vitae were embraced by the Theosophists, who called this subtle force prana and the "sidereal body" the "astral body".

Paracelsus was possibly one of the most underrated minds of the Renaissance.

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Baron Karl von Reichenbach (1788–1869)

arl von Reichenbach, born in Stuttgart, Germany, was a scholar of high merit with doctorates in natural sciences and theology. He also made contributions in the chemical,

geological, metallurgical and meteorological sciences. The baron established ironworks in Baden, charcoal furnaces in Hausach and Baden, chemical works in Blansko, Moravia, steelworks in Türnitz, Austria, and blast furnaces in Gaya, Moravia. He also discovered paraffin, kerosene, phenol, creosote, picamar and many other substances which

were eagerly embraced by the chemical, industrial, food and medical industries, making him a very wealthy man.

Reichenbach became interested in studying the powers of people he referred to as "sensitives". Around 1850 he published his Researches on Magnetism, Electricity, Heat, Light, Crystallisation and Chemical Attraction in their Relation to the Vital Force, based upon these studies. The baron was also fascinated with people who were sleepwalkers or suffered from "night cramps" which had no apparent cause. He studied the theories of Dr Mesmer and determined that these maladies were of a physical, not emotional, nature and could not be cured by hypnosis. Mesmerism did not involve hypnotic suggestion at all, but



Baron Karl von Reichenbach, 1788-1869

channelled a mysterious energy which passed between the practitioner and patient, he determined.

Reichenbach tried to formulate a theory for these maladies, including electric, magnetic and allergic, but they all fell short. He was intrigued that many of these people were also able to perceive light emanating from crystals when enclosed in complete darkness. The one common factor seemed to be a reaction to moonlight, so Reichenbach set up an impressive laboratory in Castle Reisenberg in which he could study dozens of sensitives.

He discovered that many of these sensitives had an allergic reaction to moonlight, especially in the red and green spectra. They were also able to feel the effects of moonlight from the castle's interior, leading Reichenbach to hypothesise that moonbeams carry an energy which is independent from light energy. Only the protective layers of woollen clothing, leather and piles of paper were able to block out the effects of the moonlight upon these sensitives.

Moonlight, especially in the red range,

caused somnambulism and other maladies like cramps in some sensitives. They required the cooling rays of violet sunshine to counteract these unpleasant sensations. Sleepwalkers, on the other hand, were craving moonlight, which forced them into their nocturnal wanderings. Reichenbach was able to expose his subjects to the rays which they were deficient-either positive moonlight or negative sunlight-in order to treat their maladies. He also discovered that humans have positive and negative polarity within their bodies.

Reichenbach postulated an energy which contains the properties of light, gas and even fluid so it can penetrate far beyond the reaches of each property. He called it *Od* energy, and believed that the odic force permeates the universe: "Od is a cosmic force that radiates from star to star, and has the whole universe for its field, just like

light and heat." (Regush, p. 30)

The odic field can be conducted through wire at 13 feet per second, depending on the wire density rather than conductivity. Some odic fields are focused as light through a lens, while another part of the odic field can flow around.

Reichenbach summarised these

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properties of Od:

- Sensitives feel effects of it in moonlight.
- This conducted energy is not light itself but can be carried by light beams.
- This can produce physical sensations in sensitives, such as cramps and sleepwalking.
- It can be absorbed and conducted along metal wires.
- It is neither electrical nor magnetic energy.
- It becomes radiant when discharged from points across space.
- Matter could store this energy for prolonged periods.
 - 8. Mirrors could reflect currents.
- All sensitives give similar, independent reports.

In his special darkroom in his laboratory, the baron studied the various qualities of Od energy from the Sun and the Moon. Pure sunlight produced the strongest odic emanations, while refracted sunlight was weaker. Sunlight contained a negative polarity and moonlight a surplus of positive energy. Glass-refracted sunlight was coolest at the violet end of the spectrum and irritating at the red band. Depending on their personal energetic deficiencies, different people desired specific colourations.

These celestial odic forces also inhabit the sky, planets and stars, he discovered. Sensitives were able to feel soothing, cool sensations from the Milky Way and unpleasant warmth from the planets. Jupiter became unbearable for some sensitives, leading Reichenbach to speculate that the stars have a cool polarity and the planets a warm polarity.

Reichenbach studied the various manifestations of this vital force in its relationship to electricity, magnetism, light, crystals, metals, water and chemistry. Metals and minerals emanated their own colours and were affected differently in solar and lunar light. Water absorbed odic forces in sunlight and moonlight, manifesting different tastes from "cool" to "nauseous". He showed the Od's connection to the phenomenon of waterwitching or dowsing, Mesmerism and similar psychic subjects.

Crystals created the strongest odic emanations in the mineral world. The sensitives were not only able to see colours, but also had physical reactions such as muscle cramping, tetany, wakefulness or deep sleep. Metals conducted with crystalline Od produced powerful shocks to the sensitives.

Reichenbach's English translator, Dr Ashburner, produced several remarkable crystalline Od detectors, with eight or nine large mountain crystals of quartz wrapped in great silk-insulated coils. When enclosed with a platinum "keeper", they produced an odic charge of shocking power. The baron speculated that

Reichenbach studied the various manifestations of this vital force in its relationship to electricity, magnetism, light, crystals, metals, water and chemistry.

crystalline Od provides crystals with a vital, living force.

In Reichenbach's experiments, the vegetable kingdom was shown to give off powerful Od. Copper wires were wrapped around different plants, producing various odic reactions of cold and hot. Most of the blooms were warm in the stem and cold in the flowers, leaving Reichenbach to hypothesise that the warm sections were displaying accelerated growth rates. Vegetative odic force determined the medicinal efficacy of a plant, as every plant had its own vibration.

Reichenbach's sensitives were always able to see auras around magnets and often around people. When the baron created a rooftop laboratory of large motal plates, wire braids and solid wires conducting down into the experimental chamber, he was astonished to find that he was also able

to view the odic force as a natural phosphorescence which connects all things together. This force, a "self-luminant", was seen as not an inert force but a personal force which could influence observers.

The baron studied the aura and spoke of its "radiant light which, undetected, sweeps into space". He noted the differences between male and female auras, as well as those from people of different ages and temperaments. Sensitives were able to diagnose illness in the nuras of others and could even look into the auric bodies and anatomical chambers of others, observing illness and even detecting "lesions" and "dark markings".

In 1861, Reichenbach discovered that lens-focused Od light could produce images on daguerreotype plates. These odographs were made by the Od light projected from crystal points, fingertips, magnets, metals and chemicals, sometimes showing the transfer of Od light from one material to another. Lenses were used to

intensify these effects in certain plates—a method used later by Dr Kilner and Semyon Kirlian.

Baron Karl von Reichenbach's forgotten research laid the foundations of later disciplines such as psychology, radionics, aura photography, energy medicine and new-age modalities such as crystal and colour therapy. He was one of the 19th century's most brilliant, but forgotten, geniuses.

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Karen Mutton, BA, DipEd, is the author of Pioneers of the Aura (2007), from which these edited extracts are taken (the ebook is available from her webpage http://www.karenmutton.com/rampa/pioneers.html). She has a passion for ancient history, alternative medicine, geology, astronomy and esoterica, and has travelled the world visiting important archaeological sites. Her previous contribution to NEXUS was "T. Lobsang Rampa: New Age Trailblazer" (vol. 13, nos 2-3), extracted from her e-book of the same name.

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Spin-field Generator

By Alexander A. Shpilman

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Everyone knows that elementary particles can have the following properties: electric charge, magnetic dipole moment, and the moment of quantity of motion, i.e. spin, and these properties are connected with each other. The electric charge manifests as electric field in the space surrounding this particle, the magnetic moment manifests as magnetic field, and the manifestation of spin can be seen as the hypothetical 'spin-field'.

What is spin?

The spins of electrons and protons are considered to be connected with their moments of quantity of motion. But since this conception contradicts the prohibition against faster-than-light velocities, spin is therefore considered to be just a quantum-mechanical value. So, we know that there exists the physical value called 'spin'. If in any substance the spins of particles have a preferable direction, then this is interpreted as spin polarization of the substance. Every substance creates a spin-field in the space surrounding it when polarized by spins. (This field is also called 'torsion field' or 'axion field' in different works).

How is it possible to produce the spin-field and how can it manifest? Since the spins of elementary particles can be a source for the spin-field, we can consider that a spin-field can be produced as a result of spin polarization, i.e. the selective orientation of spins in space. The simplest way to achieve a selective spin orientation is through the mechanical rotation of objects. Thus, the spins will be oriented along the axis of rotation.

Barnet applied this method in his experiments when he observed the magnetization of a ferrite rod as a result of the rod's rotation. Since the spin is connected with the magnetic moment, the spin-field produced as a result of selective spin orientation manifested itself as magnetization of a ferrite rod.

But the effective creation of a spin-field using this method has several problems. Since the orienting moment of gyroscopic forces is proportional to the vector product of the gyroscopic moment and the angular velocity vector, then there is an absence of selective (by sign) orientation effect on the spins of particles oriented parallel to the rotation axis by the gyroscopic forces. Secondly, the magnetic fields produced as a result of spin polarization will orient the particles of which the rod is made (electrons and nucleii) not by their gyroscopic moment, but by their magnetic moment. The third problem is that the spin-field will be produced in the same space as the magnetic field, thus, it will confound the analysis of the spin-field.

These problems can be solved in the case of rotation of objects made of substances having anisotropic properties (e.g. electromagnetic properties.) The anisotropy should be directed with some angle in respect to the rotation axis (this angle should be greater than or equal to the angle of the spins' precession in respect to the axist of anisotropy). Thus:

At first, it is necessary to orient the particles along (with respect to) the object's axis of spatial anisotropy. And this axis of anisotropy must be oriented with some angle with respect to the axis of rotation of the object. As a result, we can provide the necessary gyroscopic moment that affects the spins of particles of which the rotating substance is made (this gyroscopic moment is proportional to the vector product of the gyroscopic moment and the angular velocity of the spin vector of the rotating substance, i.e. it is proportional to the sine of the angle between them, it has the maximum value if the angle is equal to 90 degrees and the minimum value if the angle is equal to zero, and it also increases with the increase of the angular velocity of rotation). Thus, we can increase the quantity of the selectively oriented spins of this substance.

Secondly, it is necessary to use the anisotropy of the properties of substance (space) whose effect is greater than the substance's electromagnetic polarization that originates from it's spin polarization due to the dipole and quadrupole moments of this substance. Thus, as a result of orientation of EM-properties in some angle with respect to the rotation axis, we can achieve a separation of the spin-field and the magnetic field in space due to the rotation of the vector of the EM-polarization of the substance with respect to the spin-polarization vector.

An increase of the effect of selective orientation of gyroscopic forces, spin polarization, and the strength of the spin-field, can be achieved with an increase of excess of gyroscopic forces over orienting effects of other external and internal forces (electromagnetic). The particles (electrons and nucleii) are not in equal conditions in real substances and they are always in the process of thermal

motion, therefor the optimal values of the angular velocity, the anisotropy of properties, and the angle between the axes of rotation and anisotropy should depend on the parameters of the material and on the nature of physical construction of the device.

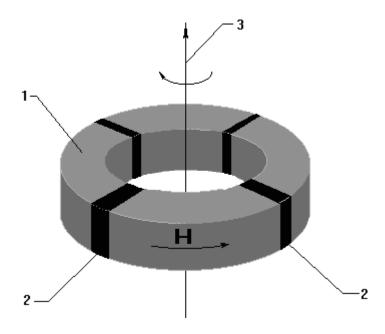
Nevertheless, the angle between the rotation axis and the axis of anisotropy should be equal or more than 30 degrees according to the experimental data.

Due to external sources, it is possible to achieve an anisotropy of substances in practice, e.g. the external (electromagnetic) field that does not slow down the rotation of the active elements of the material employed. It is also possible to use the inherent anisotropy of this substance that is due to it's crystal structure, the concentration gradient, the deformation of crystal structure, etc. and it is possible to use both variants.

An example for implementing this method is proposed below.

This is the diagram for the spin-field generator.

The generator consists of a rotating hollow cylinder made of ferrite-magnetic material with the axis of rotation coinciding with the cylinder's main symmetry axis. Four (wedge-like) permanent magnets are inserted into the cylinder. The magnets are magnetized perpendicularly to their own plane. The cylinder can take the form of either a flat ring or a tube. It is possible to cause the cylinder's rotation (to create the motor) with different methods, but it is necessary to take into account that external EM-fields, and the materials used in the motor can alter the properties of the spin-field significantly.



One of the possible variants of implementation of this method consists of:

- 1. Ferrite ring 20x12x6 mm
- 2. ferrite-barium magnets,
- 3. the rotation axis.

The ring should rotate counterclockwise with a velocity of several thousands revolutions per minute. Magnets inserted into the cylinder should create a magnetic field directed against the direction of rotation. The elements of attachement and cyliner-rotation (the engine) should be made of non-magnetic materials. The equipment should be placed at a distance of ten cylinder radii in a direction perpendicular to the cylinder axis in order to prevent interference. The attachment and equipment elements are not shown because they don't affect the radiation in the case of the fulfillment of the above mentioned requirements . Nevertheless, it is recommended that the following materials be used: silver, cadmium, aluminium, wood, rubber glue.

The experiments with the active spin-field generators revealed the following results:

The spin-field does not interact with the crystal lattice of substances. Thus, it has strong penetration ability (it propagates through both ferroconcrete and lead). Isotropic substances that could screen the spin-field were not found in the experiments. Only zinc and steel can produce a delay in the propagation, becoming a source of a spin-field themselves. Basically, the interaction of a spin-

field and the transfer of energy of spin-waves is observed in the case of the resonance interaction with the spins of electrons and nucleii of matter. Thus, the effective control of the orientation of spins of matter is possible, and this is a completely new method for the control of its physical and chemical properties. This theoretical hypothesis was confirmed experimentally. Interesting results were achieved when producing effects in biological objects with the spin-field radiation. Some parameters of this radiation can provoke an increase of the 'grow energy' of plants and an increase of animal's immune systems.

The spin-field cannot be detected by ordinary detectors. In some cases (with the special elucidation) the spin-field can be seen without use of any instruments.

The spin-field produced by the generator described above is concentrated in two opposite beams propagating along the rotation axis at a distance of tens of meters. These beams can have four different attributes depending on the mutual orientation of magnetic induction vector and the direction of motor rotation. The beam that propagates along axis 3 in the diagram is the most harmless for man. Nevertheless, it is unsafe to be exposed to this beam for more than several minutes. When the rotation is stopped, the intensity of spin-field decreases to some constant value that can be retained for several weeks, i.e. the spin-field (and it's influence) can remain even when the generator is turned off.

Eric Laithwaite was a genius with a since of humor!

Below is a section from one of his works, which was sent to me by a man in Japan. Unfortunately, I was unable to find out where this section of work came from, nor could I contact the gentleman who sent it..

Consider a wheel mounted on the end of a right-angled shaft and forced to precess in the plane of the bent shaft about an orthogonal axis through the end of the shaft remote from the wheel. If the wheel is large and spinning at high speed it may take considerable torque to force such a precession to take place. The fact that torque is being applied in the direction of motion means that work is being done continuously on the wheel and axle, even though it rapidly attains a steady precessional speed with no acceleration. Where then does the energy go, on the assumption that the wheel is in a near-perfect bearing, such as a gas bearing? The answer must be that the wheel's speed increases. The next question is the, "By what mechanism?" – for once again we appear to break the first law of dynamics in applying spin torque to the wheel through a free pivot. Once again the answer has to be - "By radiation."

But what kind of radiation? Certainly not electromagnetic, for there are no magnetic fields or currents in the system. Let us therefore define it as 'inertial' or 'spin radiation' and it should be possible to cause one force-precessed wheel to transmit a torque through space to another spinning wheel.

If that be true it is extremely likely that this kind of radiation is bombarding the earth from outer space and should be capable of collection:

Is this the prize that Tesla promised? His hopes of 90 years ago and his promise of 50 years ago have been seen to remain a mystery – but perhaps only until now!

You can read more about Eric Laithwaite's work on the Internet. Below are two reference to his work:

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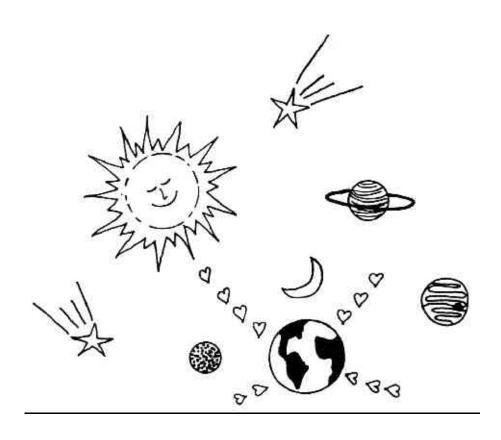
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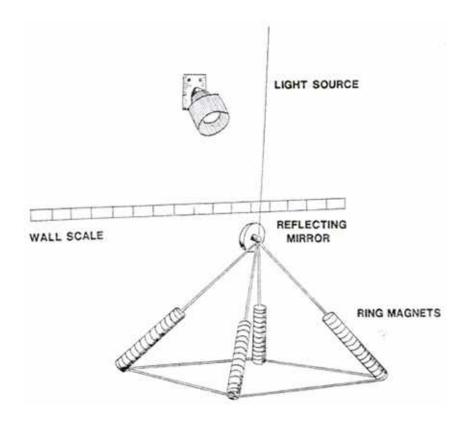
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ABOUT THE AUTHOR

Buryl Payne holds an M.S. in physics, and a Ph.D. in psychology, both from the University of Washington. This book is a blend of those two fields. Buryl Payne gave General Mills the idea for the Granola Bar, starting a trend in nutritious snack bars, he started the company that became the first biofeedback company, and later designed an electronic muscle tester, contributed information to support the magnetic basis of astrology and extended the work of others to the cyclic nature of wars, uncovering the physical mechanism, means of predicting them, and one way of quieting them. He is an out of the solar system thinker who's works will probably influence theories of human nature for the next 1,000 years.