THE DIVINERS BIBLE

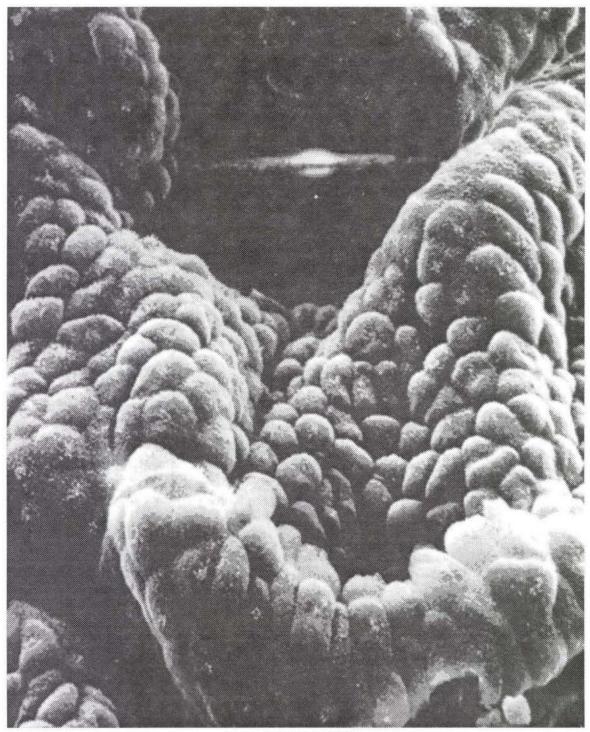
VIBRATIONAL SCIENCES & RADITIONAL PARAPHYSICS



ÆTHERFORCE

DEDICATION

This work is dedicated to the conscious evolution of those of my students for whom it is written and who will persevere with it until light breaks through. Rather than mention specific names I feel they know who they are and will eventually write their own versions of Supersensonics. This science already has a long history from before the times of the prophets and therefore the work is dedicated in advance to the prophets of the coming age of light which shines in the darkness. I dedicate this work to that light of consciousness who is the God of all religions and the inspirer of all science.



THE CAVE OF BRAHMA

The central part of the brain photographed from the inside, showing the walls of the third Ventricle. This seat of the divining faculty and the inner vision is related to the sensitivity of the entire nervous system which functions as a wave-guide for seven different levels of consciousness. This book is about the polarization of the brain fields through the evolution of the thalamus, which provides the walls of the cave, the hypothalamus, which provides the floor, and the choroid plexus, which provides the roof of the seat of consciousness. The ability to sense on levels beyond the normal physical senses is the first step to the knowledge that the entire universe is vibrating in our consciousness as a hologram. These concepts are taken further on to the other levels of consciousness in the author's book "Nuclear Evolution" which should be read either before or in conjunction with this one, since there are subtle levels of ego interference which inhibit the faculties.

ACKNOWLEDGEMENTS

This is one of those books that travels around in the author's head for years before it is written; eventually two factors have decided that the time is right. One is an awareness of an expectant and receptive readership and the other is the availability of material help from the group of intelligent and willing students to whom it is dedicated. Their hands and feet have aided the production voluntarily without any financial reward and their enthusiasm for the work has spurred me on to complete it.

For the major task of typing the manuscript, my grateful thanks are due to Pamela Osborn who, without complaint, has daily deciphered my handwriting and enthusiastically typed and checked every word in the book. Then there are those students who have helped to sort the original material, to refine my Supersensonics drawings and have given of their time and money to get it published. Among these are Deborah Rozman, Margaret Draper, Wendy McFadzen, Robert Massy, Daniel Hime, Jeff Goelitz and Rod Glasgow.

Acknowledgement for the half-tone photographs and for hours of stripping the printing plates goes to my son John, while untold credit goes to my co-worker and wife who has given me freedom from all other tasks.

Posthumous acknowledgement is here given to my friend and colleague Noel McBeth, who bequeathed to me all his translations and all his notes on radiesthesia, and to those French authors who inspired him between 1935 and 1970. The initial sifting and classification of these notes was done by Dr. Myron Allen and for this generous donation of his time and painstaking effort I amindeed grateful as I am for the labors of Deborah Rozman who typed out the newly classified material.

For permission to quote extensively from his life's work I am indebted to Professor Vasco Ronchi of the National Institute of Optics, Florence Italy, whose research findings have provided a scientific base for my own metaphysics of vision.

In acknowledging my immediate indebtedness to those who have helped with the production of this book I have become aware of all those who have inspired me down the ages to search beyond the known. For this inspiration my gratitude and respect are offered to Jesus the Christ, Krishna, Gautama Buddha, Pythagoras, Einstein, Newton and Dirac. My thanks go also to those brilliant thinkers of ancient times who invented mathematics and discovered number, and to those many quantum physicists who opened up the microcosm in which the whole universe is reflected.

I am conscious that there are a number of illustrations cut out and collected over the years, whose origin has been lost and so have not received credit. I have adopted the view that, like this work, they were all inspired by and belong to God and that in giving credit for them to Him I will be forgiven.

Through the love and wisdom of this ONE who is in all and everything great and small, I have written of divining as the "divinization" of Supersensonic Man. My thanks go to Electromagnetic Man on whose shoulders Supersensonic Man can stand and view the vast cosmic intelligence at work.

Thanks go to my invisible Guru who is always the joyfulness with me in the heart.

Thanks-giving would not be possible without acknowledging the eternal debt to consciousness itself and the ONE who invented it, who is working through all of the above helpers - Supreme Brahman, whose names and manifestations have no beginning and no end. Christ calls it Father and Hindus call it Mother and I call it THE ONE. May I thank the reader who uses Supersensonics to directly experience this ONE.

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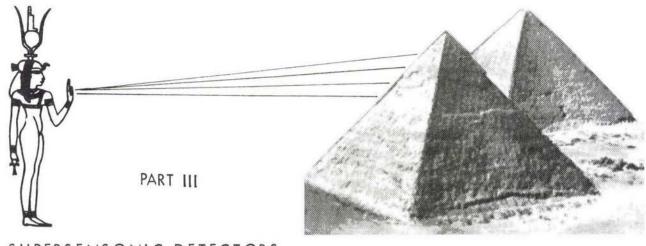
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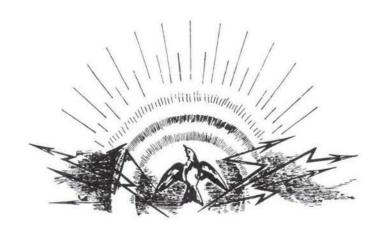
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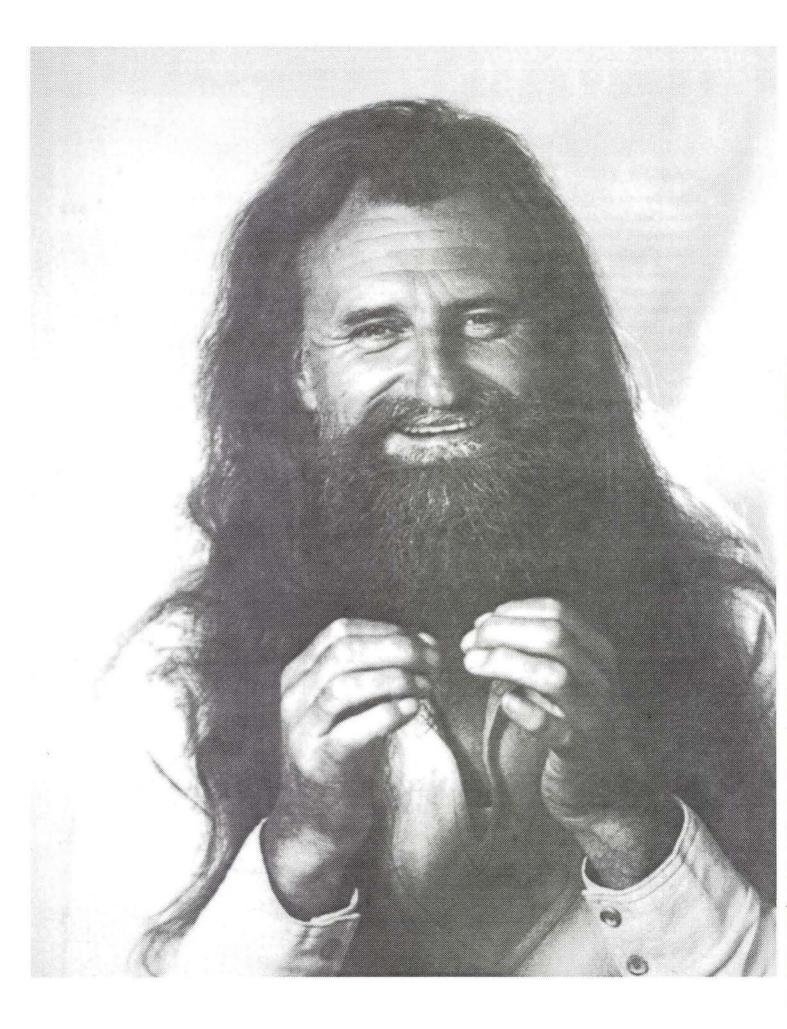
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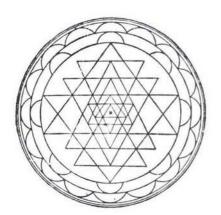




CONCEPTS OF SUBTLE MATTER

A Perspective on the Investigations of Christopher Hills

by Victor Beasley, Ph.D



SCIENTIFIC & METAPHYSICAL VIEWS OF "ETHER"

Most investigations of possible subtle states of matter lying beyond the scientific detection of the atom seem invariably to involve a postulation of "ethers" or some analogous concept. Whereas the Delawarr radionic researchers advanced the idea of a "prephysical" state of matter, others have spoken in terms of "universal link", "humors", and "ethers", in order to identify a level of reality which is thought to underlie, and to necessarily precede, the scientist's domain of physical manifestations.

The "ether" of science, as a carrier wave for light, was supposedly disproved by the Michelson-Morley experiments in the 1900's. It should be noted, however, that the scientist's view of "ethers" differs significantly from the metaphysician's awareness of etheric energies. Whereas the former regards "ether" as a conceptual construct to be proved or disproved by scientific methods or investigation, the latter, by means of supranormal faculties of direct perception such as clairvoyance, experiences etheric substances as tangible reality, just as any other tangible phenomenon of nature which is perceived by properly refined corporeal senses.

Hence, the metaphysical investigative approach is to accept the existence of subtle fields in order to find out about them, to consider them as reality until disproved otherwise; this is perhaps the gap that prevents physicists from experiencing any energies other than the ones they can conceive of in their own minds. Nevertheless, there are among leading physicists and mathematicians some outstanding exceptions to the standard scientific approach, individuals who regarded undiscovered energies as real, even though as yet unprovable with mathematics. This group is led by Einstein, Roentgen, and Zender, all of whom endeavored to reach an acceptable theory of more "subtle matter" composed of gravitational waves or "ether".

THE ARCHETYPAL WORK OF LOUIS TURENNE



Additional insight into the nature of subtle matter is provided in the prolific radiesthesia work of Louis Turenne, as translated by Noel Macbeth. Turenne, writing during the second decade of this century and reflecting the consensus of radiesthetists even of the present 1970's, held that everything in the universe vibrates and that these vibratory influences are naturally transmitted to the all-pervasive ethers of the surrounding atmosphere. It is explained that the vibratory patterns derived from a given substance indicate its inherent qualities and that these can be registered, via the human body, as the involuntary movements of a pendulum, which is held between the thumb and forefinger.

Turenne went further in elaborating his concept of subtle matter. He felt that the vibratory emissions of all physical substances were capable of producing a pendulum response and that the influences did not have to be as strong as that, say, of radium emanation. He pointed out, in fact, that according to physics, all matter is constantly dematerializing and disintegrating and that corresponding radiations are being produced with resulting wave bombardments which the pendulum aids its operator to register. In the case of radioactivity, apparently the operator picks up effects connected with the release of helium, argon, hydrogen, carbon gases, light photons and so on. The vibrations resulting from atomic disintegration are known as "pendular waves" or "standing waves" which are thought to set into motion other etheric substances present in the atmosphere. Moreover, Turenne claimed that the earth's magnetic field is itself a force which can set up vibrations in a substance without the latter being in any way radioactive, as defined by nuclear physics.

Other Turenne discoveries are also relevant to our present discussion. He found that not only did all objects emit vibrations detectable by pendulum radiesthesia methods, but that the presence of radio waves, too, could be registered by the same means. Additionally, he established that each of the 92 elements in nature emitted what could be regarded as a fundamental vibration which could be transmitted and impregnated into neutral powders (thereby creating a "witness") and that having done this, the emissions of the powder would then vibrate in resonance with the original fundamental frequency of the element. Further, Turenne noted that all areas of the earth are subjected to solar radiation which strikes the earth and is then reflected upwards, carrying along with it the combined effects of whatever mineral deposits might be present in a particular geographical area. It thereby seems that solar radiation provides a kind of carrier frequency for the inherent oscillations of other naturally vibrating sources.

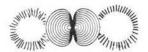


But an even more provocative contention of Turenne's, relating to the existence of subtle matter, is his postulation that solar radiation itself owes its propagation to a higher cosmic force which acts as a carrier for light waves. It is at this point where the original insights of Christopher Hills take over with his scientific view of the supersensitive perception of the universal field.

It is known to contemporary science that cosmic rays are carriers of large amounts of energy, although scientific detection indicates that these rays break up into many particles on contact with atoms in our atmosphere. Consequently, thus far, scientific attempts to isolate an "ether" have proved inconclusive. But the Supersensonic operator by proper "tuning" is capable of detecting the presence of the carrier through the instrumentation of expanded human sensitivity. It should be noted, therefore, that just as scientists would claim, and rightly so, that one cannot make scientific judgements without having been trained in science; so too can it be said that one cannot sense subtle radiations as in radiesthesia without first having received proper training. For both systems of investigation have their own validity which can only be expressed by those proficient in the respective methodologies.

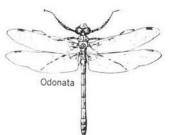
PERCEPTION OF RADIATION & THE SENSES

VIBRATORY RESONANCE, THE BASIS OF SUPERSENSONICS.

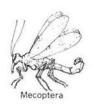


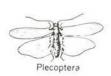
Before going on to discuss some of the known and probable mechanisms involved in "ray sensing", we should pause to reemphasize, using the insight provided by Turenne, that Supersensonics relies on the operation of a series of fixed natural laws. These laws and the proofs required to substantiate them involve the knowledge and techniques of conventional physics, as well as that of certain "para-physical" concepts which are not generally embraced by standard scientific approaches. Thus, whatever other complexities of Supersensonics are brought forward, remember that from a vibrational standpoint, the fundamental concept is that of the resonant interaction between frequencies: the frequency of the human organism is "tuned" to the frequency of the incoming wavelength of the substance or the source being investigated.

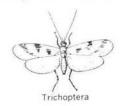




Considered biologically, Supersensonics is no more wonderful than other forms of perception by hand, eye, or ear. The radiesthesic faculty in man appears to be the same used by homing pigeons, dogs, and even moths, as a means of finding their way back home or of finding a mate. In fact, an examination of the antennae of insects reveals that one antenna is negative and the other positive and that they are used for vibratory wave selection within the insect's environment. It is since the advent of modern Supersensonics that we know that storks never nest above an underground stream, and that anthills are almost always over one.









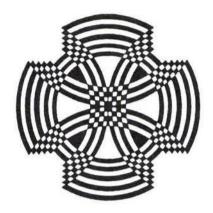
HUMAN BIOLOGICAL MECHANISMS

As previously emphasized, the evidence of Supersensonics suggests that every piece of matter whether mineral, living plant, or living animal, produces its corresponding radiation perceptible to the Supersensonic operator. All radiations, we are instructed, impinging upon man, behave the same, regardless of whether they are animal vibrations, radio waves, or solar oscillations – in each instance the Supersensonic operator seeks to "tune" his own physical organism to the rate of vibration of the incoming signal.

By means of various training exercises, involving the use of pendulums, rules, dials, etc., which are detailed in other sections of the present Volume III, the inherent human biological faculty of "ray sensing" can be extended. The more elaborate Supersensonic devices employing aspects of electronic circuitry are mentioned in Volume 1 of the present series, and are associated with the works of George Delawarr and Mark Gallert.

The involuntary movement of the pendulum as it is being held by a thread between the operator's thumb and forefinger, represents a neuro-muscular reflex reaction of the body's sympathetic and parasympathetic nervous system to the presence of the particular vibration being sensed. We can, in fact, offer a tentative biochemical explanation for this neurological response.* It is known that the nerve dendrites and cells release ATP (stored chemical energy in DNA) at very low levels of radiative input, theoretically calculated at a quanta of four electrons.

* See "Nuclear Evolution" by Christopher Hills, published by Centre Community Publications, 1968.



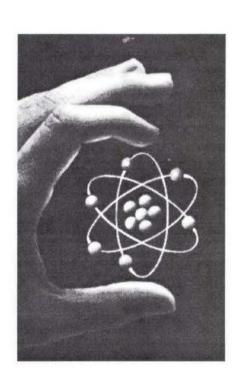
There is no instrument yet made by man which can measure energy changes anywhere near this low threshold. Conversely, on the macro scale, there are no scientific instruments which can directly measure the internal heat of the sun at 16 million degrees. But in both micro and macro situations, exact mathematical calculations can reveal the true quanta. It is by such means then that the mechanics of conventional bio-chemistry and mathematics aids in broadening our understanding of the biological system as a sensor of "paraphysical" vibrations.

Parenthetically, it should be mentioned that the Supersensonic operator is always influenced by what he happens to be looking at. The eye as a specialized part of the body's sensing apparatus, appears to send out a carrier wave upon which the waves of the object under observation travel. Best results are achieved when the operator keeps looking at the instrument in his hand.

MENTAL & SUPRA-MENTAL EFFECTS
IN SUPERSENSONICS

MENTAL INTERVENTION

Thus far we have discussed the subtle fields of matter and their perception by the human organism in fairly straightforward physical terms. But a fuller comprehension of Supersensonic functions would not be complete without at least a cursory and introductory mention of mental and "meta-mental" states which involve the human operator. In setting forth these concepts, the writer cannot claim their originality, nor to have achieved mastery of the mental and consciouness realms spoken of. The preponderance of the ideas which follow were either dictated by, or inspired by, Christopher Hills.



From our previous discussion of L-fields and the measurable (by the EEG) brain-generated frequencies, as presented in Volume I of this series, it will be recalled that there exist energy fields corresponding to mental activity and varying states of awareness. It turns out that the electro-vibrations thus created by an individual's thinking and feeling are capable of interfering with the results obtained by the Supersensonic operator. Apparently, most mental interference with Supersensitive perception stems from the operator himself in the form of doubt, wishful thinking, intellectual analysis, tenseness, or emotional involvement with the particular object or subject under investigation. One explanation given is that the field created by mental and emotional processes interferes with the body's reception of the wave-field, or standing wave, being produced by the object under investigation. For this reason the operator is admonished to remain mentally neutral as regards results, to be in an indifferent but receptive state of mind, to be sure that the pendulum movement (or lack of it) does not result from some adamant mental predisposition or self-suggestion towards desired ends.

Yet, by contrast, there is another aspect of Supersensonics wherein the intervention of the mind is both desirable and necessary. Brief mention was made earlier of Turenne's discovery of making a "witness" by duplicating an original vibration in a neutral powder. That way a natural vibratory affinity exists between a given frequency and its "witness" or similar frequency. Consequently, if an operator is trying to identify, say, copper from among several other elements present, having in his hand an actual sample of copper should produce a pronounced pendulum response owing to the natural resonance which exists between the copper being sought and the copper sample ("witness") held in the hand – this is as applies to a "physical witness".

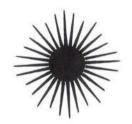
But beyond the domain of physical energies lies that of mental energies, a domain which, as suggested in Volume I, is very real indeed. Several years ago the Delawarr researchers, using a specially designed camera, found that thought energy could be photographed. Under test conditions it was revealed that the thought of copper, or of any element, consistently produced on a photographic plate, a specific visual image related to the physical, atomic reality of copper. This, then, suggests that the mind has the ability to create a "mental witness" through sympathetic vibrations in the thought world and to objectify this in testable results, i.e. in a photographic emulsion. The ability of Ted Serios and Uri Geller to reproduce such photographs "at will" without any special camera has been tested by leading scientific institutions such as Stanford Research Institute.



It has been found by Supersensonic operators that best results are usually obtained when the "physical witness" and the "mental witness" are used together. Hence, returning to our illustration of the copper, the operator should experience a maximum response in his search for copper with a copper sample in one hand, his pendulum in the other, and the thought of copper clearly fixed in his mind. Turenne and others have shown that a physical witness is not absolutely necessary and that the written word COPPER - or even a photographic picture of copper will carry the thought energy corresponding to the actual physical substance. Still other investigators claim that the "mental witness" only, produced by the operator, is often less effective than when paired with the "physical witness". According to them, the "physical witness" has the effect of raising the level of awareness, thereby enhancing the Supersensonic effect because of the alliance of thought energy with the physical stimulus.

"ABSOLUTE CONSCIOUSNESS" - THE GENESIS

Up to this point we have spoken of Supersensonics largely in terms of vibration, frequency, wavelength, etc. But shifting our level of diction to that of "thought energies" and "levels of awareness" puts us into a somewhat different plane of conceptualization; a sphere where we strive beyond science and even beyond the science of paraphysics and try to know the genesis of vibration, the cause of causes - the realm of consciousness.



From Christopher Hills, an accomplished radiesthetist and metaphysician, we learn that whatever physical or spiritual stimulus raises the intensity of consciousness to a sense of conviction, to a point of absolute certainty, that feeling which says, "this is going to work," will enable thought energy to manifest in the physical world. Consequently, human thought energy emitted with absolute belief seems to be the causal force for much that occurs in the phenomenal world.

It was, in fact, his investigations of various physical radiesthesia apparatuses which led to the realization that all "witnesses", dials, rules, etc. used in radiesthesia are really arbitrary creations of the mind, in the same way that yards, feet, meters, and seconds are arbitrary conventions based on nothing more than consensus. In order to discriminate this realization from the prevailing views that it is the sample which radiates a field which can be measured on a rule instead of in the field of consciousness, he has coined the name Supersensonics to describe a new approach to the nature of biological life.

The writer realizes that the reader of scientific persuasion might feel a bit uncomfortable with the undefined usage of such central terms as "mind" and "consciousness", for it is the practice in scientific inquiry to carefully define concepts before attempting to deal with them. The problem is, however, that not all spheres of

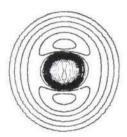


existence can be confined to the current "scientific methods" of investigation. Einstein himself in his later writings warns us of the futility of this method. Nevertheless, in the course of this exposition, Christopher Hills hopes to establish a basis for a theory of consciousness, to make the necessary conceptual distinctions and postulates and to illuminate as much as possible, the perspective taken.

As Christopher Hills explains it to me, according to our present scientific view, the mind functions somewhat like a computer in that the physical, bio-chemical relationship in the brain, the bio-electric signals travelling through brain dendrites and over nerve synapses, are recorded and stored in the form of energy in the brain cells. These kinds of physical events in the brain are controlled by the mind. Here, "mind" is seen as content and brain as form, since nothing exists in nature without form, i.e., you cannot have content by itself. Thus, form and content work together in the same way that brain and mind work together. If, for example, the brain does not get enough oxygen, the mind does not work.

Mind, as an apparatus manifesting consciousness, works according to certain laws which are discernable by the methods of physical science, which requires that all measurements be agreed to and observed by different individuals in the same way. But the problem with this "observer" is that there are various thresholds in the human perception of the manifestations of the universe. If we define as "physical" that which can be perceived by the human senses, then we should also say whose human senses we mean, since there are some persons who perceive sensations of things which others do not.

The demarcation of what is physical and what is not, is simply a line drawn by man and based on the awareness of the majority. Who is to say that what we presently regard as "meta-physical", "para-physical", and "spiritual" are really not an extension of our more well-known physical domain, another segment of a single universal continuum awaiting detection by expanded human faculties of perception? What the physicist sees when he observes the physical processes of the atom could well be just the proverbial "tip of the iceberg", the mere end product of a whole range of other processes about which we know nothing.



Just because a particular phenomenon works in a particular way does not mean that is how it is. All scientific quantitative measurements suggest only proportional relationships - not reflections of absolute, final natural essences. Quanta, direction of movement, spatial/temporal relationships, boundaries of statistical probability, and kinetic associations of atomic substances do not reveal what the atom is. Any definitive label, any verbal or conceptual construct applied to the observed phenomena of matter is the product of man's mind, a conditional device limited by the confines of an unproved linear system of linguistic symbols. If an atom were to speak for itself to man, in the English language, in an effort to reveal its essence and its origin, it would undoubtedly find its attempt stymied by the narrowness of human mental constructs, its efforts stunted by a restricting vehicle of symbolic expression.

The senses, then, are seen as a slave of consciousness - consciousness being that which interprets the signals received via the mechanisms of senses, regardless whether the mechanism in question is an atom, or the interlocking brain/mind system.

Senses are not activated by themselves; it is "consciousness" that always makes sense of the senses. In any process of human



observation consciousness gets involved - whether it is a scientific measurement in angstrom units or an ideological judgement of preference of one social system over another - these discernments exist only in man's consciousness; they are not found as naturally occuring phenomena in nature. Consciousness is not something to be grasped by a brilliant intellect or to wrap one's incisive scientific mind around. Consciousness has to be experienced by supra-mental modes of knowing. Whereas mind has laws, consciousness has no laws - consciousness creates its own laws, for it is absolute. Just as the physical energies of the brain form represent a different level or threshold from that of the mental energies of the mind content, so too is the mind separated from consciousness by a threshold of awareness.

To take a conceptual analogue, consciousness is somewhat like light. Light is no-thing until it strikes something, e.g. physical objects, atmospheric particles, air/gas molecules etc. Light is not quantized into matter when it is free and coursing through space. It is only quantized when it comes into contact with some substance that has form. Once light penetrates any form it begins to absorb energy; this changes its character from light to what we call electro-magnetic energy. Similarly, then, absolute consciousness is the resonant link between all systems in the universe.

Thus we conclude that human mental energies and all the paraphernalia of Supersensonics - pendulums, dials, rods, rules, etc. - are really just so many different expressions of consciousness, that ultimate and universal essence, that primordial motive force, that no-thing from which all things emerge, that omnipresent, omnipotent, omniscience which adheres all terrestrial kingdoms of material and subtle expressions into a single planetary being vibrating its own cosmic note. But, alas, at this stage of our evolutionary ignorance of the universal purpose, the human mind categorizes, constructs, dissects, and symbolizes and so sees separation - but the "consciousness" of the cosmos, the "isness" of it all, breathes through all spheres, unhampered, indefinable by most human standards of discernment.

Divining rod helps November 24, 1975 THE VALLEY PRESS Page 9 find loot

Sheriff's deputies are still scratching their heads over how a young Boulder Creek man, using a whalebone divining rod, managed to find the loot from the robbery at Johnnie's Market on November 8.

Officers, with the help of residents, combed the area for several hours looking for the moneybag dropped by the thief. Finally they gave up.

That's when Christopher Hills, director of University of the Trees in Boulder Creek, stepped forward to offer his services as a matter of "academic interest."

In about five minutes he had found the money sack, containing \$800 and returned it.

How did he do it? Rather then consent to an interview, Hills asked that he be allowed to write his own explanation. Others at the university also had a hand in the statement, which is printed below.

Before giving their account of the incident, here's more information on the robbery itself. The suspect in custody in connection with the crime is Robert Douglas Bradwell, 32, Half Moon Bay.

The suspect apparently hid out in the market and accosted Erick Seifert, butcher at the store, when he arrived at 7:50 a.m. to open up.

One thing led to another and Bradwell finally fled the scene on foot with the loot. A group of Boulder Creek residents helped run him down.

Here is Hills' explanation of how he found the loot:

"The University of the Trees is a correspondence school in meditation, self-discovery, scientific, and spiritual research. It is located in Boulder Creek. Each morning at 8 a.m. students who live at the university jog around a few blocks of Boulder Creek.

"On Saturday, the 8th of November, Robert Massy, physicist and student at the university, left his house to join the joggers and saw them standing among a crowd of people outside the post office. A man was being taken out of the bushes by police.

"Massy reports that "Christopher Hills, University of Trees director, told me he had seen the man creep past his kitchen window carrying a bag that looked just like one of his own. Thinking he had been robbed, he rushed out and yelled up the neighborhood with shouts of 'Thief! Thief!'

"Hills cornered the thief in the back of the Post Office yard and asked the postmistress to call the Sheriff.

"By this time, however, the thief had thrown away his gun and the bag of money stolen from Johnnie's Supermarket.

"After four hours of intensive searching, behind bushes, up trees, in various yards and on top of the post office roof, the police gave up. George Chekouras, deputy sheriff, gave his written permission for Hills and his students to hunt for the missing items through the science of divining with a rod or pendulum.

"Hills explained to officer Chekouras the process of divining and showed him the books which he and his students have written on this technique. He said if the sheriff's department would give a written statement before and after the experiment, saying how many deputies and civilians had looked for the bag of money and failed, he would find the bag. Chekouras gave the permission at 11:30 a.m. and Hills asked his students to start looking.

"Science has made common knowledge of the fact that atoms and molecules of solid objects are vibrating and that in vibrating they give off subtle energies.

The missing bag, therefore, would be sending out energy. One can selectively tune into a particular object by holding the thought of it and a picture of it clearly in mind.

"It also helps if one can hold a similar object to the missing one in one's hand.

"For example, if you are looking for money, then hold some money in your hand, too. In this case Hills conveniently held his own bag which resembled the missing one.

"The energy from the missing object is picked up by the nervous system of the diviner's body and fed into his finger tips where it is amplified and made visible by means of a pendulum or divining rod that moves in response

"Although people are aware of this technique to locate water or to drill wells, the use of divining to gain other information, like discovering lost objects or missing people, or to get ideas for scientific research, is not widely known. Nor is it known what 80 per cent of humanity has divining ability.

"Richard Welker of 9195 Glen Arbor in Ben Lomond, reports that he arrived on the scene with the hunt already in progress. Several students were using dowel-like wood instruments, pointed on one end and attached by a string on the other. When I arrived, the students using these pendulums had already pin-pointed the general area of the money behind a house on Pine street.

"According to Massy, a crowd began to gather, so he abandoned the attempt until things quieted down in order to make the search a valid experiment. Later when the crowd had gone away, the group of six were led by Hills, the director, using a divining rod made of two lengths of whalebone about nineteen inches long, fastened together at one end. The two pieces of bone, from a male and female whale, combine the two opposing electrical polarities of positive and negative energy which enhances the rod's response.

"On the sides of the rod are two magnetic needles that can be rotated to detect electrical and magnetic energies.

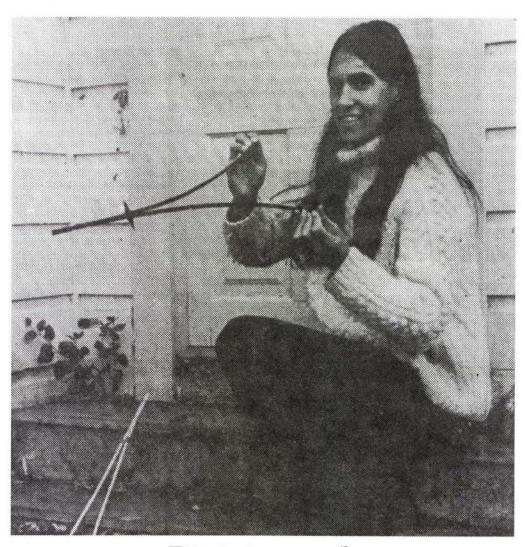
"According to Richard Welker of Ben Lomond, "Hills moved with great speed, first going over one fence then back again, then over another and finally into the thicket of thorny blackberry bushes where I heard him exclaim, "I've found it!" He smilingly pulled a satchel from the thicket of brambles, berries, stickers and vines, then took the bag to the Boulder Creek postmistress for validation.

"The total time between his arrival on the scene and his subsequent discovery of the missing bag was five minutes.

"Barbara Brimblecom, a postal worker, had been involved in cornering the thief earlier in the day. She was told by the thief at gunpoint to get inside the post office. She was not present at the University of the Trees search. "I did see them in the berry bushes," she says, "and thought he (Hills) had a stick in his hand. When he came into the post office, he opened a brown leather bag and showed me the County Bank zippered envelopes inside. I suggested that he turn the bag

into the sheriff, rather than return it to the supermarket. Hills turned the bag in and the sheriff signed a statement validating the divining experiment and reporting that Hills did find and return the missing money after normal methods of search had failed."

"Deputy Sheriff George L. Chekouras' police report on the case backed up what the statement said."



Divining rod

Debbie Rozman holds whale bone divining rod used in finding \$800 in loot from recent Boulder Creek robbery. The device was used by Christopher Hills, director of University of the Trees, which teaches various forms of meditation techniques. It took Hills only five minutes to find the loot. VALLEY PRESS PHOTO.

The Mercury

8★ SAN JOSE, CALIF., TUESDAY, NOVEMBER 11, 1975 21

Psychic Used To Recover Robbery Loot

By DON WILSON Staff Writer

BOULDER CREEK — Psychic Christopher Hills was credited here Monday with having recovered the loot from an armed robbery.

Hills and almost everybody else in the neighborhood were credited with having foiled the escape of the alleged robber.

According to the sheriff's report, Eric Seifert, 69-year-old butcher, showed up at Johnnie's Market shortly before 8 a.m. Saturday to open up the store. At the front door, he found an old-time friend, Harry Holmes, waiting to buy a box of candy in the market.

They went inside together.

As Seifert approached the meat department, a man later identified as Robert Bradwell, 33-year-old unemployed cook from Half Moon Bay, allegedly rose from behind the counter and demanded that Seifert give him the money bag he was carrying.

Seifert ran outside, chased by Bradwell, who caught up with him outside the store, poked a pistol at him and took the money bag with several hundred dollars in cash and a number of checks intended for deposit later at the bank.

Seifert tripped the bruglar alarm, alerting sheriff's deputies, and began shouting.

A number of people at a service station across the street saw Bradwell run down Pine Street and head toward the post office. The people from the service station gave chase.

Dean Mallard and Tim Ellis looked up and saw the fast moving parade zip through their backyard. They joined the chase.

Deputy Sheriff Bill Wulsing later described his arrival at a berry patch near the post office here: "The suspect was standing in the corner of an 8-foot chain link cyclone fence with a large number of persons yelling and screaming, there he is."

Also there was Raymond Rohrbough, 36, who was holding Bradwell, whom Deputy Wulsing described as "disarrayed and muddy."

But although the robbery suspect had been captured, there was no sign of the pistol he reportedly had used, nor of the money bag. A lengthy search by deputies and others failed to find them.

Hills, who lives near the post

THE AUTHOR DENIES
THAT ANY "PSYCHIC"
POWERS WERE USED.
THIS SHOWS HOW ALL
NEWS MEDIA HAS TO
"SENSATIONALISE"
WHAT 80% OF ALL
NORMAL PEOPLE CAN
DO IF THEY WILL ONLY
PRACTICE THE METHODS
OUTLINED IN THIS
BOOK OF INSTRUCTIONS.

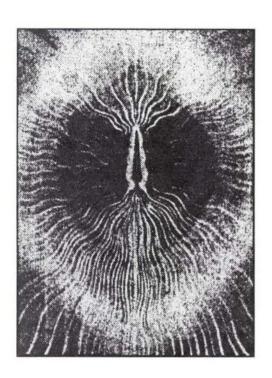
office and conducts a school which deals with psychic approaches to handling human problems, offered to attempt to locate the missing money bag "as a matter of academic interest."

Armed with a divining rod made of male and female whale bones and a set of magnets, he went through the area and found the money bag under a blackberry bush within about five minutes. He said he could not find the pistol, and surmised that someone must have picked it up.

He also said he didn't want any publicity about the finding of the money bag "because this always brings a lot of people down on us to help them find missing relatives and lost articles, and we have too much to do without that."

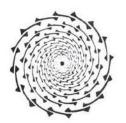
Bradwell was arraigned in Santa Cruz Municipal Court Monday afternoon, charged with armed robbery and burglary. He was being held in county jail in lieu of \$10,000 bail.

THE SCIENCE OF RADIATIONAL PARAPHYSICS



The science of Radiational Paraphysics which I have called SUPERSENSONICS goes far beyond sensational phenomena and our present concepts of energy. It goes far beyond the sensational in its other meaning which we constantly find in the claims of those who contact extra-terrestial intelligences, flying saucers and the spirits of departed kings and queens, scientists, and other earth people. Anyone who masters the science of SUPERSENSONICS can talk in their own thought language with any of these beings whether manifest or unmanifest in any part of the universe. There is no mystery such as pyramids, Bermuda Triangles, intergalactic communications or anything fascinating the consciousness of man which cannot be solved by Direct Perception in two minutes flat. All these trips into the sensational world of the so-called impossible, such as levitation, thought photography and teleportation become of little significance in comparison to the mystery of consciousness itself. This claim, that anyone can find out the answers to any question the human mind can think up in its imagination, is not an idle one, if you can develop a SUPERSENSONIC language with the cooperation of the ultimate intelligence of which you, and all these sensational aspects of energy, are an undivided part.

I have seen many of my friends sucked into sensational happenings and extra-sensory phenomena in the belief that it gives them more wisdom, but I have yet to see any real change or evolutionary advance in their consciousness, ego-structure, or understanding of ultimate reality. It has always seemed that they are looking for a "cop-out" from going the whole way by getting their entire consciousness obsessed by one brilliant facet of the immortal diamond which I call Pure Consciousness. Whereas SUPER-SENSONICS can explain any question by phrasing it in a "yes" or "no" format, humans crave more details and explanations. However, I observe with a heavy heart that these explanations and models, whether they be of atoms, energy, or psychic origin, do not give any real knowledge or understanding but remain just what they are - secondhand perceptions which attach new words and labels to old phenomena. To call something



"Electricity" or Energy and explain the way it works, does not tell us what it is. This is also true of everything else from flying saucers to thinking processes. To think that we are somehow wiser by having an explanation, whether farfetched or simple, is a self-deception even when it gives us powers over natural phenomena such as we acquire through science. We can have all these powers whether through science or psychic training and still be a complete dummy in knowing our own Self, its ego trips and its purpose here on earth.

Hence this is the author's appeal to students. Do not get your consciousness stuck in anything fascinating or compellingly sensational from a worldly point of view. You will not change the world through phenomena. You will only change the world when you change the inner-worlds of men and women. External phenomena cannot do this, however marvellous and miraculous. However many miracles you see and believe, you can remain evolutionarily stagnant and may even become more wise in your own conceit. Therefore be aware that SUPERSENSONICS has many levels, viewpoints and angles and that everything seems True from the angle from which it is perceived. From the angle of the sensational world of matter, social impact or psychic fascination with energy, the SUPERSENSONICS ultimate trip cannot possibly be seen or understood. By practicing humility and using the techniques herein for super-penetration of our own Being, we will transcend both sensation and phenomena.

The same

THE PERCEPTION OF UNSEEN WORLDS

In setting out this knowledge of the many worlds of Being we are faced with a choice of beginning with the familiar world of material objects and biological entities which surround us throughout the environment or starting our odyssey in the less familiar spiritual outerreaches of space. Since the purpose of using our gifts of perception is to realise the highest state of consciousness, it would seem best to begin at the top and work down into matter and sensation. However, we must be scientific and commence our investigation with what we know and work from what is known to what is unknown, rather than ask people to believe things which lie beyond their immediate experience.



At this point I shall make it clear that for me this is a backwards method and not forward, since according to my own reality all true knowledge and the modes of knowing it, come from the One Source which some call "God" but which I call THE ONE. My consciousness is the "knower" and the experiencer; the way it interprets the vibrational signals from the matter in the universe around me will determine my reality. Hence all these messages from the environment, whether the sensations come from the immediate objects around me, or from the unfelt waves of cosmic energies from the uttermost depths of space surrounding me, will pass through the highest and lowest, the most subtle and the most gross mechanisms of perception in the human personality.

This book is ultimately about those mechanisms of perception although we will be researching specific vibrations and patterns of energy as they appear to our sensations to come from objects and matter. All sensations from the universe around us, whether we are aware of the perceptual process or not, come to us somewhat like the finely twisted strands of a rope.



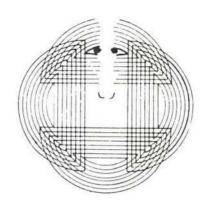
If we examine a rope closely then we see that each of these twisted strands is used to make up another larger rope of three or five or even seven larger strands. The modes of knowing and sensing the objects in the world around us in this volume will be concerned with a seven stranded Truth which affects every perception of vibration or sensation.



The choice we make of beginning the work with the material sensations from objects is deliberate because if a student realises that he or she can sense the unseen world of nature by these methods, it is only a question of time before they begin to use the techniques for probing the much more important levels of their own understanding of consciousness. To probe and search the inner worlds which condition every signal from the external environment, which includes the total universe surrounding us, will be eventually to find the source of all knowing. If I can achieve that with these works I shall have more than fulfilled the purpose I came into this body for, since the source of all knowing is God, or in more scientific terms – the purest state of consciousness.

To talk of God in one breath and the sensations coming from material objects in another is to my mind a trap we must avoid. The only way we can know anything about God is first to know man. The only way we can know man is to know how he senses the world around him.

Every perception of vibration whether of sound or of radiation of light or the invisible unfeeling waves of cosmic energy must come through the seven stranded personal mechanism which conditions our senses and affects that Being which makes sense of our senses.

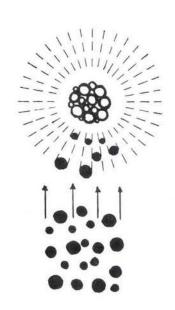


These seven faculties, which lie behind all our creativity and experience of the creation, act as filters of all vibrational signals which pass into us, through us and interact with us as an integral part of the universe we live in. The appearance that these sensations are somehow separate from our own Being and come from outside of us is the main stumbling block to direct knowing. The reason that this direct knowing was called "Divination" is obvious when we see that every prophet or divine incarnation was simply a "Diviner". Whether we are a Joseph with our divining cups or an ancient prophet using his breast plate as a divining instrument, we see clearly after some study of this divine science that we do indeed invent our own meanings, conceptualise our Urim and Thummin and communicate with the universal One in our own private language.



The purpose of this volume is to trace that private language through the following seven filters, (1) The imagination, (2) The intuitional knowing, (3) The conceptual mechanism, (4) The sense of Being and belonging, (5) The intellectual process, (6) The social brainwash, (7) The physical objective sense of concrete reality.

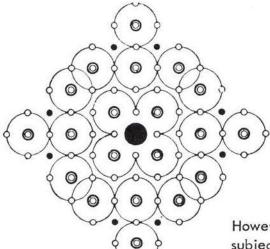
In tracing any signal from an object to its ultimate resting point in our understanding we shall not be restating this important functional pathway directing each of the experiments or referring to it on every page. I do wish to point out, however, that for correct understanding of any of the working methods and the understanding of the results which come from the direct sensing of influences from various objects, this seven stranded rope of Truth must always be kept uppermost in consciousness. Otherwise human Beings tend to forget that they may be only looking at one of the twisted strands.



Another reason why we choose to begin with matter and end with the highest spiritual perceptions of the invisible worlds is because students must learn to make their own inner connections with the results, otherwise they will not experience insights for themselves but will merely be accepting secondhand knowledge. So much clap-trap and downright self-deception is handed down in God's name from some supposed external authority that the only correct way to know anything with any certainty is to try it out in your own life and see if it works. You may read some far-out and mind-blowing statements in what follows, therefore it is wise to check them out and not reject anything until you have tried to prove them or disprove them yourself.

We begin in the same way as the great researchers of ancient times did, at the bottom of the class with the simple problems of earthly perception and remember the words of Christ to his disciples: "How can you learn of Heavenly things when you don't even understand simple Earthly things?"

The great Rishis of old who gave us our sciences of mathematics and were actually much more strictly scientific than our present scientific method of today, put the same Truth in a slightly different way. The first of all sciences is man. Therefore the proper study of man leads to the knowledge of the invisible forces of nature and the way they interact with his whole Being. In the study of all objects of sensation which science calls true objectivity, the organs of sensation are the real subject of study. If the object of our study is the sensing of influences from objects, then the body which experiences them is the real subject of study.



However, if the object of study is the body of man then the subject of study must be the mind which controls it.

Therefore if the mind is the object of study, then the subject of study must be the self-sense or the Ego which experiences itself as a mind.

But if the Ego becomes the object of our study, then the intelligence which activates it must be the subject.

If intelligence itself becomes the object of study then the reason, which postulates the existence of such intelligence, should become the subject of our study.

When reason is the object of study then the Self (Consciousness) which reasons must become the subject.

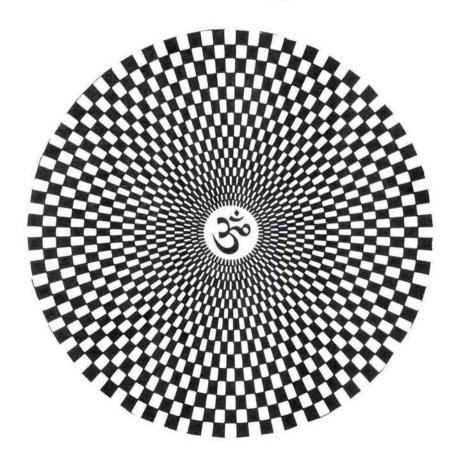
But if the Self is the object of study and consciousness of Self is also the subject of study, then the Self becomes both subject and object and logically they cancel out each other and we then perceive our own dualistic existence is an illusion. Man is included in the environment and the total environment becomes part of himself. In the ultimate science of Being there is only one God - pure consciousness.



The final reason why I choose to start at the beginning of this study with the sensations of matter and their supersensitive vibrations is because I have already written a three-year course in Direct Perception, beginning from the spiritual end of the spectrum of consciousness. This approach from the point of view of Pure Consciousness requires a three-year commitment before you begin, but the testing of various samples and witnesses of

matter requires no more commitment than the time required to perform each experiment. Therefore, like the sages of old, we commence our study of the universe with man and his simple physical sensing of the familiar material objects around him and the sensations they produce in him.

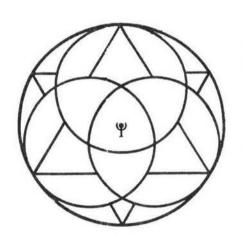
It is the author's intention that you will soon see the potentialities for communicating with any object in the universe or, for that matter, with any other intelligences in the universe known or unknown to puny earth-bound man. Even beyond that is the prospect of using these potentialities for communicating with our ultimate Self, that ONE who is seeing these words on paper and that ONE who is writing these words in your consciousness at this very moment of eternal time. To know that ONE is indeed greater than knowing anything else created or uncreated in the imagination of man. You may or may not wish at this time to use these working methods to get that deep into your vaster Self, but it is my reward, if you do so, to know that discovery of your own Divinity is the ultimate Divining power.



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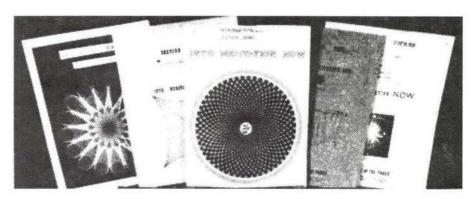
CHAPTER TWO.

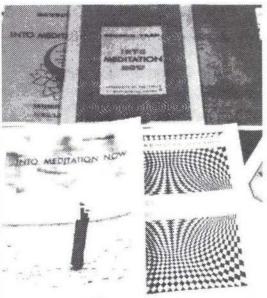
Having outlined the real purpose of this work in Chapter One – to use the biological/material radiations of various life-systems and the influences emanating from inorganic matter to discover the nature of consciousness – we can begin to see clearly that it is consciousness which senses and perceives these radiations through the biological system. The techniques of yoga have always had exactly the same purpose but in the West and also in India among the masses the concept of yoga as being a physical system of postures or a religious way of life have severely limited its appeal to a few enthusiasts



The real purpose of yoga is to unfold methodically those powers which lie dormant in every human being but how many great yogins do we see with great inspiration and great being, radiating like Christ or Krishna? Obviously just the practice of physical, biological postures or engaging in fasting, special diets and meditation exercises does not bring the hightened awareness we speak of in understanding the nature of consciousness. Merely to watch a group of so-called yogis together is to observe a pantomime of Egos bristling like a bunch of porcupines.

No doubt some of them develop powers and can do psychic feats but these can be acquired by other occult practices without any reference to the methods of yoga. Hence the great yogins emphasized the development of a Pure Consciousness first and the search for powers second, in fact they maintained that if the awareness is awakened, the powers of perception come naturally as gifts.





Therefore the training of one's biological sensitivity and the methodical unfolding which takes place in this volume should be done in conjunction with the course in direct enlightenment which I have called INTO MEDITATION NOW*. This covers a three-year period of personal daily exercises designed to develop great being and spiritual insights to go along with the awakening of our consciousness on the biological and physical levels.

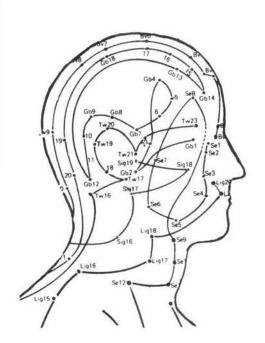
The specific location of these powers in man's biological system will be the subject of one of the later chapters but by the time we come to this, the student will have discovered the means of mapping the currents of psychic electricity himself. Many people give different names to these radiations and many people also have in the past regarded these energies as coming from outside man's biological system from the environment or from some extra-biological intelligence, or even, in some cases, from extra-terrestrial intelligences. Some people even believe the source to be spirits, Devas, space men, mediums, and so forth. Consciousness has even been given names like Kundalini in older times. However, everyone has Kundalini to some extent and thinking and consciousness would not be possible without it. But until mastery of the Kundalini energy, which arises out of Pure Consciousness, is attained, the great perceptions of the universe that have made such extraordinary individuals as Christ, Buddha and Einstein possible, will be beyond the ordinary state of man's consciousness. However, it is wrong to conceive the absolute nature of consciousness as "energy" although Kundalini is the movement of such consciousness in the biological sense of energy.

* Published by University of the Trees Press, P.O. Box 644, Boulder Creek, California 95006. The levels of consciousness that exist beyond the movement of biological Kundalini, beyond the psychic realms of intuition, beyond "energy" concepts, can be tapped and used to reach to much higher levels of perception which are present in every human organism. There is not any question here of accuracy of psychic prediction or scientific prediction because we are merely reading from the book of nature how things actually are at this present moment. There is no need for any new fantastic explanations or bizarre theories and speculations on how things might be or ought to be. The concepts of the people who have studied the radiations of this many-tiered faculty of consciousness as a phenomenon of matter, or regarded it as some physical radiation from objects, are repeated here in this volume only to show the evolution of the thoughts and concepts about it over the last 50 years. Behind all this conceptual framework which has been mixed up with the occult sciences and civilizations of ancient history, lies the essence of the evolutionary thrust working in mankind towards the universal field.



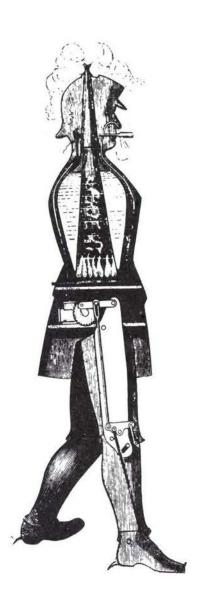
Einstein spent most of his years until old age working from the time he conceived his theory of relativity as a young man of 26, trying to include the observed universe and its sensory field of experience based on the velocity of light, within a universal field which could be mathematically expressed without inventing unreal and fantasy-based theories such as anti-matter.

The fact that he did not regard consciousness itself as the universal field which interpenetrates all of matter, does not detract from the most brilliant perceptions which he gave the world. The ancient yogis and sages of India could have told him the answer if he had sought in that milieu. The universal field and the relative field have long been acknowledged to be impersonal and personal respectively, the universal field carrying the mathematical value of zero. Western science does not look at zero as a transcendental number while in yoga it stands for a witness of Absolute Pure Consciousness.



This concept has not yet been discovered because the Western scientists up to now have been convinced that phenomena happened external to consciousness. The slightest thinking at any depth should reveal logically that events cannot happen separately from consciousness and must always happen within consciousness, whether we are looking at a distant star or experiencing its light after it has travelled millions of light years to reach our physical senses. This volume is intended to add to Einstein's work what he very nearly stumbled on several times in his investigations of some of our human notions about objectivity and objects in space. He could see the problem but did not know how to bring "consciousness", then a disrespectable word in Western science, into his formulations and coordinate systems in which mathematics was imprisoned. Hopefully modern science will now make the jump and understand the nature of Absolute Zero. Here in this volume then is the means for discovering the answers to any questions that can be formulated by the human imagination. Here are the skillful means by which we can discover the hidden processes by which the human body works and links itself etherically with its total environment. It is not expected that everyone will understand this universal link because the complex mind fails to understand the simplicity of what is meant by direct perception. Rare spiritual geniuses have always had these faculties of perception and have used them to contact the evolutionary intelligence of their times.

It is expected through actual practice of this work and through the use of the methods of perception which follow that every student can gain familiarity with the manifestations of the total mind of which he or she is an integral part. One warning must be made about all these fascinating worlds that wait to be uncovered, in order to avoid confirming ancient superstitions and generating even more misconceptions. That warning word is that all these events are products of consciousness in some form or other. Whether we choose to investigate these phenomena in the form of Kundalini energy or what I have called "Psychic Electricity", or whether we call it creative intelligence or any



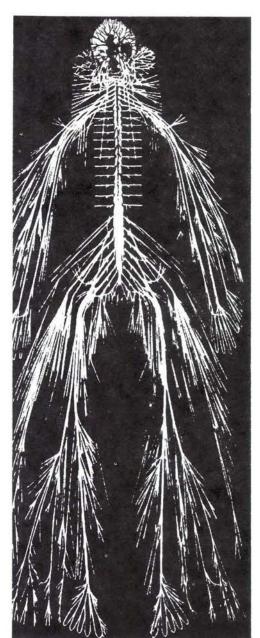
other term, we are always dealing with the observer's consciousness and his knowledge of his perceptual mechanisms. Without this knowledge of his own biological mechanisms and how meaning is attributed to the signals which send nerve energy to the brain, man is still an animal with little knowledge of his rightful place in the total universe around him.

This volume gives this knowledge in such a way that any reader can prove it for himself by undergoing the training set out in each chapter. A conceptual framework is also provided by the author, at the same time bringing together the many conceptual speculations and measurements of approximately 150 authors in the field of Radiesthesia, Radionics and Divining faculties. For this purpose I set out in the following chapter a list of the main terms and concepts which we will use throughout this volume, so as to give the reader an idea of the last 50 years of experimentation by those who like Einstein often did not realise that the measurements, scales and rules that they were measuring with were made of consciousness.

Hence we can see from this next chapter that the pioneers of this entire field still regarded the phenomena as taking place outside of themselves with certain influences coming from external objects which they labeled according to their radiational patterns.

The word "influence" was used by almost every one of the researchers between 1920 and 1970 and it seemed apt since it originated in ancient times through the old science of astrology which postulated that some fluidic energy came from the planets or different sections of the Milky Way and affected man's attitudes, personality and psychic make-up in some mysterious way. The fact that astrology is largely an empirical science, relying on human observations over long periods of time, makes





it difficult to check by modern scientific method. Although attempts are made by computer to prove statistically significant results, it will always remain true of any empirical science, that invariably accuracy will be only as good as the user of the tools.

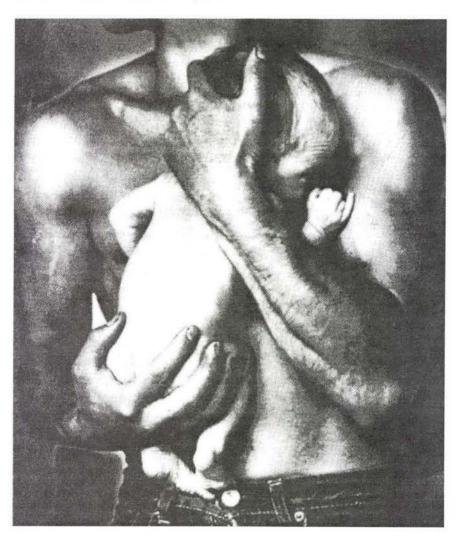
In the same way radiesthesia and its near relative radionics and clairvoyance and all other forms of ESP are all subject to the same limitation. They are only as good as the user.

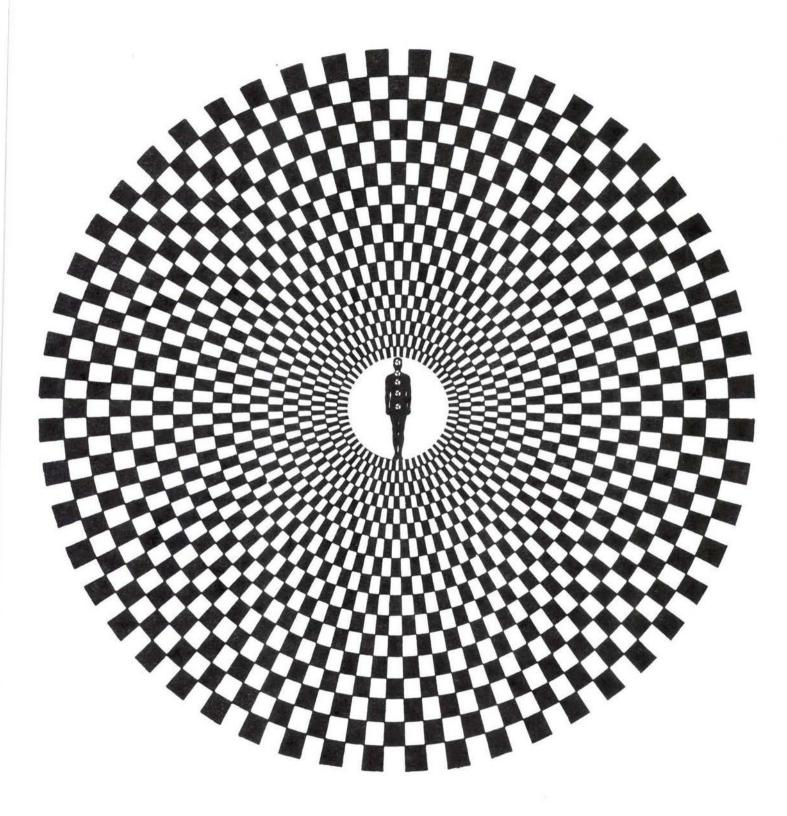
Hence Supersensonics goes into the way these measuring devices evolved in the consciousness of their inventors so that the reader can experience for himself the building of his own intelligent "hot line" to facts which will not depend on the statistical gathering of second-hand facts from others.

This does not mean you must ignore the work of others or stop reading their research. This would be most unscientific and ignorant, to appoint yourself sole authority on earth for all facts. But you are the sole authority which must confirm and validate all facts in your own experience. Therefore, checking the accuracy of scientific observations and watching nature's processes at work and arriving at your own reality and comparative knowledge through getting first-hand information from nature herself, is the first step in achieving yoga or union with the universal field.

This volume is a first step because with it you hold the key to the mystery of your own psychic processes and more important those processes by which the evolutionary intelligences are even now controlling your destiny as a human being or as a Cosmic Being. To control these unconscious forces is to become liberated from bondage in mind and soul and to bring the superconsciousness at the seat of everyone's being into its true decision-making functions to change our destiny. This is the real meaning of the word "yoga" which truly stands for union with all the worlds.

The re-creation of the nerves and dendrites of the human brain with the kundalini energy of consciousness that is released through the practice of Nuclear Evolution and the channelling of this energy through the different shells of our being provides a new purpose for changing our thinking patterns and adopting a correct learning attitude. If we think we know it all or try to fit nature into some preconceived set-up in our consciousness, we will be automatically guaranteed failure in all that this volume sets out to do. The attitude of the student must be open-minded, which means forgetting entirely what you know already and learning something new. This is much more difficult than most people think. The true humility required, before nature will reveal all her secrets, is enormous and beyond the achievement of most men. Therefore to work on the purity of our consciousness as we undertake this work on the biological radiations we experience from matter is the main experiment. All others which follow are second to that. If this is kept uppermost it will give the correct attitude automatically and we will become as a child watching in amazement as the book of wonders unfolds both within us and before our eyes.



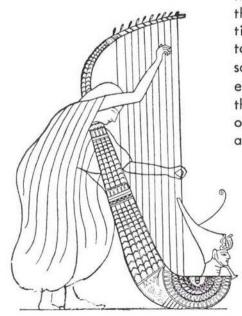


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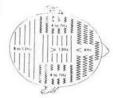
BIOLOGICAL RADIATIONS & THE IMAGINATIVE FACULTY The following chapter is a review of the concepts of various authors so that the reader becomes familiar with the thoughts and speculations of those who have devoted large parts of their lives to probing obscure fields of research.

Many of these ideas have been published in over 100 books in the French language which the author now has in his possession. Many of these researchers have not been blessed with clarity of expression; therefore I shall list and redefine some of the concepts in alphabetical order and not in order of importance. This will enable the reader to refer back to Chapter Three if he gets stuck in understanding the experiments in later chapters. Having done this the author will not redefine any of these words in future pages but will assume the student has a good memory. I will not call this a glossary which is merely for reference, but an essential tool of learning, without which the student will not be able to navigate the rest of the work.

The concepts listed below are not necessarily those of the author nor does the author agree with some of them. In this history of the research done they all are included to show the fertility and the amazing phantasmic faculty of man's mind. How our imaginations can bring facts into reality and ignore what we do not wish to see is one of the principal reasons why the majority of scientists in the West and the researchers of over 50 years of endeavor have never until now got together an investigation of the universal field. Reading these concepts gives one perspective on the vastness of the field we are entering in SUPERSENSONICS and some insight into man's imaginative faculty.









ALPHA, BETA, GAMMA

	TYPES OF BRAINWAVES AND ASSOCIATED MENTAL STATES		
BRA INVAVE	FREQUENCY (Hertz)	AMPLITUDE (Microvolts)	MENTAL STATE
Delta	0.2- 3.5	10- 50	Deep dreamless sleep, trance state.
Thets	3.5- 7.5	50- 200	Drowsiness, hypnogogic imagery, creativity, receptivity.
Alpha	7.5- 13	10- 100	Tranquility, meditative state, diffused inner self awareness.
Bets	13- 28	10- 50	Focused awareness, anxiety, concentration, problem solving.

Referring to rays of radioactive decay of the elements; when the nucleus decays it shoots out Alpha particles which have little penetration power but are harmful to human tissue. Beta particles are not so harmful but they penetrate deeper and interact with the atoms of our body. Gamma particles and X-rays are very penetrating and harmful radiation. When applied to brain waves, Alpha represents a pulse of 9-13 per second and relates to more relaxed states. Beta represents pulses of about 13-28 pulses per second and relates to excited or agitated states of the brain. Delta represents the slow pulses of .2-3½ in deep meditation or sleep states of consciousness.

A MPLIFIERS (Radionic)

All kinds of detected influence can be amplified or made stronger and easier to detect. Amplifiers may consist of solar energy or a ray of light, or magnets, or the aligning of instruments north—south, or small amounts of radioactivity such as a "radium block". Also geometrical forms like a parabola or symbols such as the seal of Solomon can cause amplification of a diviner's signal. Finally there is the radionic set, consisting of several tuned dials which act as antennae for setting a rate for a vibration pattern which concentrates a form of energy at a certain place, depending on the witness or sample used for tuning. This is usually a person's hair, blood spot or sample of sputum which identifies the condition to be amplified.

CAPACITOR

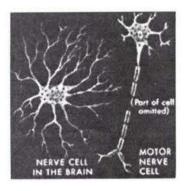
This is sometimes called a condenser in Europe but refers mainly to the induction of energy through tuning either plates or a circuit to produce a capacitance effect. A human body acts as a capacitor when it takes hold of a radio antenna and the reception is thereby improved. A capacitor stores the potential difference between the separate polarities of an electric charge through insulating them from each other.

COORDINATE SYSTEM

Whenever a measurement is made there must be a framework or a direction in order to make it of any meaning. The framework erected such as a map or a starting point will be determined by breadth, depth, and length and a three dimensional coordinate of space, whereas time may be brought in as a fourth coordinate or even "space-time" as a fifth dimensional coordinate.

DENDRITES

DIVINATION



DIVINING

DIVINING

The tree-like branching of protoplasmic structures which conduct impulses towards the body of a nerve cell. Such structure can continue to grow by intensive stimulation, thereby increasing sensitivity in the brain.

The radiesthetist does not look on the sensing of influences as being a psychic feat but more in the nature of a mental-biological reaction such as a water diviner gets when he thinks the thought "water" and walks over an underground stream. To help him think of "water" more accurately he may carry a small sample of water or a witness of it to reinforce his tuning ability.

Divination can also be done by clairvoyance or scrying or by psycho-kinetic reaction as in Radionics which uses a "stick pad" to determine when a thought is in resonance with the reality of the situation being tested. About 80% of all people have this ability naturally.

A vague term which covers many extra-sensory methods of obtaining information about life and matter. Ranges from clairvoyance and scrying to water divining and looking for metals and minerals. Used in this book as the faculty of perception which senses some change in a wave-field.

Radionic and radiesthesic devices are simply tuning instruments for consciousness. The neuro-muscular perceptive reactions of the water diviner's forked twig can be amplified by using male and female whale bones bound together at the fork. The earliest known divining rod is the ancient Egyptian Ankh. Similarly there are pendulums or suspended weights which give a visible effect to the human powers of perception. The releasable internal energy manifesting as vibratory waves or ultrasonics of an object can be detected and well recorded by various methods of perception using amplifying instruments such as rods, dials, rules, grids and the biometer. In ancient times they used crystal divining cups such as Joseph used in Egypt, crystal balls and glasses of water for scrying and other feed-back devices, such as the fall of three coins or yarrow stalks with the I Ching oracle. Divination also showed effects corresponding to perception of waves of color.

EFFIGY

Refers to something seen, either as a virtual image or representation of a real image. Could be a phantom image of some object which is not there but is apparent, such as a mirage, which uses layers of atmosphere as a lens to refract light to the eye. The image seen through a telescope is an effigy because the real object is not where it is localized.

ELECTROMAGNETISM

One of the four main energies, the others being nuclear forces, weak interactions and gravitational forces. Electrical and magnetic fields are combined at right angles to each other to produce a force of attraction at the molecular level and, through the exchange of electrons, produce electromagnetic currents such as radio waves or light waves.

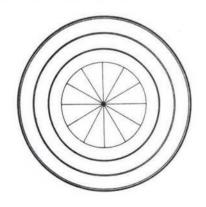
FLAME POINT

Refers to the resonant nodal point which discharges an electromagnetic emanation or current whenever there is resonance between the harmonics of different vibratory phenomena.

GALVANOMETER

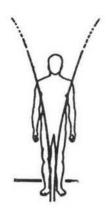
Invented by Galvani by observing bioelectricity in frog's muscles, but now used to register any discharge of electrical tension between two poles. A voltmeter works on the same principle.

GEOMETRICAL FORMS



The influence attributed to geometrical figures by various practitioners of radiesthesia is revealed by use of a pendulum. Whenever a figure concentrates the energy of consciousness at one place there is a tendency for that energy to be released in the form of vibration and radiation and it is this release to which the biological nervous system is sensitive. The shapes of Arabic numbers, for instance, act as amplifiers and concentrate this energy so that a diviner's sensitivity can become wave-selective. The origin of numbers and their relationship to colors therefore opens up the question of whether numbers are based on geometry or on logical operations from 1-10. We ask whether logic and mathematics was a later development than geometrical forms.

HUMAN AURA



The clairvoyant adjusts the sight mechanism to receive mentally another range or octave of color vibrations, while the radiesthetist adjusts his combination of nerves which perceive by eye and hand sensation in order to receive a range of vibrations corresponding to a "witness", which is a sample that stimulates the diviner's sympathetic system. The diviner tunes his para-sympathetic system to a wave-selective vibration, which causes the sympathetic to react when resonance has been established in consciousness.

The aura, whether detected radiesthesically or clairvoyantly, is essentially the psychic waste being eliminated from a living body or the energy being re-radiated from an object.

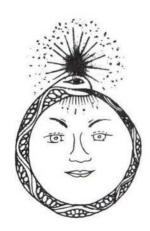
INDUCTION

When a magnet is brought near to a piece of iron a similar magnetism is induced in it. Similarly a current is induced by moving a wire or coil past a magnet or moving a magnet along a wire.

INTERFEROMETER

An optical instrument that measures wavelengths through passing light rays through slits so that the waves overlap and interfere with each other.

KUNDALINI ENERGY



This is a biological movement of consciousness from a center at the base of the spine to other centers in man's nervous system. Strictly speaking consciousness is not an "energy" in its pure state but it becomes energy in the same way that light does when it strikes an object; up till then it is unformed and unmanifest. When consciousness moves vibrationally it creates psychic electricity which can be measured as it travels along the nerves and reaches the brain. With the average person the current involved in terms of brainwaves is measured in so many hundred microvolts, but anyone having full control of Kundalini could register on a chart recorder over 10,000 microvolts of nervous energy. When this happens spontaneously and without control the result is brain seisure, as in Epilepsy, which gives similar voltages; but it does nothing to enlighten the human being. Accidental awakening of Kundalini does not enhance, but more often electrocutes.

LASER CHAMBER

A chamber full of gas is excited by a radio frequency and then a light beam with a resonant frequency is passed through it to produce Light Amplification through Stimulated Emission Radiation.

LOADSTONE

A magnetic type of rock used by ancient navigators and healers in the same way we use ferro magnets.

MAGNETIC FIELD

Whenever there is a passage of electrical current between two poles, a magnetic field is created. Permanent magnets keep their magnetic fields intact by orientation of the spin of their composite atoms. Rocks and atoms and universes all have a magnetic field related to the electrical intensity of their vibrations.

MICROVOLTS

A volt is a measurement of electrical potential difference equal to a current of 1 amp flowing across a resistance of one ohm.

A millivolt is one thousandth of a volt and a microvolt is 1,000th of a millivolt or 1 millionth of a volt.

MINERAL DETECTION

Just as some use the divining faculty for detecting underground water, there are many who use it for prospecting for mineral deposits. Ionization patterns similar to those of a witness held in the hand may be responsible for recognition. Turenne discovered, over 60 years' observation and operating experience, that the wave-selecting sample witness of a particular mineral could only be used by day, although underground streams can be located at night. The conveyance of the signal from the mineral or of the consciousness of the operator to the underground mineral, to pick up its influence, is assured by light energy. Or the mineral emits some penetrating wave derived from the sun which releases a vibratory pattern of radiation on which the solar spectrum impinges. Amplifiers work in the same way to convey an influence from an object in a selected direction and this is called a "Pendular wave".

NEGATIVE CURRENT

Whenever there is a positive accumulation of electricity, free electrons will flow towards it from the atmosphere or static fields around it.

NODAL POINT

A point where an accretion of energy is centered in a field which changes polarity or becomes a null point between two fields.

NONSELECTING PENDULUM An ordinary suspended weight on a string made from a bob of wood or metal or plastic without any attached colors or magnets.

NUCLEAR EVOLUTION Refers to the book by that name, written by the author, concerning the intake of subtle energies into the Nuclear Self. The Nuclear Self is the nodal point at which the life forces concentrate in order to produce consciousness. This in turn produces self-consciousness through Ego identification with personality. Evolution from this low state to the pure consciousness at the center of Being involves the control of the forces of Kundalini and implies direct perception of nature's forces.

OPERATOR

All results follow the laws of operation described in Supersensonics and take place in the perceptive mechanism of the operator. The source and arrival of the detected signal which reaches the diviner's hand or skin and thence travels through the nerves to the brain, must originate from the object or system wherever it is located in space. The operator's consciousness in some way goes out to the object or is linked with everything in space. Only when the operator tunes out unwanted vibration and tunes in to those he has selected by using a witness, does the signal reveal its recognizable pattern.

PA-KUA

Eight trigrams arranged in a circle in two primary forms. The eight trigrams are put together to form 64 hexagrams all known as kua arranged in a definite order.

PARTICLE WAVE

The phenomena of light and radiation can be observed from either the wave theory or the corpuscular theory, depending on the choice of the experimenter, whether the source is far away or near. The corpuscular theory requires light to travel in straight lines and is good for reflection whereas only the wave theory is good for refraction.

PATIENT'S WITNESS

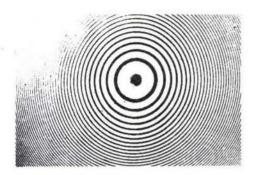
Through a blood spot or source of lymph, hair or sputum supplied by the patient this witness will reflect the prevailing condition of health or sickness. The presence or absence of particular bacteria or toxins such as uric acid or catarrh can be coupled to the patient's blood or witness. The same applies to trees, animals, crops, or other examples of life.

The pendular wave-field or standing wave of the patient expands or contracts as the condition for which the operator is testing alters. The administration of a drug or remedy can be immediately checked as the condition is altered daily.

PENDULAR WAVE FORM (Or standing wave)

An amplifier helps to carry a selected wave of energy along its pendular wave. Pendular waves can be conveyed along various carrier waves such as light beams, radio waves. Selective techniques based on "tuning" of the operator through "witness samples" show that pendular waves originating from a test sample correspond to vibrations which are found in certain elements. Turenne found that all vertical plane surfaces, like walls and upright sheets of metal, emit alongside them a concentration of helium and argon varying in their height according to the position of the sun. By its pendular wave the diviner can locate emission or absorption of oxygen or carbon by a plant specimen. Pendular wave-fields may be the modulations of color-wave frequencies caused by molecular structure and organic cell structure.

PHASE REVERSAL



On reflection of light waves from a surface a phase change of 180° takes place. In the Newton ring experiment two rays emerging in the same phase will appear bright but if they emerge exactly in opposite phase it will be dark. Towards the edges there are alternative places where there is destructive and constructive interference, producing a set of concentric circular fringes. The 180° phase shift makes them destructively interfere, thus making the central spot dark. Whenever electromagnetic waves are propagated there is a phase shift when the wave crosses the wave axis.

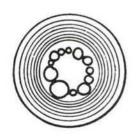
PLASMA ENVELOPE

Around the earth is a skin of highly energized particles surround ing the magnetosphere. This meets the edges of the interplanetary magnetic field. The magnetopause is constantly buffeted by solar winds which shoot out high energy plasma protons in spirals around the magnetic lines of force. These are swept around the edge of the magnetosphere to form an envelope of plasma which protects life on earth from heavy radiation.

POSITIVE TERMINAL

Every storage battery for electro-chemical energy works on the principle of positive and negative exchange of electrons. The positive terminal refers to that pole to which the electrons are flowing in a circuit.

PROTICITY



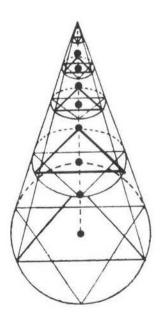
The nucleus of the atom is made up of several particles positively charged and neutral. The energy that binds them together decays in several ways. Chemically the atoms can change in the human body with little energy and heat. By ordinary nuclear processes the atom requires fission or weak interactions in order to decay. These events are all controlled by the nature of proticity. Electricity is the exact counterpart of proticity. Neutronic, electronic and protonic forces make up the three forces of creation involved in all cosmic vibration.

PSYCHIC TIME

The cycles which can be counted in a vibrating pattern of energy are measured from absolute zero time rather than a clock fixed by human convention or scientific standard time.

Vibration is a feature common to all psychic and radionic detection operation. Since vibration is produced by the release of opposing electric changes in matter, resulting in electromagnetic wave-trains, a radiesthetist or diviner can recognize what is an electric field by the accompanying pattern of vertical vibration and what is the magnetic field by horizontal vibration. Similarly psychic detection of the ion count in a wind or from below ground by a geiger counter can be confirmed by the diviner's reaction.

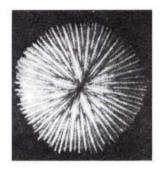
PYRAMID ENERGY



It was found by Enel and Turenne as far back as the 1920's that a card pyramid form 15 cms high with sides 23.56 cms X 22.42 X 22.42 cms produces dehydration and prevents fermentation. Orientated with sides north/south a wire coiled along the sloping edges produces a D.C. current on a galvanometer. The coiled wire in a pyramid form also produces dehydration when a D.C. current is passed through. Fifty years later in Russia an academic scientist rediscovered the experiment performed by Bovis, who found that razor blades get sharper in the pyramid and get duller exposed to moonlight.

Recent years have seen pyramid forms for improving meditation, but since life-force and consciousness are the same, this claim is merely based on self-hypnosis. To the experienced meditator, nothing is more potent than consciousness itself.

RADIESTHESIA



RADIOLOGY

RADIONICS

RADIONIC ANALYSIS

The operations of the diviner's art are as old as the human race. The building of Stonehenge and the Pyramids as radiesthesia devices, to create and sense "influences" originating from animals, man, and his material environment and to work with the "Law of Similars", is typical of the more sophisticated divining instruments. Radiesthesia can be defined as the detection and recognition of nature's influences produced by the object under consideration. Recognition comes from the determination of the form or pattern of energy assumed by the object according to its structure. By the use of pendulums, rules and rods, special discs and witnesses, the operator is given selective powers which enable him to analyze a sample or discover an object buried under ground. It can also be used for diagnosis in medicine or veterinary work, tracing the energy patterns in a living body. The detected influences are vibratory and Radiesthesia's major fact is that a pair of substances of the same vibration are linked through space irrespective of whether solid matter is intervening between them. The most common form of Radiesthesia is the waves of vibrational phenomena in the water diviner's sensing faculty.

The scientific application of radiation to human use such as in medicine and photography.

The adaption of radiesthesia to electronic tuning and instrumentation based on the "stick" of static electricity at the fingertips when resonance with a harmonic of thought fields occurs.

Radiesthesic detection can recognize electrical causes associated with the structure and activity of organic products. It can also determine the value of inorganic products as stimulants for growth of animals or plants. The methods based on sympathy and antipathy are useful to soil chemists, physicians, pharmacologists, and for determining health states of the microorganisms in normal people. By specially designed rules, dials, etc. the wavefield can be measured, leading to data normally unobtainable by ordinary methods of analysis.

RADIUM BLOCK

An amplifier invented by Luis Turenne to stimulate the natural fields around a crystal or sample. A weak solution of radium salts was implanted inside a wooden block. The device intensifies detection of atomic field patterns.

RELATIVE FIELD

All fields except the absolute field of the observer's own validating consciousness are relative to each other or relative to the coordinate system of the observer's starting point. Everything is true from the viewpoint from which it is seen in the relative sense.

SERIAL SEQUENCE

A serial results from the muscles and nerves of the diviner reaching saturation point with the charge from an object. The rod falls or rises a given number of times and then goes dead. In the same way the pendulum rotates a given number of times to the left or right depending on the saturation values of the individual operator. Each diviner finds his own serials and reactions to different samples in a standard environment.

SPECTRUM OF MATTER & RADIATION

There is a pendulum-detected equivalent of the total light spectrum, with nodal positions as in spectroscopy, allocated to the chemical elements in their electron order. It is possible to obtain an analysis of the vibration pattern of the more subtle and rare elements as well as the common ones. These can be checked by traditional methods which are much slower. To determine the resonant points of an element of matter and its specific octave in relation to the visible light spectrum is no more difficult than finding the psychic resonances in the biological chakra system and their relation to light energies in different octaves of radiation.



TATWA WATER

A stick conducts different forces into a glass of water depending on its orientation to the earth's magnetic field. The force from the west is injurious to health, while to point the stick to the east with the tip just touching the water induces east-west flow of life currents which are vitalizing to living organisms. A magnet can be added to the end of the stick and its tip dipped in the water while charging with TATWA (life) energies.

UNION RAY

A diviner's term for the universal link between two identical samples or substances. A resonance phenomenon which exists between objects of like vibration or two colors of the same frequency. The Law of Similars governs the balancing of energies through the harmonic link between two similar radiations.

UNIVERSAL FIELD

A term used to denote the limitless total field of both the universe and the observer's own consciousness within it. It is not infinite, which is merely the opposite of finite, but more a concept of voidness or emptyness all-pervading every object and the subject.

VIBRATION

The nature of scientific vibration is cyclic and periodic - that is a spiralling of energy in circles or cycles in a fixed time dimension such as clock time. Where the time is not fixed or is an elastic "psychic time", the cycles or spirals of vibration can only be measured from an Absolute zero dimension of "no vibration" or stillness.



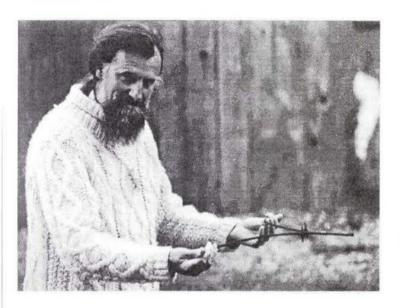
All exact sciences measure with earth time or space time which is related to the constant speed of light and varies only with the square of the distance. Radiesthesia and radionics measure in vibrational patterns which have a frequency measured proportionally in relation to a radiation or light which is stationary and of nil velocity. In other words, vibration arises and has its source in the silence and is measured from the absolute point of zero vibration and no time.

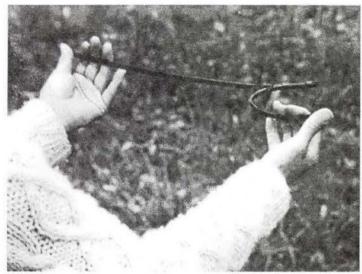
WAVE-GUIDE

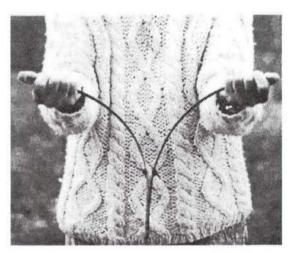
A device for channelling radiations of electromagnetic energy such as microwaves, but in Supersensonics it is extended to include thought waves of higher harmonic frequencies and the transmission of psychic electricity.

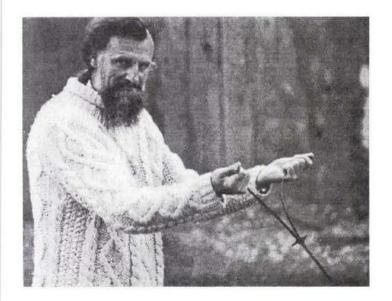
Z No:

This is the number in the Mendeleyev Periodic Table of the elements arranged in order of increasing number of protons in the nucleus.









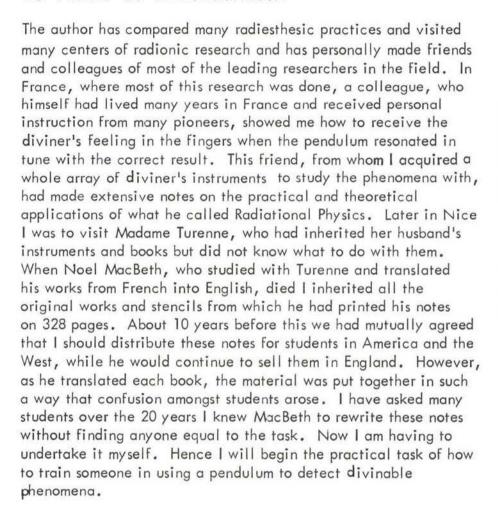


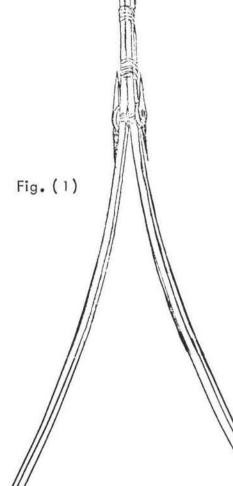
Sequences of Divining reactions: Top Left: walking the territory as at (a) referred to on page 113. Top right: position of hands on rod. Bottom left: alternate twisting of rod down or up over B_{ν} (p.113) and bottom right: rod twisting up at C and D. Center picture: rod reacting to electrical center of underground stream of water.

4

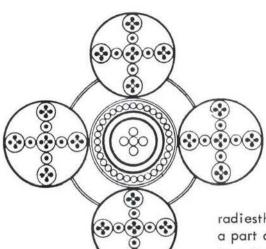
75 YEARS OF RADIESTHESIA







First, let me begin by writing out in my own words the theory that Noel and his French mentors held regarding the phenomena of extra-sensory perception. They held that the perception of extra-sensory influences which are produced by matter are just as recognisable as those produced by electrical charges and that the rays sensed by the diviner's faculty are due to the operation of fixed laws no less than the laws of plain physics and that they can be made acceptable and repeatable by different methods of



radiesthesic investigation. They claimed radiesthesia should be a part of radiology and that this form of radiation, perceptible to extra-sensory powers because of the number of proofs available, should justify full claims to recognition.

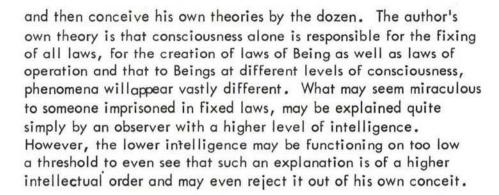
However, during over 50 years of research by all kinds of professors of physics, engineers and chemists and physicians, very little recognition by regular physicists has taken place and only now have some physicists taken an interest in explaining the role of consciousness in matter. Because of the rather bizarre demonstrations of breaking keys and spoons on television by paranormal means, a group of scientists have decided to investigate extra-sensory radiation and energy. While noting these bizarre attractions, little has been noticed of the whole body of knowledge contributed by classical physicists who refused to accept the theories of quantum physics as anything but highly imaginative explanations for the results obtained. That the energies were there was not disputed, but the reasons and theories advanced for their operations in purely statistical domains led to unnatural and impossible concepts. Einstein himself was left behind by the quantum physicists who discounted his opinion that "God does not play dice with the universe." That Einstein also believed there were fixed laws of operation behind phenomena, which man would have to discover, was the driving force behind his long search for a universal field theory.



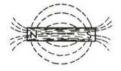
The author does not subscribe to the fixed laws theory of Noel MacBeth and the French physicists of his times nor to the fixed laws of physics being of any absolute reality. The author's position is that the phenomena are real but the explanations are not. The position adopted throughout this work is to repeat the methods described so that the student can test them out himself

Fig. (2)

The rod/pendulum designed by Signor Pasquini of Rome.



As each phenomenon is described and the methods tested through the use of selected experiments, the laws of operation will become evident to the intelligence of the student from the actual results. The volume starts with a simple method of testing the sensory proof of the results by training the reader's own extrasensory powers of divination. Experience will show that this will produce a practicing student in nine times out of ten. Many of the techniques are connected to standard physics and electromagnetism. We begin therefore with the more familiar field of magnetism.



ELECTRO-MAGNETIC FIELDS & THE PENDULUM EFFECTS.

Everyone knows that the earth is surrounded by a magnetic field which is charged by the action of the sun's rays. The field shifts gradually year by year and is influenced daily in its thickness by the rotation of earth and the position of the sun which causes it to take the shape of a plasma envelope. The objects on the earth and particularly things we call magnets are influenced by this sheath attracting the molecules and atoms to orientate themselves towards the earth's poles.

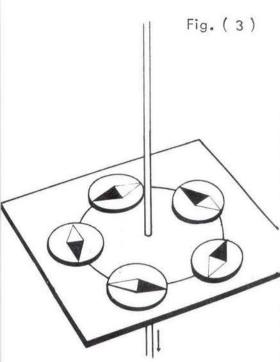


FIGURE (4) Direction of the magnetic field near a straight, current-carrying wire.

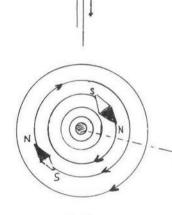
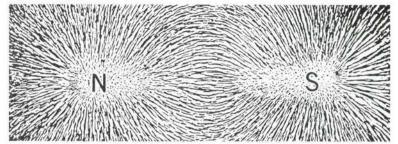


FIGURE (5) Circular magnetic field lines in a plane perpendicular to a current-carrying wire. Their directional sense is given by the right-hand



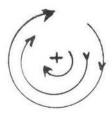
When two magnetic compasses are placed near to each other on a flat table, one end of the compass needle is attracted to one pole of the other. Magnetism cannot be perceived by our senses but its invisible effects on life are verifiable. Physicists would say that some external force of nature is responsible for this magnetic orientation. It is our view that the phenomena is caused by internal and external forces acting upon each other.

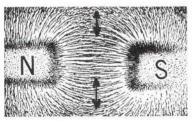
Similarly electro-magnetism can be produced by passing a negative current from a battery terminal through a wire to a positive terminal, thereby creating a field at right angles to the flow of current in the wire. A galvanometer is constructed from this fact and the resulting field strength caused by a passing current gives science an important tool in measuring electric currents in the ranges from micro volts to millions of volts. A diviner with a pendulum can easily detect the passage of a current of electricity of any strength in micro-volts or any convention set by the consciousness of man. The measure is irrelevant since the diviner merely sets his own scale mentally. In the same way a diviner can detect the qualities of a magnetic field in any object in any other spatial location whether inside the sun or of any magnet set in front of him on the table. The distance is irrelevant to an experienced dowser but if we make it a limitation by not being able to control our own consciousness, then distance becomes a factor.

Let us take a simple straight magnet and dowse its field. Around the north-seeking pole of a compass needle there is a so-called positive response (See Volume I for discussion on positive and negative, pages 16-19,) and around the south-seeking pole there is a so-called negative field. The diviner also senses a so-called radio-magnetic or RM + - field immediately above the compass equator or center of the bar magnet. These effects are noted by the neuro-muscular gyrations imparted to the pendulum whenever it is held in those respective locations. The pendulum will respond

Fig. (6)

CURRENT





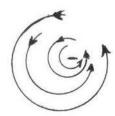
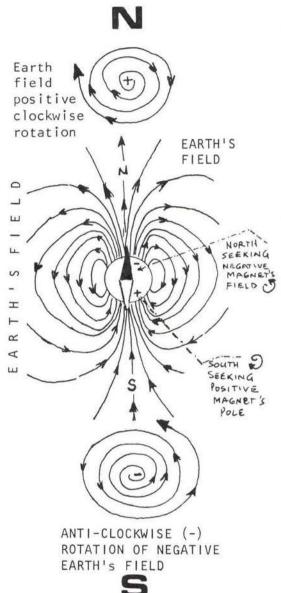


Fig. (7)



by gyrating in a right-hand clockwise circle in the air over the north-seeking pole with to-and fro oscillations at the null point, or an anti-clockwise movement over the south-seeking pole. A diviner's rod, if one is used instead of a pendulum, may be found to rise or fall, or rise and fall alternately. The three kinds of movement correspond to the three kinds of magnetic influence at the location of the three nodal points we suggested.

It is an error of our consciousness and a part of our dualistic thought processes to believe that the force or influence is only coming from the magnet we are testing. Obviously this magnetic force must be passing through the magnet and also passing through all matter in the planet and all its inhabitants, including the reader. It is merely the way the organic reacts to it or the way the influence affects the magnet that creates any difference, which we call magnetism.

A diviner will find throughout nature some few specimens which emanate the same Radio-magnetic field which we found at the null point at the center of the magnetic compass needle. Almost all other products, whether plant or mineral or biological matter, cause a radiation which is detectable as either a positive or a negative influence. All such radiations of fields are sensed by the consciousness of the diviner through his biological neuro-muscular responses imparted to the rods or pendulum. These fields extend only up to approximately eight inches above the specimen. However, if there is an amplifier in the vicinity or some Radiomagnetic field such as an ionising source or radio transmitter close by to the sample, this eight inches can intensify and expand its influence considerably. Since consciousness itself when balanced in our biological system between positive and negative becomes Radio-magnetic, a person who can transcend the normal human limitation of a positive/negative biological energy can indeed dowse the influence at any distance away and this is why we stated earlier that the distance is irrelevant to an experienced dowser.

However, the distance between two samples being tested on the laboratory table or a Supersensonic rule or radiesthesic balance is of importance to an inexperienced dowser because their samples' proximity to each other puts their fields of influence within each other. Only practical analysis of the two fields enables an experienced diviner to cancel the effects of nearness and achieve the same results of detection of the same two samples at a distance.

The Van Allen radiation belts shown as dots in the following illustration are made up of high energy proticity. The East → West flux of electrons which flow between and around them causes all objects on earth to be interpenetrated with a resonant field of polarized electrical energy which is constantly passing through the human nervous system. This energy was called "Prana" by the ancient seers and diviners; it interacts with the field of consciousness known as Kundalini energy. Everyone has Kundalini, but not everyone has full biological control of it.

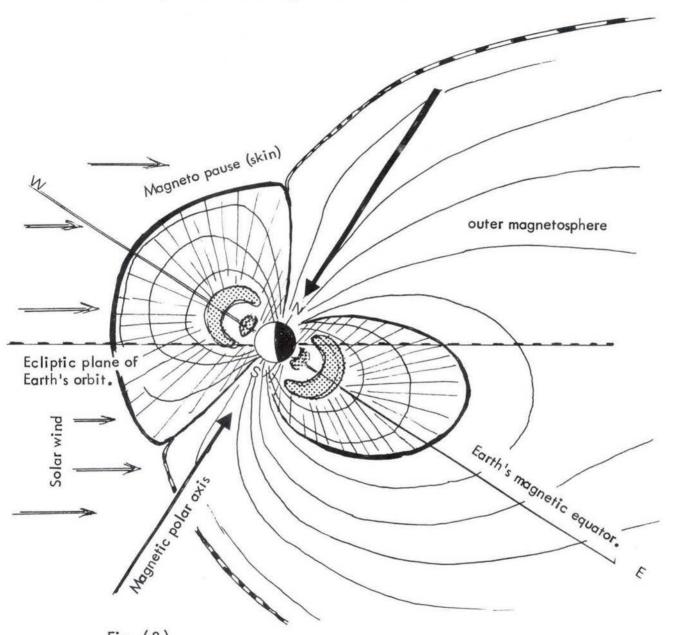
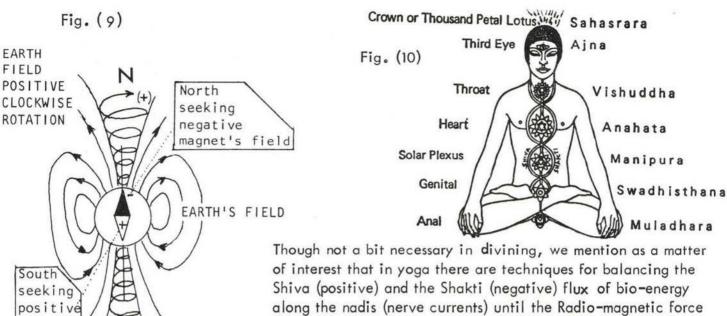
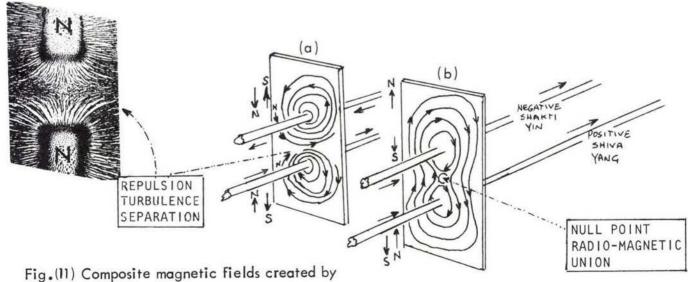


Fig. (8)
The actual geomagnetic field is shaped by solar winds and not equally distributed as in the undistorted dipole field on the next page in Fig. (9). The electrically charged radiation from the sun causes the field to be confined to a volume of space called magnetosphere (shaded area) and in the outer magnetic field there is a "skin" which remains approximately symmetrical around the earth's magnetic poles. The solar radiation pressure bends the magnetic field lines of force back towards the streaming tail on the shadow side of the earth. The thickness of the field at night causes the radiomagnetic signals to oscillate and bounce back all wave-fields more intensively.



of interest that in yoga there are techniques for balancing the Shiva (positive) and the Shakti (negative) flux of bio-energy along the nadis (nerve currents) until the Radio-magnetic force is generated along the Sushumna (central nerve canal in the spine). By breathing a certain way anyone can become Radio-magnetic to some extent and increase their perceptive powers. The full development of the Kundalini Radio-magnetic force should be left to the serious students of yoga or those who are taking a specific course in awakening their full biological/electrical powers through a proper step-by-step education in meditation, such as the three-year course offered by the author elsewhere. For the moment we are concerned only with developing the primary divining faculty in each student so that he may participate in sensing these extra-sensory fields that lie all about him. This force of nature which is passing through all of matter can be defined in many ways and this will be done later but for the present we must become familiar with divining its actual existence.

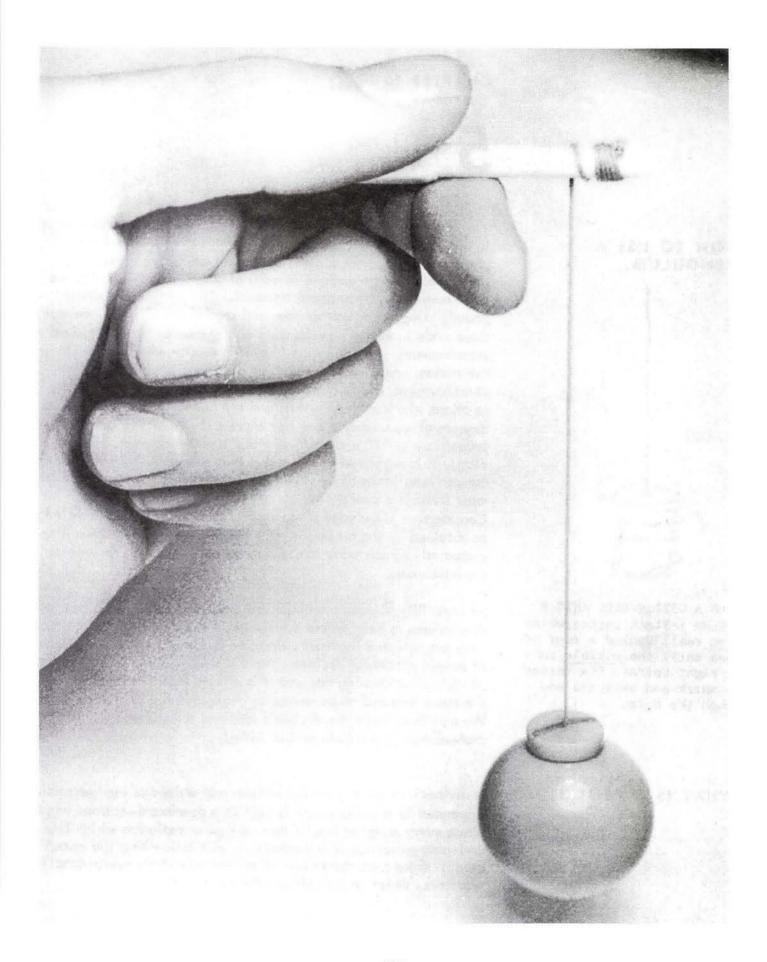


the flow of energy along a pair of parallel lines:

(a) in opposite direction, (b) in the same direction.

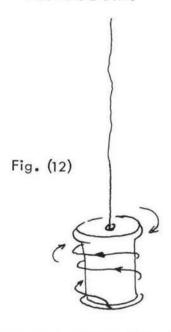
magnet's

pole



5

HOW TO USE A PENDULUM.



MAKING A COTTON REEL INTO A PENDULUM: Black cotton, white wooden reel. Unwind a foot of thread until the visible coil is a right spiral. Fix thread in a notch and pass the end through the hole.

In dealing with the extra-sensory perception of the divining phenomena our progress can only go forward as we realise that the signals must be defined in units of something already known and taken as a conventional standard. The foot, inch, meter, pound, kilogram or volt or hour and second are all such conventions made in man's consciousness and agreed by all as standard measurements. In nature they have no reality whatsoever. If the student wants to set up his own code or standard in his own consciousness, the final measurements will only have meaning to others who know and understand the code. If one works in degrees of a percentile one can express the results in terms of proportions of 100 and apply any value to the degree, but for clarity it is suggested at the outset that we use established conventional units of measurement, while realising that measurement itself is a concept which can only give comparison. Comparative knowledge is not real knowledge. Direct knowledge as obtained by the diviner always has to be translated down into comparative knowledge in order to be communicated to another consciousness.

At least fifty diviner's methods are described in the remainder of this volume to help define the nature of the detected radiations. They are selected for their simplicity to make the greatest number of people successful diviners. At this stage we are selecting the pendulum for training because it is a more sensitive amplifier of the sensations and neuro-muscular changes in the operator's hands. We will later study the diviner's rods and rules used by professionals as we gain actual skills.

WHAT IS A PENDULUM?

A diviner can make a pendulum from any weight of any material suspended by a string which is held in a downward-inclined hand. Since every material has its own particular radiation which is a divinable influence on his results, it will follow that the material used to make a pendulum can affect the operator's neuro-muscular reactions, which in turn affects the pendulum.

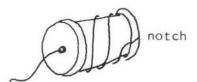


Fig. (13)

REEL: direction of visible coil of cotton thread.

The pendulum can be made of bone, crystal, wood, ivory, plastic, or metal but metal should be avoided if you want less interference. The student here is recommended to make a pendulum of a wooden black cotton reel suspended by its own thread. The reasons here are many but one is that anything which smacks of chromium plate or extra-sophistication is bound to involve the operator's consciousness emotionally, whereas an ordinary spool of black thread helps to detach from such glamour. Another is that for reasons to be explained later the coil of thread wound on the wooden cotton reel helps to amplify the detected results.

STEP-BY-STEP PROCEDURE FOR BEGINNERS.



To guarantee yourself results, get a pocket compass with its needle visible under its glass cover and place it on a bare table which has been covered by a dark green or neutral-colored cloth. Sit so as to look towards west across from the compass. Open slightly any drawers of the table since "cavities" have a remarkable effect on magnetic vibrational fields and may suppress the influence you are going to detect through your nerves.

Unravel enough thread to make the cotton reel dangle on one foot of thread by fastening it at the notch and then pass the cotton up through the reel hole. Tie the end of the thread to the middle of a piece of stick about 4 to 5 inches long, but be sure the stick has no color. Use unpainted wood preferably or a stick painted white or black or dark green as a second choice. Wind up the cotton on the middle of the stick until the reel which becomes the pendulum "bob" touches the stick holder.

With elbows on the table grip the holder with both hands between thumbs and fingers and hang the pendulum bob just slightly east or west of the center of the compass needle. The bob should be about half an inch above the compass and slightly to one side of it. Now still the mind and get rid of all expectations from the mind which could influence your muscles unconsciously and relax your muscles as you slowly unwind the wooden stick. You will

STEP TWO.

STEP ONE.

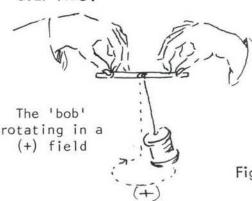


Fig. (14)

A compass on a bare table

Fig. (15)



have to raise your hands as the cotton thread unwinds. At a certain length you will notice the pendulum bob begin to gyrate describing a circle or oval movement. Note the approximate distance along the thread when this begins. Then unwind the thread a little more until a to and fro oscillation beat begins. Note the thread length.

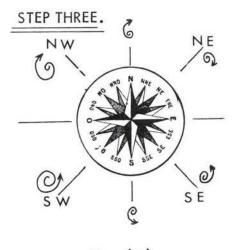


Fig. (16)

Continue to unwind more thread until gyration commences again. Note the thread length. Then unwind more until there is oscillation again. Keeping the thread length you have found for this second oscillation, move the pendulum gently to a place just north-east or north-west of the compass. If you found an oscillation at this string length just east or west of the compass center you will find a gyration when you move it to the NE or NW. Now move the pendulum without changing the string length to the SE and SW of the compass and here you will find gyration but its direction will be opposite to that on the northern side of the compass. If the diviner's gyration was originally clockwise in the northern half the southern half will gyrate anti-clockwise and vice versa.

NOTE: Generally diviners find clockwise gyration on the northern side of a magnet or compass and anti-clockwise on the southern. This may vary with some people depending on their Shakti/Shiva balance of consciousness. Note what it is for you and take this as your own sign of positive or negative pole.

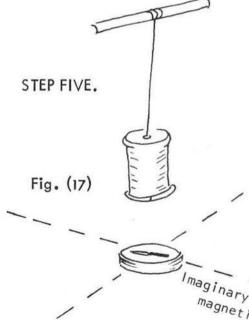
STEP FOUR.

Now practice moving the pendulum gently from north to south along the compass needle and vice versa. The effects should be gyration at the pole, oscillation towards east and west as the center is passed, then opposite gyration. Now make a knot in the string at the point where you found the second oscillations most active. You can now experiment by moving the string length to where you find gyration over the center east-west line and moving

it to the poles to find oscillation on either side of it. In other words we do not find the same effects at all <u>three</u> places. When you have mastered this you have become sensitive to the invisible magnetic fields which pass through all of creation.

NOTE: Should you find results slow in coming there could be a variety of reasons. You are blocking your imagination either negatively or positively. You should be expectant but not expecting anything in particular. In other words, let nature talk her own book. Don't try to tell nature what is happening or ought to happen. Be humble enough to accept and listen to what she is telling you. Some people get better results by changing their body position and facing east instead of west. The diviner's own body is a unique pattern of energies. We are not all made the same, therefore stick to the position which suits your own biological energies. Do not get concerned or anxious if the direction of swing taken by the pendulum is different from Steps One to Four. It may be necessary for training purposes to give the pendulum an initial swing forcibly and then watch the movement disappear until the reaction of your nerves start a natural ayration. By exercising this way and noting when you are forcibly trying to keep the pendulum still and vice versa you can train yourself to produce the usual reactions.

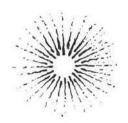
The pendulum string seems to have a roughness as soon as there is an incorrect gyration or oscillation. This is very fine and subtle for some people but sensitivity can be increased further by realizing that correct string length creates resonance and that certain of your fingers may be more sensitive than others. Having found correct string length and tuned the pendulum to the eastwest to and fro beat, grasp the holder by its center with just a single finger and thumb of one hand and experiment with each finger to see if you get a more excited pendulum movement. That will be your dowsing finger.



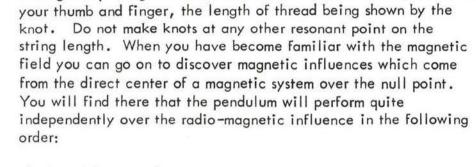
magnetic directions.

The pendulum will not behave in the same way at the three places.

POLARITY IS NOT THE SAME.



STEP SIX.



Now give up using the holder and hold the thread directly between

- a) A positive gyration,
- b) about 3 north/south beats,
- c) a negative gyration,
- d) about 3 east/west beats.

Fig. (18)

Test polarity of product laid on the compass glass (right swing or left swing) using tuned-in pendulum. This serial of beats is the sign of R-M radiation and can come from different kinds of matter just as the positive magnetic or the negative magnetic influence can be detected in most forms of matter. Each piece of matter has one of the three forms of energy composing a magnet's field and may have more than one.

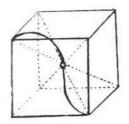
STEP SEVEN.
TESTING SAMPLES WITH A
KNOWN MAGNET.

To recognize the polarity of any specific object, lay the specimen on top of the compass glass and take the reading, then lay it alone on the bare table. To encourage yourself to be detached in your readings find out whether the following are positive or negative: squares of zinc, copper, lead, iron, drops of water, alcohol, etc. You will discover in a later chapter whether your results are correct.

TESTING A SAMPLE WITH A KNOWN WITNESS.

Surrounding influences tend to mask the emanations of some elements and sometimes the shape and form of the pendulum interferes as well as the material it is made from. To find out the correct vibration of some element or object we find something which radiates the same pattern of energy or we make something identical to the object which will resonate a similiar wave field. This acts as a tuning device and is called a "witness" or specimen.

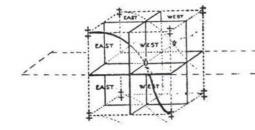


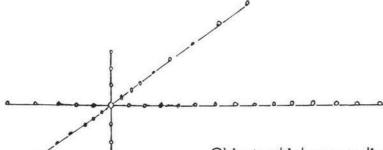


Later, a whole chapter will be given to the preparation and use of witnesses as amplifiers and selectors of particular wave frequencies and wave fields. In the meantime, for the purpose of directly experiencing, we can use a professionally made "witness" obtainable from the University of the Trees Press, or we can take a known specimen for the sake of testing a sample and compare it. For instance, if we take a specimen piece of lead element 82 as a witness, which has a negative vertical electric field and a positive horizontal magnetic field, we can then hide another small piece of lead in one of ten match boxes (not envelopes - reason explained later). Now shuffle or have someone else shuffle the boxes and arrange them in random order on the table top. Then by suspending the pendulum over each box in turn with the "witness" held in your free hand, detect the positive magnetic horizontal field radiating within 8 inches of the top of the box containing this hidden sample. This selectivity will effectively cut down some of the surrounding influences set up by the electric wires in the walls of your room, or the shape of your pendulum, and make your pendulum a tuned instrument which you can test against a known source of vibratory phenomena.

REDUCTION OF SURROUNDING INFLUENCES IN SPACE.

The universal field around you is full of cosmic radiations which also enliven objects around you so that they give off different kinds of fields. So far we have only mentioned horizontal magnetic wave-fields because we want to become supersensitive to the energies of Supersensonics as soon as possible in this brief training period. There are "vertical fields" as mentioned with the sample of lead. The element 82 lead happens to have a negative vertical field. The elements zinc and tin have no vertical field. There are also east-west flowing fields which later on we will deal with extensively when the student becomes more advanced at perceiving the horizontal fields and their three forms of magnetic polarity, i.e. positive gyration, negative gyration and radiomagnetic serial number of oscillations.





Objects which are sending their influence to you horizontally through space will often mask the vibrational perception depending on their shape and color. Or the horizontal field may be enhanced by being a perfectly round or curved surface. Also if the object is narrow and straight like a stick it gives an enhanced reading if it lies north or south along the meridian. Similarly if this "bar-shaped" linear object is vertical it will give off a different intensity from something inclined at an angle. It will depend on the angle of the sun and the time of day and if you become acutely aware of the interrelatedness of everything to everything else, you can become a master of your Supersensorium which God gave you for no other purpose.

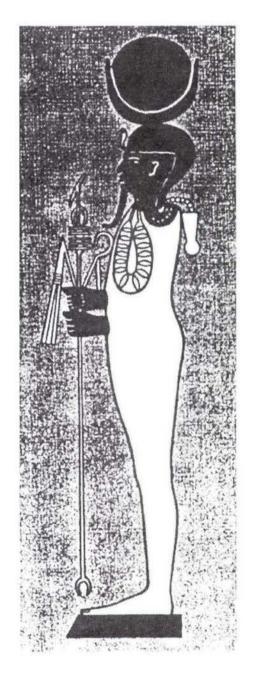


Objects placed in the prismatic colors of a rainbow act in the same way as intensifiers and maskers of the universal supersonic sound which sings its tune in everything in and around your experimental table.

Hence your experiments should be done far away from such sources of influence not connected with the tested samples. For instance, you can avoid highly colored curtains or flower vases or strong decorations. Keep any radio or T.V. set as far distant as you can. Even when it is not switched on its circuits act as resonators and capacitators to radiations in the supersensonic spectrum of the total cosmic field of entire space. Do not work near a typewriter or filing cabinet or surrounded by bottles of chemicals or medicine. Camphor ointment or strong liniment containing capsicum, or even a cup of coffee, can mask your vibration easily if your biological energy system is not highly trained to counteract its subtle effects on the ESP faculties of our higher consciousness.



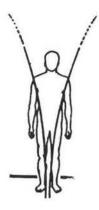
SELF-SUGGESTED RESULTS.



It is essential to maintain mental neutrality as regards results. You need to be certain that the gyrations and oscillations of your pendulum are not self-induced or coming from any self-hypnotic suggestion. Throughout this volume we shall describe methods for preventing this self-delusion. The correct attitude is to be indifferent as to the direction of the pendulum swing and yet still in a receptive "willing" state of mind, expectantly waiting for any signal to reach your consciousness and hence influence your nerves. Although the radiations detected are invisible to our senses they appear to be vibratory energy which can be absorbed subtly through the eyes and skin and thence transmitted to the brain. Therefore keep looking at the place where you are sensing or point your free hand palm forward in the direction the influence is coming from. Let your fingers and nerves be as if you were trying to feel them being tickled lightly by a feather.

It is an important facet of all divining work and ESP to have your mind and being "at the ready", as if it were waiting to see and hear the result of a gunshot, a rocket or airplane. You see the signal before you hear it and you expect to hear the sound shortly after because you "know" it is coming. So the sensation of the tweak of energy always follows the movement of the pendulum with an experienced diviner. With beginners they must learn to sense the invisible just as we "feel" the presence of a cat or a person behind us. A good dancing partner is expectant and ready to follow the next movement indicated, just as musicians follow the conductor and their colleagues' feelings. Artists and others in aesthetic pursuits call this feeling "taste" and a good diviner must acquire this inward awareness of resonance and harmony.

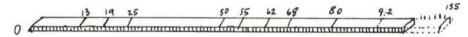
At the beginning, however, it is no different from a Rubenstein learning to play the piano for the first time or even someone learning to touch type on a typewriter. You must not get discouraged because you cannot sing the leading part in the opera at first go. First class ESP results take daily practice like any other instrument or game of skill. To understand why some people



get results quickly and others are slow we must develop some awareness of ourselves* as an instrument of the universal field on which we shall have much to say in later chapters. The diviner's implements and tools are no better than the diviner himself in exactly the same way that a carpenter's skill is not inherent in the chisels he uses.

On the other hand, however great a carpenter he is he cannot drill a half-inch hole with a one inch bit. The various appliances we shall be describing in later chapters will only give better results when we have mastered the basic vibratory influences of the horizontal field and try to become familiar with surrounding influences affecting our consciousness.

Fig. (19)



UNIVERSAL RULE AND ITS FIELD EDGES.

When we refer to the various rules, dials, discs and measuring devices in future chapters we will find that there is a common agreement among all diviners through the intuitional faculty of the dowsing phenomenon. This general agreement caused Turenne to invent a rule 155 cm. long which unknown to him represented psychically the proportionate fields of energy(Fig.) emanating from every system in relation to the whole. He used the 92 points representing the then known elements of nature expressed in terms of centimeters, but it is clear to anyone who does his own divining, that whether you measure in centimeters or potatoes or the length of a finger or foot, you are still in the end only coming up with some comparative measurement.

^{*} The practice of some of the exercises in the popular paperback edition of "Conduct Your Own Awareness Sessions", published by Signet books and available at University of the Trees Press is here recommended.

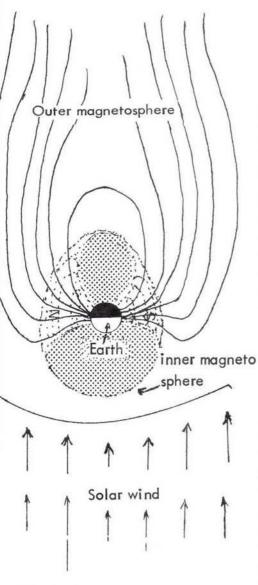
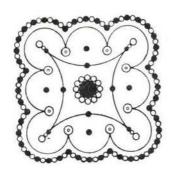


Fig. (20)
The Earth's magnetosphere
is shaped into a pear drop
by the pressure of the solar
winds. On the dark side of
the earth the outer magnetosphere blows into a long tail.
The inner magnetosphere
takes on a doughnut shape.

Turenne speculated, as an engineer teaching physics and radiopropagation, that the "Pendular wave field" recorded on his apparatus was a "General field" produced by each sample or element used as a test sample in the presence of air and light.

The author, as well as many other researchers, holds the view that the various rules and devices and all the apparatus of radiesthesia and radionics are all mental constructions, and therefore conventions in consciousness; that they merely describe the field around the test sample as a whole, so that the various measurements on these different rules reveal only a selected part (or a resonant nodal point) comprising a single component of each test sample.

A person schooled in electro-magnetism or physics would explain this in terms of phase reversals in the vibrations sensed in the general flux which we have termed the "Universal field". We need not concern ourself with technical explanation of a "standing wave" which affects any material substances placed in its path according to its relationship with the surrounding space. In more simple layman's language each substance is an absorber of surrounding radiations dependent on its own specific frequency of vibration and its direct relationship to the empty space of "no vibration". Each rule or device invented by the 150 odd early pioneers of radiesthesia, radionics and divining measured their ESP readings, but our study reveals that these rules measured only one phase of the whole. Each of these rules and methods provides data which is interchangeable when using the proportionate measurements of the universal rule which, although it was marked in Turenne's version in centimeters, actually has nothing to do with exact centimeters, but more represents geometrical proportional values. In the author's book "Nuclear Evolution" this is also shown as a reflection of the human aura field which, in terms of biological material existence, is no different from any other material field and its surrounding total space.



When one realizes that this auric field is modified by human consciousness in the same way that witnesses, forms, patterns of energy and electro-static energies can be modified by consciousness at a certain level of conviction, then the mystery is immediately taken out of radiesthesia, radionics and divining and all its related supersensory results. The "whole" or Universal Field then becomes mirrored in every object of nature, including ourselves (the ultimate validating instrument,) and we then clearly understand the state of consciousness in which Christ and Krishna and other spiritual geniuses related their own awareness to the whole. More importantly still, we can also realize what caused their state of conviction about reality, i.e. that everything material was ultimately a projection of their own consciousness. We can see that everything is correct and True from the level of consciousness from which it is observed and validated and we realize that this was also the basis of Einstein's insight into relativity, which states that every observation made of an object is relative to the position in space of the observer. Here the author humbly adds his own insight and that is that the position and vibration pattern of the observer and the surrounding radiations of light and energy are both relative to the Absolute point of zero vibration.



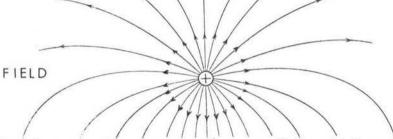
Thus all vibrations whether sound, light or supersensory are measured and compared by consciousness in resonance with the silence of stillness from which they arise. This absolute point I have called "Pure Consciousness" although I fully realize from a religious and devotional point of view, it could be called Brahman or God or the Ultimate One or anything consciousness can think of. I am content here to give a Supersensonic understanding and let those who want to define God or speak for God, first define the limits of man. For those who want to spend a dedicated life of researching the nature of Consciousness and its relationship to the Universal Field, I have written a step-bystep three-year course available from the University of the Trees Press on a tithing basis. This three-year course is intended to set the student on his own path of discovery of the Universal One who is both writing and reading not only this course, but also the whole course of life in Evolution.

MORE ABOUT HORIZONTAL MAGNETIC FIELDS.

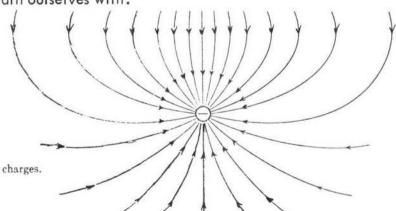
The connection between the magnetic and electric fields can be explained by the divining sense and we shall get deeper into this as we go along and get familiar with nature's own forces by actual practice of the faculty. It is virtually useless to investigate this faculty from an intellectual standpoint alone simply because this creates a separation in the observer between himself and what is observed. This does not mean we cannot build up theoretical knowledge about these fields; it merely means that we cannot investigate them by theory alone. First we must have the sensory or supersensory experience and then we can invent a theory to explain it. To do otherwise is merely the height of ignorance, however well endowed intellectually we may be. Secondhand results in ESP and the subtle radiations of matter are about as much use to the intellect as reason is to a mindless fool. The arrogance of an intellect which would sir and watch phenomena and then write about it like a newspaper reporter punching out his daily secondhand account of some event, is incredibly blinded by its own limitations. The intellect, however, which trains itself to search out its own nature and to experience the universe and its energies directly, can be as sharp as to invent a dozen theories of how things are what they are. All our greatest men had razor sharp intellects second to none.

Fig. (21)

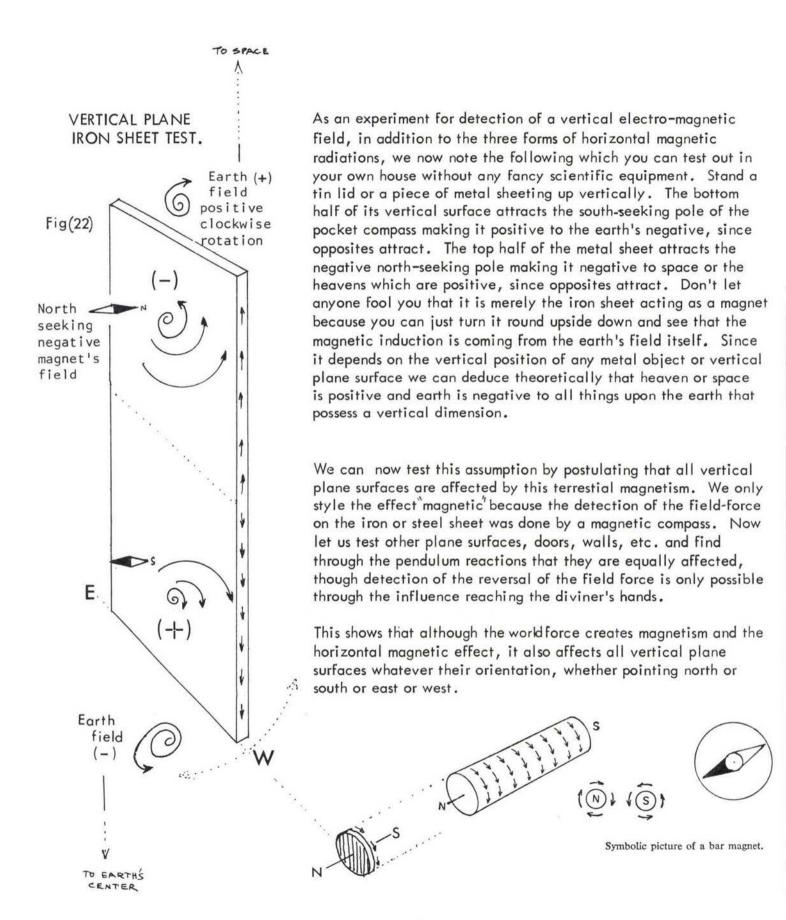
EARTH'S



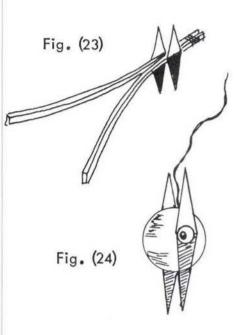
Here is an experiment you can do to get firsthand information about how every object on the earth, including yourself, is permeated by magnetic and electric currents induced in addition to the horizontal magnetic influence we have been using to train ourselves with.



Lines of force for equal but opposite charges.



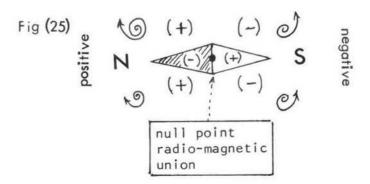
MAGNETS IN SUPERSENSONICS.



HOW TO MAKE YOUR OWN MAGNETS. As standards for use as comparisons radiesthesia, radionics and diviners have used magnets as intensifiers of detected influences and for selecting single type of wave phenomena. Some radionic practitioners have gone as far as using a vertical bar magnet as a tuning device for the universal field. The value of using magnets can be seen by studying the patent dowsing rod invented by Turenne in France where the proper fitting and orientation of two magnets make this appliance (a) sensitive to selected types of detectable radiation and (b) an intensifier of the detected influence. In addition to the three polarities of horizontal magnetic fields there are two more types of radiation which make three main types of detectable field forces which make up the universal field. By adjusting the magnet needles attached by swivels to the Turenne divining rod and the Turenne pendulum, all three of these fields can be selected in turn and at will. Similarly magnets and needles arranged on the table top have the effect of selecting a single type of wave field. If we wish to select only the horizontal field which we have been dealing with so far, or go on to select vertical fields and E-W fields we can do so by correct orientation of these magnets in Supersensonics.

Before we go on to describe these two extra fields let us describe for the benefit of those who are not acquainted with physics how to make magnets for use in Supersensonics work.

A magnetic needle when hanging free on a thread or balanced on a pin will align along its greater length according to the earth's magnetic field. This knowledge enabled ancient navigators to travel across the seas and keep to a course or direction. Before the invention and the hammering of iron bars to make magnets induce the earth field, the ancients used <u>loadstone</u> tied to a piece of cork floating on water to show the North Pole. The ancient Egyptians were familiar with magnetism and wore magnetic bracelets and amulets and knew its properties since they used the same methods of divination by rods and Supersensonic devices to inform themselves of subtle cosmic fields of energy.



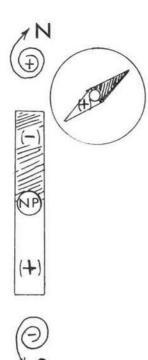


Fig. (26)

Modern methods of making magnets include the sudden breaking of an electric current whose magnetism is passed through nickel steel or iron, so that induction of the field causes orientation of the electrons to line up in north-south direction.

Once you have made a magnet or obtained one you can make others for Supersensonic work very easily because the field strength only needs to be weak to polarize the subtle fields detected. You can do this simply by rubbing the first magnet from the center neutral point of the linear bar of steel along half its straight length to the end with one pole of your first magnet.

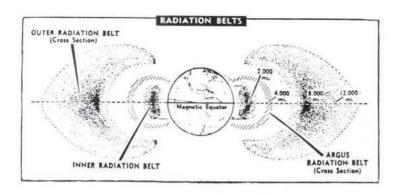
The first step is to determine which end of your first magnet is positive or negative by noting which end attracts the opposite pole of your magnetic compass. Your negative north end will attract the positive south-seeking pole of your compass and vice versa. When stroking the positive end of your first magnet from the center of the new steel rod or needle you will produce a negative pole on your new magnet. Test the magnet after you have made it, by bringing the end you have labeled negative close to the compass needle. Now compare the relative strength of your new magnets made in this way by separately placing them at the same distance from the compass needle and seeing that they do in fact attract the compass to an equal degree. Preferably the new magnets should be made out of square rods about one to three inches long. Round curved surfaces of objects affect the horizontal magnetic influence and suppress it slightly so using square rods will help you get more results. Once you become proficient you will be able to negate these small interference effects mentally.

Now you are ready and fully equipped as a diviner to discover more and more interesting relationships. First we illustrated the diviner's hands shown using a black cotton spool over a magnetic compass as in the first two steps of training the Supersensonic faculty.



Graduating from cotton spool

to sophisticated magnet pendulum



RECAPITULATION.

You were shown in the preceeding pages how to develop your "divining sense" essential to the direct investigation of Supersensonics and we used magnetism to acquaint you with the horizontal or pure magnetic type of wave phenomena. By using the field of the compass needle you provided a model of the field forces at work in matter and our sensory and extra-sensory perception of its influences.

When you have practiced properly and developed your Supersensonic powers you will find that nearly every specimen of matter or organic life placed on your neutral green experimental table, with or without a magnet or your compass beneath it, will produce a radiating influence of some kind. Specimens of the animal, human, mineral and vegetable kingdoms have horizontal fields around them. In later chapters you will find lists of the polarities of various substances. Do not be distressed if your findings are different at first. As you become more sensitive with practice you will find results getting the same although the facts of polarity are not so important as the noticing of changes from one polarity to another. Because we are all made differently our legs, arms and nervous system often influence polarity but the diviner attaches more importance to detecting when the pendulum moves out of one field of influence into another. The alteration of the signal is the essential factor. Therefore practice frequently, sensing the difference as your pendulum passes from north to south over a compass magnet. When you have become more proficient you are ready to detect other types of fields.

Fig. (28)

The fitted magnets are clipped on with a snap fastener to enable the magnets to be swivelled to different positions.

6

VERTICAL FIELD INFLUENCE.

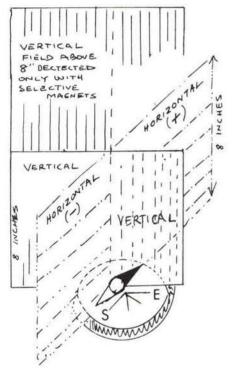
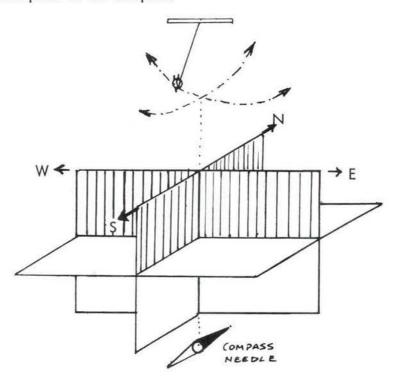


Fig. (29)

So far we have deliberately kept our experiments to the horizontal magnetic influence because the student must begin very simply and work up to the more complex fields of Supersensonics. The second type of radiation from any natural object or sample to which we now introduce the student is the vertical type of influence. It is called "vertical" only because it is at right angles to the horizontal field. We are still dealing with the electro-magnetic effects and the fields around a magnetic compass which we are using as a model. These fields appear around all substances but in talking of their orientation we can best illustrate their shape and polarities and the relationship of the magnetic horizontal field to the vertical field by using the same model of a magnetic compass.

Around the magnetic compass needle we have discovered a horizontal field which extends through a belt of radiation about 8 inches upwards. Above that we can detect vertical wave fields by making a selective pendulum which does not react to the horizontal waves quite so well. With a selective pendulum we can detect the vertical waves even below 8 inches but with an ordinary cotton spool pendulum you will only be able to trace the vertical field above the horizontal belt of 8 inches and the pendulum will oscillate to and fro along a north-south axis and then an east-west axis when it is held directly above the center of the compass magnet. Like the horizontal field there are the same three types of influence corresponding to the direction of the pendulum swing. This vertical influence shows that there is a field making an E-W cross as soon as the pendulum is above the horizontal belt of 8 inches. This field is called a vertical electric field"because it is the influence which a person trained in Supersensonics detects over all sources of electricity. We shall deal more extensively with this electric field in a later chapter but just now we are still engaged in training the preliminary sensing of basic radiations. The following diagram gives a conceptual picture of our model's invisible fields which make up not only the field of a magnet but of all matter and sources of radiation.

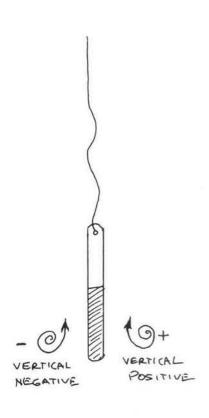
Fig. (30)
Oscillations over the center point of the compass.



The cotton spool is non-selective and will therefore only sense the vertical field at a certain height above the tested specimen, unless the diviner is very experienced and can mentally amplify the selectivity. An easy way at the beginning is to make a pendulum with one of your bar magnets suspended vertically on a thread. It then takes on the characteristics of the metal sheet experiment we did in the last chapter. If you used the patent type of pendulum invented by Turenne then you would align both magnets on their swivels vertically to select the vertical field radiation from the other two fields. The color of a pendulum can also have a selective value but this will be fully explained in a later chapter. With your cotton spool or your vertical rod magnet pendulum you can now test for three forms of polarity within the vertical field over the magnetic compass, i.e. (a) positive, (b) negative and (c) radioactive, instead of positive, negative and radio-magnetic with the horizontal field. The standard patterns are:

Horizontal magnetic field - type (+) or (-) or radio-magnetic (+, -)

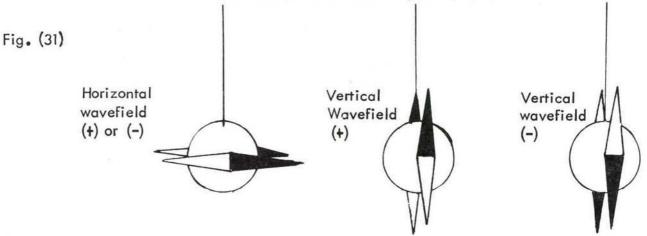
Vertical electric field - type (+) or (-) or radioactive (+, -).



You can also test now over samples of elements as listed below, however you must be aware that the vertical field exists over magnets such as a compass in a radioactive combination of field forces and therefore the detection over other products by means of a pendulum must be done separately with a pendulum that selects the vertical type of Supersensonic radiation, such as the vertical magnet pendulum. Another way of creating a pendulum with selectivity would be to make it from an element which had no horizontal wave field such as Thorium. Such a pendulum or rod helps the diviner to sense only that radiation which is created by the material of the detecting pendulum combined with its shape and form. Such professional instruments need not be made until one is fully proficient at detection of various elements and has become familiar with their fields. Train yourself by learning the following elements: (Test near edges.)

Number	Element	Horizontal Magnetic	Vertical Electric
6	Carbon	+	+-
13	Aluminium	+ -	+ -
26	Iron	+	+-
29	Copper	+	+
30	Zinc	-	0
47	Silver	-	+ -
50	Tin	+ -	0
79	Gold	+	+ -
82	Lead	+	
90	Thorium	0	+ -

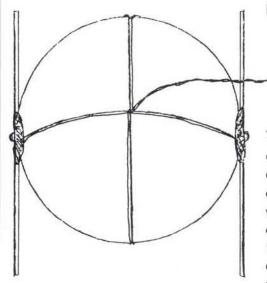
In a similar way to your testing of the horizontal field below 8 inches your pendulum selectively tuned to the vertical electric field will now gyrate clockwise where the polarity is (+) positive and gyrate anticlockwise to the left when the sign is (-) and in making the combination oscillations on the east-west and north-south axis, the radioactive polarity (+-).



When a sample has no influence on the diviner's faculty the zero is written either in the vertical or horizontal columns.

The beginner can be misled by placing a sample with a "zero field" on top of a compass or near a source of radioactive († -) radiations and will sense an influence coming from the specimen. This "something" is considered by experienced diviners to be an extra combination of field intensities caused by the extra energy subtly provided to the sample by the radioactive emanation. The true nature of a "zero" product is only tested on a bare table with a selective pendulum, magnets vertical. Once we have acquired considerable skill at recognition of the Supersensonic signals a diviner can use such extra-energy sources such as radium blocks or magnets as intensifiers and amplifiers of signals. Notice that Thorium has no horizontal magnetic influence and is therefore capable of amplifying vertical type influences even in strong horizontal fields.

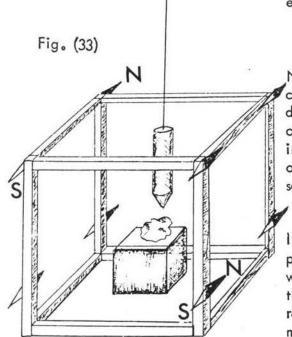
Fig. (32)



The horizontal magnetic radiation from an object has been shown by experiment to be associated with or even a function of surfaces exposed to air and its ionizing properties. It is never perceptible over a product as soon as this is buried underground. This explains why some diviners who use pendulums and rods without extra help of special amplifiers and selectors do not get any radiations from the surface of a still pool of water underground. Stationary water alone has only a horizontal magnetic influence on the diviner's neuro-muscular system. If the water is running in an underground stream or receiving some assisting radioactive amplification, it sends off an electric vertical wave-field which the selective pendulum can detect quite easily.

SELECTIVITY BY SUPERSENSONIC WAVE CAGE.

Just as Faraday constructed a cage which could exclude certain electro-magnetic radiations so can we enhance our own selective power not only through divining instruments in our hands but also by choosing the materials lying on our table. A good test to discover whether the polarity of an influence is horizontal or vertical is to first test the radiation produced by a small square of lead (Pb). Lead has an effect on the diviner of positive horizontal field and a negative vertical field. This means that if you find a gyration of one of these corresponding vibrations over lead at any given place, the prevailing radiation from the ionizing air is of one type or the other. If you test lead with a selective pendulum which can react to both types of horizontal or vertical influence, you can compare the reading in the air surrounding the lead and learn something about the ionizing properties of the air and space which is surrounding your present experiments.

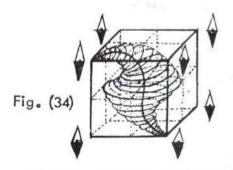


Now if you make eight magnets in the way described in the last chapter and arrange their north ends orientated in the same direction as the compass needle, then you can construct a wave cage for selecting fields. Put four of the magnets you have made in a square on your table. Next put the four remaining magnets on piles of books to form a new square on the table at a height say 12 to 24 inches above the first one.

If you test this volume of space within the eight mangets by placing a specimen of lead in it, the radiation from the specimen will be found to be horizontal magnetic type everywhere within this space instead of giving the positive horizontal magnetic field radiation to a height of eight inches only. Hence you have now made a selective wave-field in space which you can use for further training and testing of nature's wonderful patterns of invisible energy.

Just as Faraday created a space of standard electrical potential within a volume of space in the air by surrounding it with metal gauze with an electrical charge upon it, so can Supersensonics create a space which radiesthetists, diviners and radionic practitioners use to test selected polarities. By placing these eight magnets horizontally along their N-S axis, we have now created a cage in which only one type of influence - namely the radiating horizontal magnetic field - prevails.

CREATING A VERTICAL ELECTRIC WAVE-FIELD.



MENTAL MODIFICATIONS OF A WAVE-FIELD.

Now place all the eight magnets in a vertical position, standing them on their ends. In the volume of space within these magnets lined up in the earth's vertical field (like the sheet of steel experiment) you have created a cage in which only the vertical electric field prevails. Now test the lead specimen for polarity and find that within this space the radiation of the field influence is negative vertical everywhere inside the eight magnets. In some strange way the horizontal magnetic field has been masked or subdued as far as our neuro-muscular perception of it is concerned.

This does not mean in the above cages that the horizontal field has disappeared, because an experienced master in Supersensonics could mentally counteract any particular field by using his own brain as a capacitator for electric charges and creating the same kind of space or its opposite within the eight magnets. However, we only mention this in passing because beginners should not try to start at the top. It is foolish to try to achieve a virtuoso performance like Christ's without first doing the full training as he did. The teachers of music in India required a student to spend 14 years studying basic forms of raga and practicing scales and modes before they would allow any spontaneous free interpretation of a raga. We recommend a similar grounding in Supersensonics



before trying fancy sensational mental efforts at being a Superstar, simply because if we do not watch out our gift could easily be taken away by the tricks our consciousness plays on itself. After all we have hardly begun our journey into the various material domains and their relationships to fields of biological energy.

SAMPLE WITNESSES & CURVED SURFACES.

Later a whole section will describe what witnesses are and how we can make them. At this point we should mention before going on to other interpenetrating fields, that the influences we have detected so far, the horizontal magnetic and the vertical electric, can also be modified not only by the consciousness of a master but also by the curved surfaces of certain materials.

Fortunately for the diviner's faculty most surfaces are horizontal or vertical and therefore the detection of subtle radiation is not modified. But exactly curved or spherical surfaces of matter act differently because certain forms of matter do not radiate the horizontal and vertical influence. This modification allows us to make sample witnesses of the elements inside glass tubes with curved surfaces where the detected influence is entirely due to the specimen lying within the glass and the radiation from the glass itself is hardly detectable. What is inside the glass form sends its influence to the air, thus we find that over the last 50 years, diviners have used sample witnesses contained in glass tubes with little effect of glass on the sample.

MODIFICATION OF A VACUUM.

Turenne experimented with glass tubes of rarified air and found that the influences from specimens contained in a vacuum become stronger with the greater degree of vacuum. This follows the phenomena found in ordinary physical propagation of ionizing wave fields such as we have in radio waves and excited gas laser chambers. Therefore any tests made in a vacuum become stronger and a vacuum in a tube can be used itself as a witness. We will examine these forms of witness in more detail later when we have become familiar by constant experiment and practice. These last two modifications are mentioned only at this point in case you should be speculating why you got the same reading for any sample in a glass bottle, as you get when there is no glass around it.

CONTINUOUS RADIATION
OF HORIZONTAL MAGNETIC
FIELDS.



An experimenter testing a sample with a horizontal magnetic field will find that there will always be a continuous gyration over a sample which will continue gyrating indefinitely within 8 inches or in a cage. This suggests that the emanation is something to do with the continuous ionization at subtle energy levels of the air space around the sample, very much as the human etheric aura extends outward and continuously radiates biomagnetic forces into surrounding space.

DISCONTINUOUS VERTICAL ELECTRICAL FIELDS.

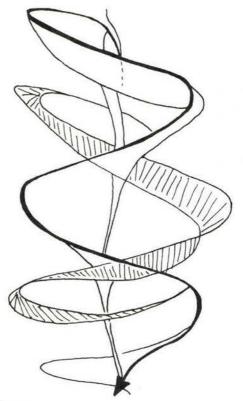
Whenever the vertical electric field is sensed by a diviner there comes a moment when the gyration ceases and the detecting instrument or pendulum goes dead. It is as if there is a flow of energy which gradually saturates the object or the diviner's bioelectric forces and creates a discontinuous effect. When the diviner's hand is removed out of the field-zone of the sample's influence the invisible system between observer and the observed object reverses its phase and is revitalized. This revival of the motion of the pendulum gives a "serial" sequence of signals and we will study this phenomenon in a later chapter on "serials and serial numbers," in Volume IV.

THE DEAD OR SLUGGISH PENDULUM.

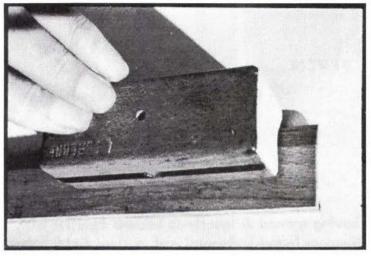
Phase reversal is mentioned here during the training of the divining faculty. An experimenter will often fool around, negating results with his imagination, trying to convince himself he is not feeling what he is feeling, until the pendulum goes dead. Then he has to force it to swing and the life and spontaneity has gone out of the system. Also the diviner's energy can be sapped by long periods of experimenting and so it is useful to know that you can always recharge your detection of this vertical electric field strength by washing the hands and wrists in running water from a faucet. Many people give up because they cannot continue long enough to get consistent results or they get tired from exhausting this expression of biological energy from their consciousness. An even greater insight is to use the electrical core of a spigot of water for refreshing our positive force of consciousness by absorbing it into our biological electric system; this involves holding our negative and positive hands either side of the column of water from the faucet for a few seconds. Even if your receptivity is low you should not need more than a minute if you are mentally "willing" it to flow into you.

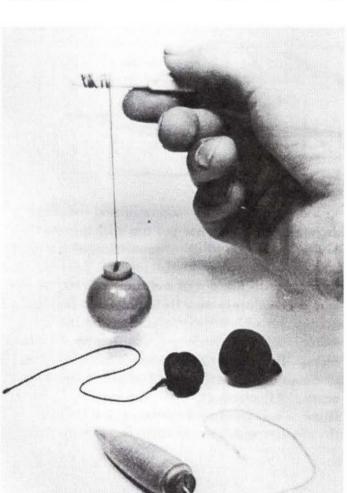
Fig: (35)

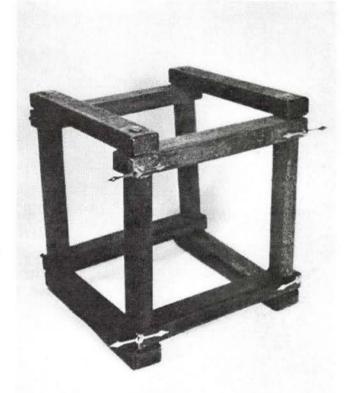
Electrical core in column of water will obey a mental command in the wave-field of human consciousness.

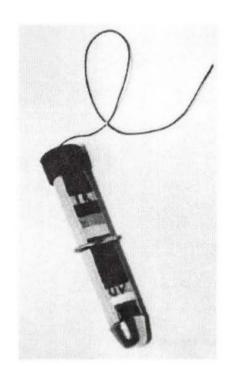


Actual visual shape of wave-field moving along its spiral wave shaft.









Left top: The radium block at zero on the Turenne rule. Right top: a Supersensonic faraday type cage for radiesthesic isolation of horizontal energies.

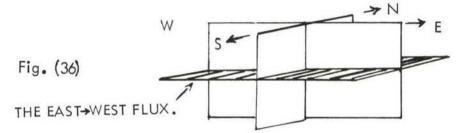
Left bottom: A selected group of pendulums. The white ivory round bob, the Mermet black point below and the pointed ivory pendulum for intuitive radiesthesia. All have empty cavity within for receiving a witness of the sought-for sample.

Right bottom: The spectrum pendulum containing diluted radioactive substance for atomic analysis and interaction of thought waves with matter.

7

THE EAST-WEST FLUX.

The diviner having trained diligently to become familiar with selecting influences in the horizontal and vertical fields around all matter is now introduced to another field-force which radiates at right angles to the other two. In our diagram we depicted three dimensions as follows:



It can be seen that the horizontal magnetic and the vertical electric fields intersect each other but are still orientated north-south giving two poles to all electro-magnetic phenomena.

Now we investigate with the aid of our diviner's tools and the trained faculty, a completely new field only just being confirmed by space research, but which Supersensonics and its early pioneers in radionics, radiesthesia and dowsing have researched for over 25 years. This force or radiation is more subtle and yet it is the prime cause of magnetism and the electro-magnetic field of the earth. All products, even extraterrestrial, have an east-west influence and produce detectable zones or field-edges when the diviner uses special rules and wave-indicating instruments.

CREATING AN EAST-WEST FLUX CAGE.

So as not to get confused with the two horizontal and vertical fields let us create a Faraday type field-cage which selects only the east-west field when a sample is within the volume of space between the eight magnets.

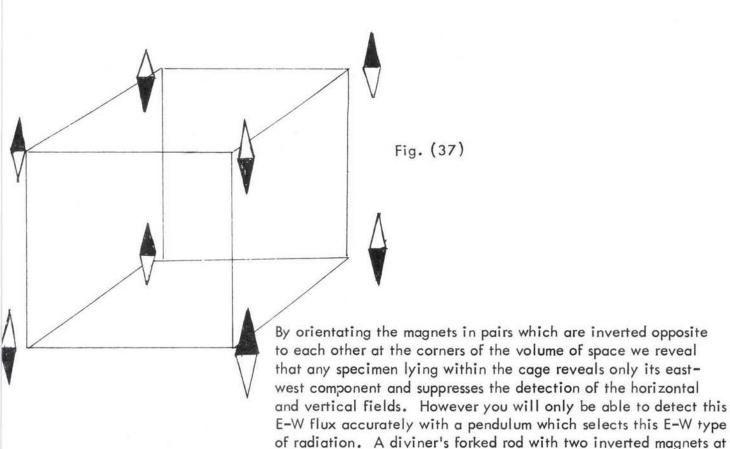


Fig. (38)

magnets placed at flash-point where "life - energy" is centered



swivel magnets set for selecting E-W flux.





pendulum with swivel magnets

The east-west influence is detected flowing west by magnet needles being in the inverted position with the (+) positive pole of one needle beside the (-) negative pole of the other. All the three types of Supersensonic influence, horizontal magnetic and vertical electric and now east-west flux can be separated only by means of magnet alignments, the magnets being set at the corners of the testing table in the way described for the various wave-field cages, or alternatively attached to the pendulum or diviner's rod. You can make three different pendulums with magnets in fixed alignments or one pendulum which swivels as shown.

its flash point is depicted along with a Turenne pendulum with its

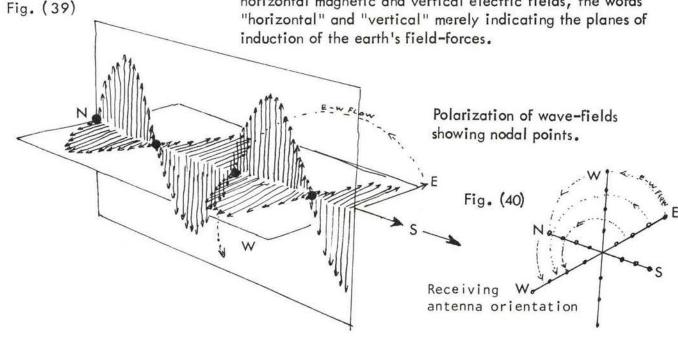
EXPERIMENTING WITH EAST-WEST FLOW.

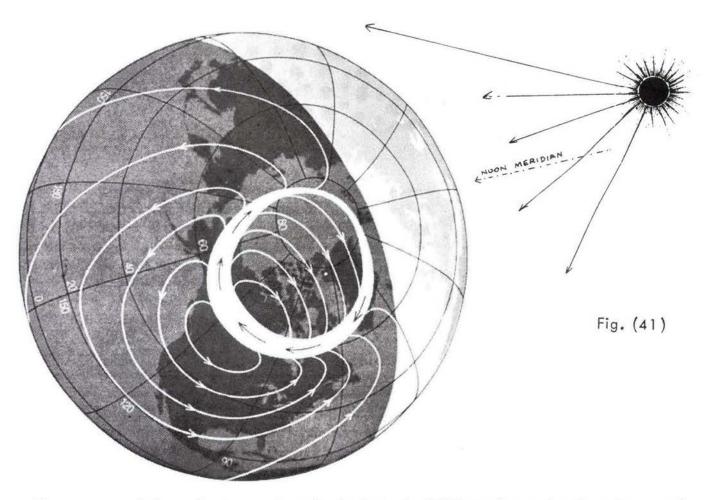
In order to understand this "flux" thoroughly and to learn how to make our own Turenne type pendulum with fitted magnets, let us go back to our standard testing model of the magnetic compass and orientate it to the earth's magnetic field.

The compass needle acts as a permanent magnetic field and is sensitive to the earth's field. As we learn at school, a piece of iron or steel placed near a permanent magnet will induce magnetic properties temporarily while it is in proximity. Using the compass needle as a permanent magnet let us see if we can detect this induction and identify the three influences definable as three different wave fields.

SELECTIVE POLARITY.

We have seen on our test table that when magnets are placed in horizontal planes and vertical planes the detection of the fieldforce follows the radiation conforming to those planes. An inversion of the magnets brings out this third field with a flux from east-west. When a radio wave is transmitted, the vertical and horizontal components of its propagation in any direction are controlled by the orientation of the receiving antenna. Orientation also becomes important when separating radioactive particles in a physics laboratory because Alpha, Beta, Gamma and all other particle-wave phenomena are controlled by the influence of magnetic poles. In the same way in Supersensonics the detecting process reveals that the fields share something that is inherent in the ordinary magnetic field even though it is not suggested that minerals or substances such as aluminum are magnetic in the ordinary sense of ferro-magnetism. Hence we will now begin to style these first two radiations of subtle matter as "horizontal wave field" and "vertical wave field" instead of horizontal magnetic and vertical electric fields, the words





The accuracy of the early pioneers in radiesthesia in the 1920's in discovering the existence of an east to west current is borne out by the modern research 50 years later on the earth's magnetosphere. In the above picture from "Scientific American" we see the highly ionized particles shot from the sun streaming into the earth's polar regions and being dissipated into its magnetic field through a gigantic ring current that flows westward around the earth. When the sun is quiet this ring is not visible but during a magnetic storm evoked by intense solar activity the most violent auroral substorms can be seen with the naked eye. The brightened auroras assume the character of rayed arcs and bands like an oval halo around the earth's poles. These "northern lights" break up on the midnight meridian on the opposite side to the noon meridian and generate large scale loops which travel westward along pre-existing magnetic spiral paths at a speed of about one kilometer per second. Such westward surges can be seen sweeping across the northern sky before they enter the earth's middle latitudes. Supersensonic operators found out the fact that these east-west surges are present in certain material crystals and samples of the elements and the pioneers regarded them as another set of poles which could be divined as a current flowing even stronger than the north-south poles. This led the author to assume that matter is polarized with 4 poles in 3 planes and not merely the two scientific planes of positive and negative polarization. When the scientific community acknowledges that matter has four poles instead of two, the orthodox methods shall have caught up with those early elementary results in the study of Supersensonics which science is now proving by more laborious methods. Fifty years of sophisticated world-wide research in detection apparatus were required to make the "Scientific American" illustration possible which could have been mapped by one man with a tuned pendulum in one hour by Supersensonic methods.

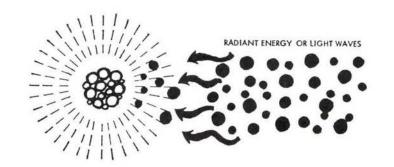


Fig. (42)

PROTONIC ELECTRICITY.

When we come now to experiment with east *west field-forces we find there is something quite new and not originating from the earth's magnetism and the electrons of electricity but more connected to a protonic kind of force which controls the negative electronic field.* It is certainly coupled with electro-magnetism but it does not share the same poles and indeed has its own polar orientation of east-west in a much stronger and more forceful radiation from a Supersensonic point of view.

It is obvious to every user of a pendulum fitted with inverted magnets or to an experimenter arranging inverted magnets on the plain table top that this inversion acts upon any test samples to cancel out the horizontal magnetic field. Experiment also shows that pendulums which have been made out of different materials produce their own wave-field when they are being examined as a specimen on the table and therefore act as a selector of a similar type of radiation. In the same way if we examine a pendulum which has been fitted with E-W type selector magnets the special wave type generated acts as a selector of the same type of radiation.

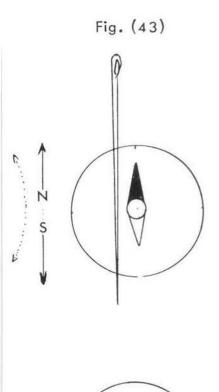
THE EXPERIMENTAL MODEL.

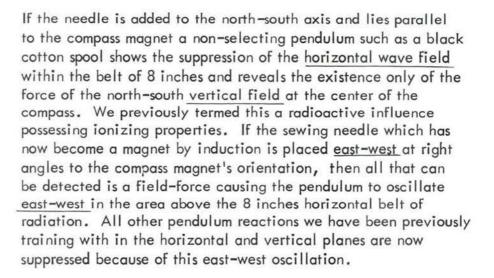
By using a magnetic compass and some ordinary steel sewing needles we can perform experiments in the induction of magnetism which throw some light on this phenomenon of <u>east-west flow</u>. The compass provides us with a standard model for comparison of fields.

Let us now see what the diviner detects with his pendulum as a result of placing a steel needle on the glass cover of the magnetic compass, causing the permanent magnet of the compass and the temporary magnetic induction of the sewing needle to act like two inverted magnets with poles opposite to each other.

[★] See "Nuclear Evolution" Published by Centre Community Publications, London.

Available from University of the Trees Press, P.O. Box 644, Boulder Creek, Calif.



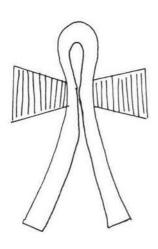


W E ->

Any pendulum which causes this same east-west signal over our model field of the compass magnet will also select the east-west influence of other specimens laid beneath that pendulum and the diviner's hand. In a similar way any witness of the east-west flow of proticity will enable a diviner to amplify the biological neuro-muscular reactions to the subtle radiative influences from various specimens of matter.

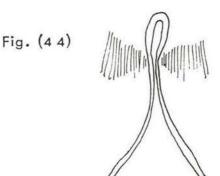
PROTONIC PSYCHIC ELECTRICITY.

The east-west flux energies which control the behavior of electrons and their ion exchange in our cells, nervous system and brain is called life-force or PRANA in Sanskrit. It was known to the ancient Egyptians through their "key of life" or the ANKH. This key is merely a diviner's rod which "comes alive" and gives us an answer to any question we can formulate clearly in our consciousness. This clarity need not be exact knowledge but can be transferred to symbols such as we find in the heiroglyphs or in the various animal-like Gods which represent the various functions of the psychic, in what appears to our modern thinking to be animal worship. However this arrogant view, that all the Egyptians were superstitious and somehow ignorant of reality, is



ANKH or Key of Life now used as ceremonial symbol only.

Fig. (45)



Modern divining rod showing discharge of bio-energetic force when in resonance.

the result of a rather naive perception of nature's finer forces. Certainly it could be argued that there were many superstitious Egyptians then, but so there are also today in our scientific age. But to lump the skilled practitioners of consciousness in with these ordinary folk just because we don't understand the code behind the symbology is merely to show our own ignorance of reality. It is a fact that it does not matter what language is used to depict the functions of consciousness. Whether you use modern mathematical formulas as images, or use such models as atoms and molecules, or merely resort to symbols such as the gods Isis and Thot, it does not change the operations in nature. All of our images which are validated by our own experiential events in our present culture become highly stylized in later generations, so that in Egypt a diviner's rod will become eventually a ceremonial "key of life". The fact that it was the instrument by which the seers of ancient dynasties, covering over 3,000 years of research, obtained their knowledge from the Cosmos, was completely lost to succeeding generations.

SYMBOLS AND THE DIVINER.

In the same way today, the inventors of mathematics and numbers who probed the depths of consciousness have been long forgotten and only the symbols and operations remain. The reason for the shape and forms of numbers and their origin is not even known by the most erudite professors of mathematics.* In order to know what these symbols really meant to their inventors, one must become a Supersensonic practitioner and be able to transcend time and space and actually contact the minds of these departed sages through the indestructible and immortal domains which exist in our consciousness. When we can channel "life force" into these hidden areas by the use of the techniques to be found and

[➤] See our next Volume 4, to be published with the title "From Zero to Infinity" The Divine Mathematics of Proportions, by Christopher Hills.

practiced in this volume and other works by this author, then these mysteries become very clear to anyone who wants answers. However, anyone who wants answers without becoming a proficient diviner cannot expect the "direct perception" to come and validate the symbolic knowledge and transduce it to real experiential conditions. Hence the first part of this volume concentrates on the faculty of Direct Perception of force-fields themselves because in our personal familiarization with them we will discover not only our own ignorance, which is disguised by our cleverness, but also that ancients who lived before us many thousands of years ago were not as gullible or as stupidly ignorant of nature's workings as we have been taught to believe. Their experiments and knowledge in the field of life-force and Prana were merely undertaken in a totally different realm of consciousness with tools which enhanced the psychic electricity and its operations. Hence results were not achieved by manipulating electric forces from the negative flow of electrons on which our entire modern civilization is based but on the effects of consciousness on protonic causes which can be referred to in Supersensonics as Proticity. The part which this plays in the control of material conditions and the interaction of proticity with neutronic and electronic field forces will become clear as we proceed to discover that the east-west flow of Prana or life-force is non-magnetic. Nor is common electricity, as we know and understand it scientifically, present in the east-west flow. The electricity in the writer's mind and in the consciousness of the reader which is validating these words (symbols) in terms of its own experience, is of a protonic kind with which we will be dealing in later chapters.



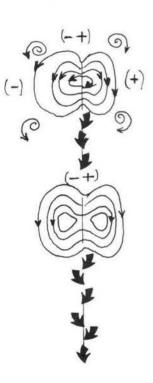
East - West Flow of Proticity causes rotation and spirals to occur in nature.

Fig. (46)

THE APPARATUS OF SUPERSENSONICS

8

Fig. (47)



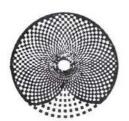
It is clear that the student's progress in the sensing of the biological interactions with the universal field and its relationship to other objects in that field can only become more sophisticated with better detecting appliances. This is as true for physics as it is for paraphysics.

Because there are different types of vibratory phenomena, their wave manifestations will correspond to the alignment of the various instruments to the earth's electro-magnetism. However, the attaching of movable magnetic needles to a detector, such as a pendulum or a forked diviner's rod, is only one way to go towards greater selectivity. There are other ways which yield similar information about field-forces through the use of the selective qualities of colors such as black or white or green. Many of the earlier radiesthesia students developed detectors with such colors and only with the more recent studies in radionics by a personal friend, George De La Warr, and the older Louis Turenne did we begin to use the selective properties of magnets and their tuning.

Because of the range of Supersensonic testing equipment, some of which owe their selective properties to the fact that they are pointed pendulums instead of spherical or that they are longer vertically than they are horizontally, there is a likelihood of the student becoming confused at first by the great mass of symbolic knowledge compared to exact mathematical knowledge. This becomes much less so as the studies proceed and we gain some insight into the principles of resonance and specific orientation which lie behind the selective characteristics of the detectors. There is a similar analogy in ordinary electricity for the physicist who knows that the properties of condenser plates in tuning a radio circuit are due to their being parallel. For the electrical engineer the strength of the magnetic induction in a dynamo will also depend on whether the parts of the system are at right angles

to each other or parallel instead. Correct orientation in Supersensonics is important to the results until we have gained full control of our mental waves of consciousness. Once a diviner has mastered all the instruments then, like a master composer or a Jesus, he can ignore some traditions and send our consciousness along pencil lines on paper and do away with instrumentation altogether.

THE ULTIMATE INSTRUMENT.



Geniuses such as Einstein and Christ never measured anything, never did any experiments in a laboratory, never looked through an astronomical telescope; but they knew more about the universe and the nature of stars and light than all the intelligentsia put together. They knew what a thing would measure even before there were instruments to measure it. To be such a master is not for everyone, as they come all too rarely in history, but by the use of instruments we can measure and confirm all that they say. While the instruments of science have proved what Einstein said, the instruments of Supersensonics will prove what Christ says about resonance with the universal field. As we will discover through experiment, his neuro-muscular system must have been a highly sensitive detector on several levels of consciousness. This volume will concentrate on the apparatus which anyone can use. The author has written a separate course for those who aspire to make themselves and their resonant nerve antenna a biological radio receiver.

ORIENTATION OF FIELDS.

Let us briefly recapitulate before going on to describe instrumentation so that we can grasp the principles behind these aids more clearly.

The nervous system is a miraculous antenna which can easily sense the three types or phases of a magnetic field over and around a bar magnet such as a compass, but without training and some aids

^{*}See the correspondence course "Into Meditation Now" publ. University of the Trees Press

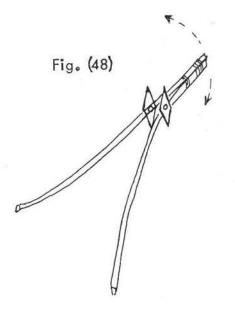
proficient. Here are the fields described in a nutshell.

With the magnetic needles parallel to the surface of the detected object and the positive poles of the two needles side by side, the result is usually:

to amplify them the student is likely to give up before becoming

positive wave form negative wave form -

clockwise gyration (right-handed), left-handed gyration, Tradio-magnetic wave form - (+) positive swings for a time, then to and fro oscillations, then (-) gyration, then oscillation.



HORIZONTAL MAGNETIC

TYPE OF FIELD.

A diviner's rod fitted with a pair of needle magnets orientated with the positive (+) points towards the apex of the "V" fork is pulled down towards the object for the positive wave field and is pushed up by the negative component of the wave-field. By reversing the needles the operator can make the rod react downwards for the (-) influence. The radio-magnetic type of radiation is revealed by an alternating up and down motion when the two ends of the rod are held one in each hand. An example of the positive horizontal field is found over copper, the color orange, the N-E and N-W section of space near to a magnetic compass. An example of the horizontal negative field is obtained from zinc, the color blue, the S-E and S-W space near a magnetic compass. An example of the radio-magnetic type is found close to the center of a magnetic compass, over the color neutral green, over most seeds and nuts, over gold and directly over the crown chakra of a person's head.

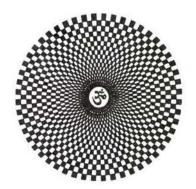


Fig. (49)

Symbolic representation of the Crown Chakra or Thousand-petalled Lotus is also the symbol of Nuclear Evolution.

VERTICAL ELECTRIC TYPE.

With the magnetic needles perpendicular or at right angles to the surface of the object with both positive poles turned up and negative down on the pendulum, the pendulum rotates clockwise over the positive form of this wave-field. A rod with the needles orientated positive up feels pulled down towards the influence of the radiation. The negative type produces the same effects on a rod if the negative poles are turned up instead of down.

An example of the <u>positive vertical field</u> is found along a vertical plane extending north of a magnetic compass, over a cavity such as a closed box, over most mineral rock specimens when exposed to the ionizing rays of sunlight. An example of the <u>negative vertical field</u> can be found by testing a vertical plane extending out along the south pole of a magnetic compass or over a small sample of lead.

An example of <u>radio-active field</u> is to be found over a radium block or over the center of a compass above an 8 inch belt of horizontal radiation.

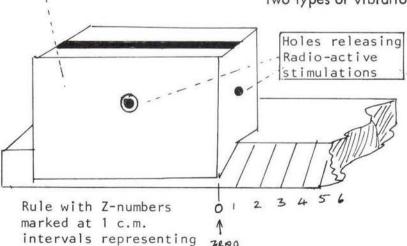
THE RADIUM BLOCK & OTHER AIDS.

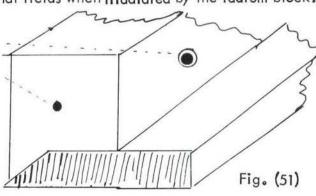
Fig. (50)

Radium Block made of wood aligned North-South on top of rule

atomic elements.

There are many varieties of amplifiers that we shall describe in the next few chapters and which the student can make for himself. The Radium Block was used by Turenne up to the age of 80, for over 50 years, to amplify vibrations in a particular phase corresponding exactly with the selected wave-fields detected by the magnet-fitted instruments already described. This block of wood, containing a tube with a weak solution of radioactive salts of the orthodox type of radiation, produced a uni-directional radiation through a small pinhole pierced in its end and at right angles to its main axis. According to whether the block stood on the testing table flat or on its end the vibrations of objects were amplified horizontally or vertically. The results of experiments show that there is a great difference in test samples between the two types of vibrational fields when irradiated by the radium block.





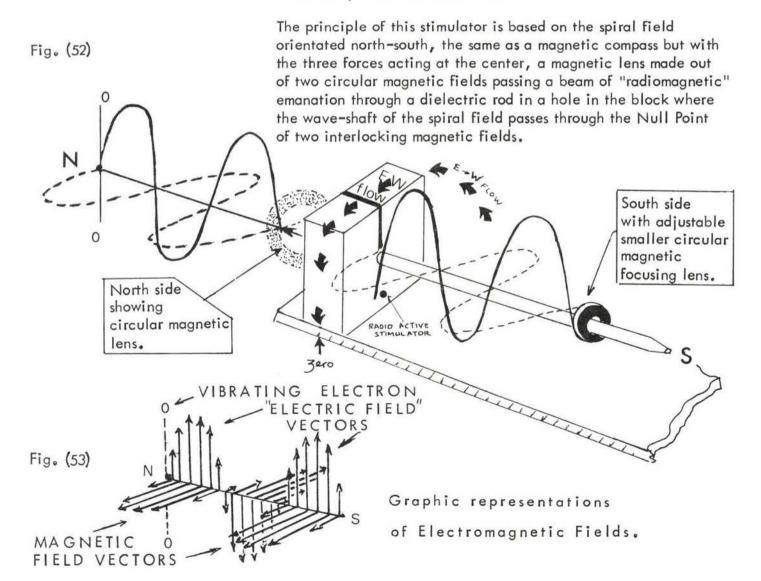
Shown in cross-section zero end of rule.

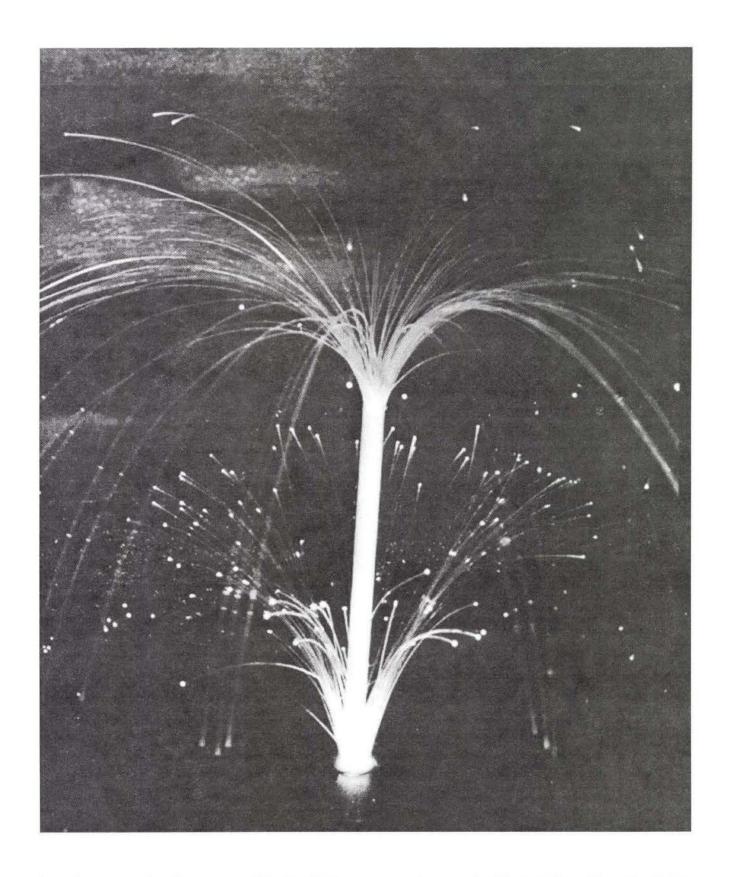
THE HILLS END-FIRE WAVE-GUIDE STIMULATOR AND RADIATOR. (HEFIGAR)

The early pioneers, such as LeSourd who worked with Turenne, found that a horseshoe magnet with its two poles orientated at zero on a north or south wave-guide rule gave a stimulation similar to the (+) or (-) or radiomagnetic paraphysical forces of horizontal and vertical wave-fields as well as the protonic east-west radioactive force.

The difficulty of obtaining radioactive salts in a solution harmless enough for civilian use caused many radiesthetists to look for other sources of ionization which would stimulate all the nodal points on the wave-guides.

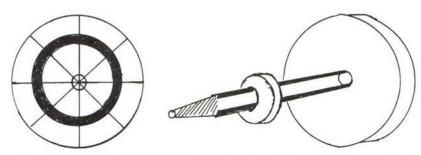
The author invented a Supersensonic version which combines most of the ideas of those who favored magnets and Turenne who favored radio-stimulation. The result is identical but even more intense amplification is obtained.





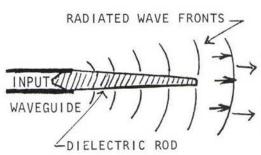
A modern example of a wave-guide for light waves can be seen in fiber-optics. Here the light radiates along a thin nylon rod and is quite invisible until it reaches the end. The light from each end shines like a small beam with the same intensity as the source, irrespective of its length. The dialectric nylon rod carries the wave-field like it carries the East — West flow of radio-magnetic forces.

Fig. (54)



One side of the HEFIGAR is painted white and this points to the southern end of the rule, while the north side of the block has the Pa-kua eight section symbol drawn on it.

The creation of a null point at the zero between the horizontal magnetic and the vertical electrical vectors in the field causes the radioactive and radiomagnetic force to intensify the wave-axis, (equivalent to the center point of a magnetic compass) and to pass down the length of the rule and produce oscillations alternating at the nodal points of the spectral colors at 13, 19, 25, 50-55, 62, 68, 80 from zero.



This intensification of the east-west flow is stimulated by the same principle used by the modern radio wave-guides. These also have a dielectric rod passing through the central axis which acts as an end-fire relay, increasing the intensity of the original wave-field. In the same way that microwaves and sound are passed through lenses these subtle invisible forces can be focussed by paraphysical wave-guides and magnetic lenses described in detail in later chapters.

A tapered dielectric rod which not only guides supersensonic energy but also radiates it gradually, constitutes a Hills end-fire radiator.

For intensifying and stimulating their divining powers the ancient Egyptians used a rod of graphite placed between two magnets at the "null point" of balance between them. By drawing the rod through the magnetic field in one hand and exciting the molecular activity of the graphite, a neuro-muscular charge was induced from the earth's magnetic field.

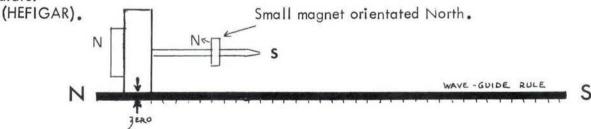
A graphite rod can be used as an alternative to the dielectric material of the Hills End-Fire Intensifying Guide and Radiator (HEFIGAR) and can be supplied by the University of the Trees Press as an alternative to the dielectric rod but the effect is not quite as pronounced. This effect can be sensed without any pendulum and in fact, if suspended on a string, the HEFIGAR can be used as an effective selective pendulum for radiomagnetic and radioactive paraphysical and physical fields.

HEFIGAR AS A ROD OR PENDULUM. The method of using this as a diviner's rod or pendulum is to sense the change between the electrical capacitance of the brain between left and right frontal lobes where a definite tweak of energy is felt, when crossing the north-south meridian. An even stronger twinge is felt when crossing the east-west line. The diviner then can use it for testing the existence of objects which have ionizing radiations as well as for intensifying his own divining powers. Stood on the edge of a map pointing north this amplifying instrument intensifies the whole map with vertical radiations and is therefore ideal for locating missing persons or searching for minerals and stolen property.

USING HEFIGAR ON THE DIVLNER'S WAVE-GUIDE.

Fig. (55)
Side view of a Hills
End-fire Intensifying Guide
and Radiator

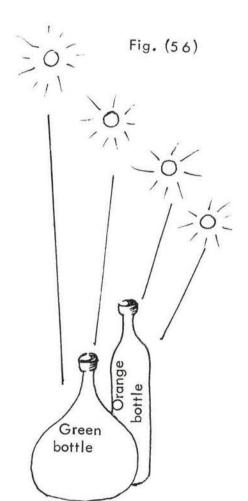
The intensification of the field is achieved merely by standing the instrument on the rule at zero and moving the second smaller magnet along the dielectric rod pointing north until a twinge is felt in the head. Alternatively a pendulum reaction is detected with the selective magnets set for vertical fields or east-west proticity.



THE ROD OF POWER.

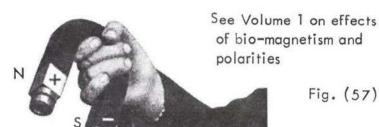
The Egyptians called their graphite rod the "Rod of Power" and used it to charge their psycho-physical energy in order to use the Ankh divining rod more effectively. The Rod of Power and the Ankh are always shown in the hands of the Pharaohs and Osiris in the Egyptian bas reliefs in the temples.

SUPERSENSONIC EFFECTS ON WATER.



It is a well-known fact in psychic and occult circles that water can be impressed with bio-electrical forces that can be detected with the pendulum. Actually it is possible to even "see" the effect of magnetized water or water which has been impregnated through the ends of the finger tips, by lining up 10 identical glasses of water in a room and then inviting strangers or children to pick out the one glass out of ten which "looks" different. Nine times out of ten people who profess to have no psychic power pick out the correct glass of water. This shows that the divining ability in so far as water and consciousness are concerned is more common than supposed. The reasons for the general idea that the phenomena is "psychic" rather than "ordinary" are many. The main reason is that there are so many masking vibrations from other sources around, including the geometrical shape of the containers, that the results are masked in the same way that sounds of a lecturer's talk are masked by loud roadmaking tools outside the lecture hall.

However the purpose here is to explain the effects of magnetism and sunlight on water briefly so that the student may take his own research further. It would be possible to write a whole book on water so we will keep it brief. The Hindu sages discovered that in the breathing in of oxygen we also breathed in certain energies which varied qualitatively in their biological effects with the angle of the sun (or the time of day) and that there were basically 8 different kinds of TATWAS or subtle energies.



The link with Supersensonics and these bio-magnetic researches of ancient sages is merely that they keep on being rediscovered independently. Whether the link is a universally present "prime cause" or a force external to the operator, due to a wave-couple derived from the universal field, is irrelevant at this point. We are only experimenting with nature's more subtle forces in order to detect enough information to complete a theory which can be subsequently used to communicate the nature of consciousness in a non-mathematical way.

TATWA FORCES.

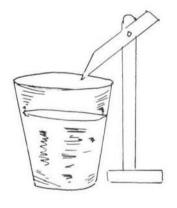


Fig. (58)

Servraux and others made a wooden pointer which was orientated with the aid of a pendulum to a critical angle in respect to the earth's field over a glass of water. The water could be distilled or slightly saline in order to improve its ionization properties. The pointer was likened to the dip angle of a magnetic needle and was left for a few hours over a glass of plain water. The water was then tested as a sample on the wave-guides to reveal its stimulating or depressing qualities. The wooden pointer or conductor of dielectric forces leads the forces into the water according to its orientation north, south, east or west. North and east water was found to be energizing and south water calming but west water was found to be dangerous to health. The three kinds of beneficial waters were drunk and its value controlled by the diviner's detection of the Tatwa currents. The demonstration convinced the pioneers that the pointer could be acting in the same way as a dial used for providing readings of the subtle sub-atomic forces which surround the human bioelectrical system. MacBeth reported personally that the reverse process of sending healing waves of Tatwa energies through a broadcast form of apparatus to a sick child removed a child's worms within three days without any medication. Since then the De La Warr laboratories (reported in Volume I) have achieved considerable success in radionic broadcasting.

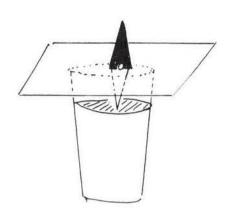
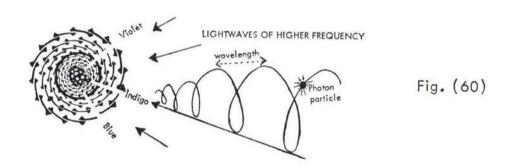


Fig. (59)

Another method of magnetizing water with Tatwa energies is to place a card over a glass of water with a compass magnet point pushed through it until the tip touches the water. This acts in the same way as the wooden pointer to induce the earth's field and impregnate the water. This can then be drunk as a healing method of inducing Biomagnetism. Experiments were tried by substituting for the card a colored transparent film and placing the water in the sun's rays, so that a particular color was impregnated in the water at the same time as the magnetism. The water was stood outside for a few hours in full sunlight and placed in the refrigerator for ordinary use as drinking water. The effects were that blue gave peaceful spiritual feelings of contentment, red created restless activity, violet created fantasies and idyllic reveries or erotic thoughts, orange created expansive energy and desire of ambitious projects and affected the appetite, and yellow stimulated the creative intellectual process.* These are merely mentioned to show that Supersensonics can aid in the detection of the color needed by a biological entity rather than proceeding by way of experimental trial and error.



The whole purpose of applying the divining ability to the determination of correct intake of electromagnetic forces into the biological system is to raise the awareness of man to the Supersensitive Life. The fact that man himself is 90% water comprising a bioelectrical wet cell battery for supplying the energy of consciousness and an antenna of the nervous system attached to it, should convince any student that work on discovering the depths of cosmic interactions with the water-filled body is important to evolution.

^{*} Full details of effects of color on personality described in "Nuclear Evolution" by Christopher Hills, published in London, 1968, available from University of the Trees Press, P.O. Box 644, Boulder Creek, Calif. 95006.

PROSPECTING FOR WATER.

Some diviners prefer the rod to the pendulum particularly out in the field. The rod's reaction suits a person walking over ground when prospecting. Supposing you walk from point (a) and you find the rod rise up at point B.

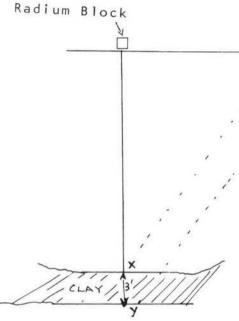
Fig. (61)

Place a pebble or stick marker on the ground and walk back from B to a point past (a) until you come to C where the rod rises again. Mark this spot with another stick. Put your rod away and measure the distance from B to C and make note of it. Turn and walk on again from C away from B behind you; walk an equal distance which you have just measured from B to C. If the rod does not rise again you know that there is no water on that side beyond C.

Now return to the mid point B and walk on to a rise of rod at D where the reaction may return as it did at B and C. If you continue walking on to E and find after the distance B-D there is no reaction there, you will know there is no underground stream on that side. The rod has risen at three equidistant points marking the outer edges of a wave-field sent up by cosmic rays reflected from the water table. The spring you seek is midway between D and C at the point B. Not only will the width of the underground stream be revealed by this method but also the depth underground is shown by the mean distance between B-C and B-D. Suppose the mean distance between B-C and B-D is 150 feet then the stream is 75 feet down below ground level.

Fig. (62)

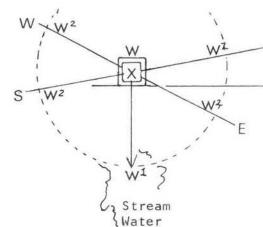
A sample of the soil to be indentified is laid on the Radium Block or Hefigar. If soil (say clay) starts at 10ft below and ends at 13 ft below (call this x and y) the diviner detects "edges" shown by dots where pendulum oscillates at x1 and y-2 so that depth of the clay can be determined



Depthing of the stream is not always so simple because errors can be made due to the clay strata which also reflect cosmic rays. If there is a flow of water and it flows on a hard bed or through underground cavities, then the depth is found above the clay strata and the distance B-C and B-D is usually an accurate assessment. Another method is to create a "psychic yardstick" with consciousness while standing above the spot B and counting the number of feet off until the rod rises or the pendulum beats to and fro, but this latter method is ESP and is beyond ordinary dowsing phenomena. A similar method is used by skilled diviners to count the number of gallons of flow per minute which can be extracted from a well pipe of a given diameter.

CONCLUSION:

The diviner discovers that the reflection of cosmic rays or energy from the earth's magnetosphere is constantly interacting with water under the ground and that water itself is a reflector and absorber of certain frequencies of light and radiation. The next step is to apply the knowledge of water divining to other areas of the wet cell battery which is man's body. To discover how the subtle wave-fields of this bioelectrical system work and what triggers the fields into new thresholds of absorption need not be the work of only a few special men but at least 80% of the human race. The divining faculty can not only penetrate the physical needs of a man or woman in relation to their environmental situation, but can also be used to dowse for hidden currents of emotional and mental forces at the psychic centers of activity. This fact is at the base of the new science of Supersensonics and this Volume III is intended to be a practical manual as well as a theoretical explanation of the human psycho-biological energies.



- Ground surface -

Fig. (63) shows a sample of water (W) laid on top of a Radium Block or HEFIGAR at (X) which causes a well-known dowsing effect between X and W. The RB or HEFIGAR produces four resonance beams which act as carriers so that the holder of another sample of water finds the edge of a "field" at W².

The radius XW^2 is equal to the radius XW^1

Elevation viewed through the earth

The water diviner for instance can place the radium block on the ground with correct orientation to north and use it as a central point for detecting the depths of water strata or mineral deposits. Just as one bounces radio waves off the ionosphere and back to earth, so can we use the amplifying radium block with a pendulum detecting device which converts the diviner's nervous system into a radioactive receiving apparatus. If the radium block has a tape touching it the influence can run along this conductor and activate it like a magnet with an attached electrical wire. This non-electrical field force obviously is conducted by some carrier wave in our consciousness. The length of the tape also acts as an antenna and it was this phenomena that led the early radiesthesia pioneers to invent rules to measure the edges of the radiating field's influence. The Supersensonic operator becomes a highly sensitive galvanometer when required and can far exceed the range of any modern scientific sensors however much these sensors are amplified. In fact, using a radium block as amplifier it is possible to tune a radio set to a specific frequency through the methods of Supersensonics, even when the loudspeaker has been disconnected and the station cannot be heard.

The part played by the radium block is merely one of stimulator. A sample laid at zero point on a rule or a measuring disc borrows energy from the activity of the radium block and its vibration is amplified accordingly. This helps to locate a sharp field edge and creates an oscillation parallel to the edge of the field-force detected.

THE RADIUM BLOCK AND THE DIVINER'S RULE.

Turenne's radium block was made to fit on the end of his 155 cm. rule at zero point and could be used horizontally or vertically whereas his zodiac disc was so constructed with the field measurements around the outer circumference but with a vertical radium block in the center. We shall devote an entire chapter to the

subject of instruments such as rules but in the meantime we will describe the rule and disc briefly so that we can go on to discover more about electricity and the hidden phenomena we have found to be at the back of our electro-magnetic field-forces.

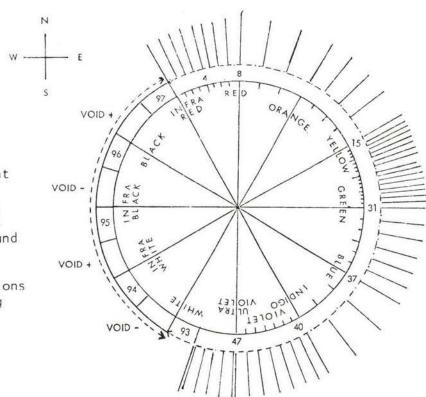
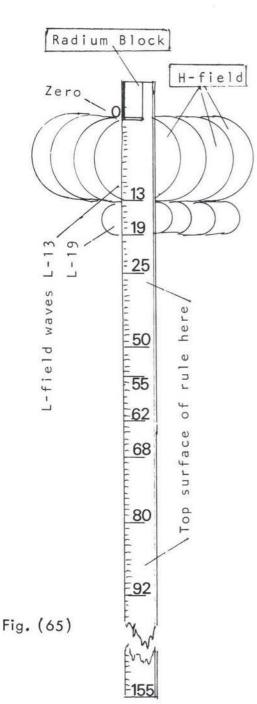


Fig. (64) The Turenne disk: a Radium Block at the disc's center is orientated vertically. Angles of all chemical elements are shown round the circumference. Four diagonals at 45 degrees create 8 sections similar to the I Ching Pa - Kua energies.

MEASURING SPECIFIC FIELDS.

As soon as a sample is laid on a radium block there is a wave interference which causes the vibration shared by the test sample and the radium block to become more detectable. This produces a specific field edge which can be clearly defined as that sample's radiation pattern. Fields assume specific dimensions based on the nature of the carrier wave or stimulator present at the zero of the rule and therefore the existence of this carrier or stimulator is of importance in correct dowsing.

THE TURENNE RULE.



Various rules, now called wave-guides, were used by the early pioneers, who discovered that the influences from tested specimen samples could be intensified by artificial means. Since the additional stimulating energy came from outside the sample this amplification was viewed as an enhancement effect. This "enhancement effect" can also be seen to operate in the photosynthesis process where electrons are boosted up to higher thresholds in order to split water. The "enhancement effect" can also be observed in the amplification of sounds and waves of energy through establishing harmonic resonance in such areas as Cymatics described in Volume II and in "Nuclear Evolution" (published 1968) in the raising of human consciousness and cell life.

In a similar way the pioneers of radiesthesia believed that this outside stimulating energy emission was communicated from the specimen to the diviner by waves or harmonic frequencies of waves. To them consciousness was not involved but the energy was communicated in much the same way that a tuning fork will resonate with sound from a similar tuning fork when they are placed together. The analogy of radio propagation was often used by Turenne as he taught this subject at a college in France. He used the analogy of the radio receiving circuit, which receives the energy through the oscillations of an "outside" transmitter when correctly tuned. A piano wire will vibrate with harmonic frequencies communicated from outside and it was believed that light waves acted on matter in the same way.

These outside forces which produced vibrations in matter are represented on the Turenne Rule by the harmonic waves of the light spectrum. The north-south alignment provided a stimulation which made very subtle harmonic waves from all matter perceptible to the divining sense which was considered to be a biological reaction to the earth's magnetic field forces acting through the diviner and the sample.

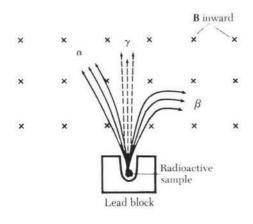
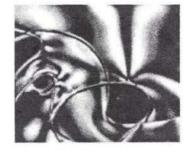


FIGURE 66 Effect of a magnetic field on the three types of rays from radioactive materials (schematic). Similar effects would be produced by an electric field directed toward the left in the figure.

The measurements on the rule consisting of 92 points appear to be amplified in terms of the spectrum and reveal the outer electron rings of the atoms concerned. The rule is a divining of the atomic structure. This Turenne rule will of course work without a radium block since the rule itself is only a convention in the mind like all other measurements. Whether we bend the rule around a circle and make it into a dial or stretch it out lengthwise as an antenna, does not affect the results in our consciousness. Whether we attach exact mathematical values to the results, or merely get our answers in proportional ratios, does not matter half as much as learning how these fields work and interact with nature's universal field. The Turenne rule, although made of wood, could be made of tape or wire or paper by the student by merely dividing its length into centimeters and measuring and marking the edges within the universal field of resonant points from zero away from the radium block. This will be found to give pendulum oscillations at the following points: 13, 19, 25,50-55,62,68,80.

By experimenting with witnesses placed on the 92 point rule the diviner can detect the radiative influences due to the bombardment of Alpha, Beta, Gamma rays, when the radium block is placed at zero on the rule. The same effects are produced by a direct ray of light from the sun.



Most samples of metal show little of the vertical wave fields while they lie on a bare table but they "come alive" as soon as they are placed on top of a radium block or are irradiated with a source of ionizing light. In this position the radiation of the sample is amplified enough to provide a "serial" of the metal's field. The Alpha bombardment with a radium block standing on its end is positive and towards north, Beta radiation is negative and towards the south, and Gamma is radioactive (+-) towards west. These pendulum oscillations are produced over the radium block's center and suggest that these are fundamental angles of the forces of disintegration.

The oscillating wave-force was considered a part of the earth's magnetic field or the electric part of the electromagnetic sheath surrounding the earth. It was found that this adding of energy occurred wherever there was oscillation and that stimulation of a wave-field would occur even with mechanical sounds or oscillations from a mechanical source such as a beating metranome or the ticking of a watch.

Turenne observed that the divining sense was greatly enhanced when dealing with magnetic field effects on matter when the substance observed was given a greater length than breadth and when its length was aligned to magnetic north and south.

This led to the ideas of the "bar antenna" or linear antenna which could amplify the different substances laid at the zero at its north end. By marking out such an antenna on a length of tape and subsequently making one of wood and measuring in units of one cm. Turenne found that a pendulum tuned to a specific sample at the north end would reveal a horizontal wave-field with gyrations at certain marks indicating the edge of a wave-field. The pendulum continues to gyrate as the bob is drawn southward along the rule and then begins to oscillate across a single point and then reverses itself in a counter gyration as we continue southward. These nodal points extend at right angles to the rule's north-south axis where four reversals are detected showing there is a field

Fig. (67)

W

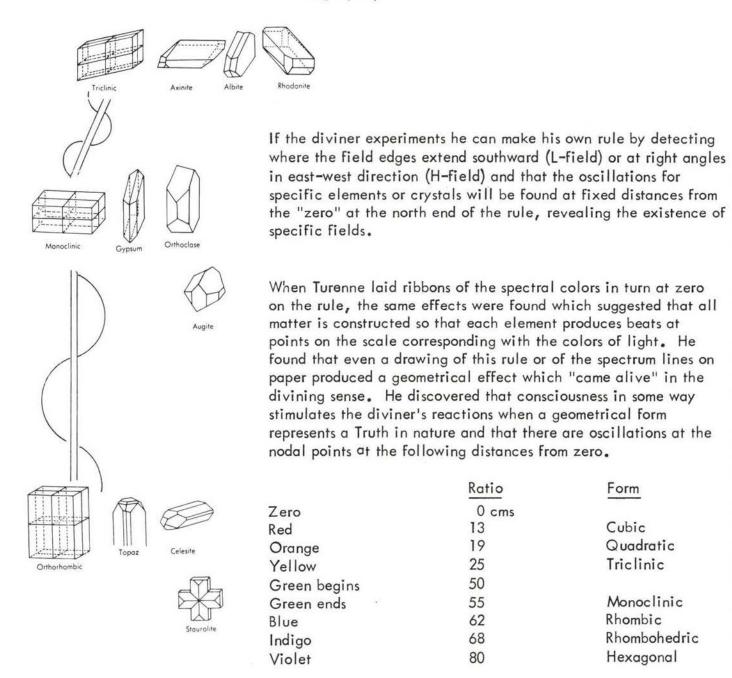
ELECTRON

ELECTRON

ELECTRON

VECTOR

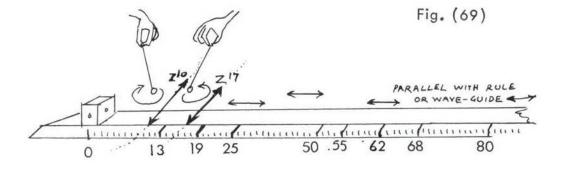
Fig. (68)



If the student marks in the above on the 92 point rule he will have the design of a Turenne Rule. Aligning it north-south causes cross beats of the pendulum at those distances from zero. It was found that if there was nothing on the rule except light all the seven beats would be produced as the pendulum was moved southward but if any sample is laid on at zero most of the cross beats from "light" disappear and leave only the ones applicable to the sample's own vibrational patterns.

This was considered by Turenne to be an interference pattern and he felt that he had invented a new kind of interferometer. However Turenne did not allow any role of the observer's thought energy or consciousness to enter the picture and believed the phenomenon was merely a physical emanation of a more subtle kind coming from the sample. Today it is possible to get the same pendulum reactions with thought alone, that is, once the student becomes skilled at controlling interfering thought waves.

The 92 point analysis is always done with vertical magnetic needles which detect the positions and phases of the vibrational fields. The pendulum usually gyrates from the zero to one of the 92 Z-points and then reverses its swing or else beats parallel to the rule if there are no more Z-points to be discovered in a sample. Thus salt or sodium chloride gives one gyration from zero to Z-10 (sodium) and then an opposite gyration from Z-10 to Z-17 (chlorine) and then a parallel beat along the north-south line if the sample contains no more elements than sodium chloride. A strip of paper marked in this way produces immediate experimental results with the vertical magnet-fitted pendulum. The best results occur if the strip is measured out with its 92 points marked along a 155 cms length.



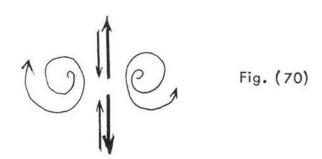
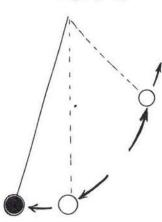


Fig. (71)



If we take a sample of one of the elements between 1 and 92 or of spectral colored ribbons and place it at zero on the rule we find there are harmonic resonance reactions with the pendulum or rod at certain points marked at 13, 19, 25, 50-55, 62, 68 and 80 according to the nature of the sample. The pendulum reaction is in the nature of a cross beat instead of a spiral swing. The ratio and proportions of the sample's emission is detected when it is added to the rule because the "enhancement effect" interferes with the normal spectral wave-field of light and reveals the nature of the sample. The absence of the full spectrum of normal resonance points at 13, 19, 25, 50-55, 62, 68 or 80 and the substitution of one or two cross beats is revealed by the pendulum reaction. The pendulum rotation becomes a cross beat and then reverses if there is more than one resonance point which indicates that the diviner's reaction occurs parallel to the edge of the wavefields.

In every case where the field edge is approached by the diviner's instrument the vibrational effect within its spiral boundaries causes gyrations of the pendulum or causes the diviner's rod to rise upward. Turenne believed the charge absorbed from the sample stimulated the operator's muscles but today it is mostly regarded as a phenomenon of thought resonance which causes muscular tension to act as a signal from the unconscious. Just as many hypnotists probe the unconscious inner world of a subject with a pendulum, so the unconscious also has the capacity to obtain information about the external world.

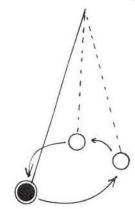


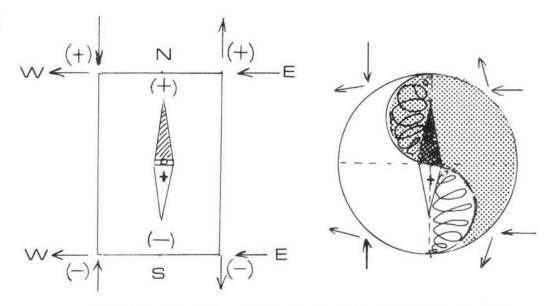
Fig. (72)





The theory however of the early pioneers may still have some validity if we need an explanation for the phenomenon of rotating bodies in space. The pendulum gyration was explained as a simple function of two force-fields striking an object at right angles to each other. The test of these two forces in the magnetic field can be checked by a diviner by laying a magnetic needle or compass at the center of a rectangular sheet of paper. Then the whole sheet behaves like a linear antenna with broad side band effects. This widened bar magnet effect shows that there are (+) and (-) gyrations at the north and south ends respectively and where east-west directions are meeting. (See Fig. ()

Fig. (73)



The direction of these forces is shown by a rise in the rod when facing the source of the current of flowing force just as when the diviner walks up the stream of an underground river when dowsing. The same effect is also observed when pointing the rod to the (—) negative end of a current of electricity along a DC wire. The opposite effect is observed by quicker pendulum oscillations when the dowser walks away from the source of supply. The arrows show the directions of movement. The magnetism flows from the north and returns there in right—handed spirals and comes from the south and returns there. The east to west "proticity" flow of force comes from the east and returns there by proceeding westwards.

The oscillations and rise and fall of the diviner's rod for horizontal type wave-fields in Fig. (73) are listed as follows over the diagram: they can be linked with the Chinese I Ching. (See Fig. (397).

Pendulum reaction

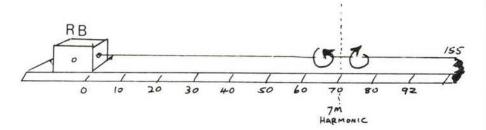
gyration to right or left then oscillations at right angles to L-field edge, and parallel to H-field edge.

Rod reaction

gentle rise or fall in the middle of field with a sudden fall or rise at field edge.

The pendulum and rod behave in the same manner when using the Turenne Rule or wave-guide with an imaginary L-field of 7 m.

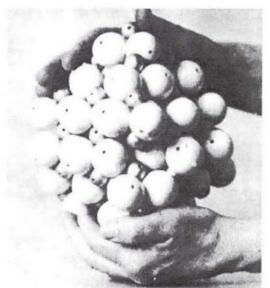
Fig. (74)



Further discussion of L-fields and their connection with the the universal field of consciousness and light waves is necessary for complete grasp of the nature of wave-guides and diviner's rules in general.

A point may be made here that metals and crystal elements affect ordinary consciousness and do not interact in the same way as dielectric materials. Many dowsers who use metal chains and crystals as pendulums are often not aware that what works for them does not work for everybody. To research the instruments themselves with the aid of a Turenne wave-guide is one of the first steps to achievement of the "enhancement effect".

DISINTEGRATION OF MATTER. Before considering the diviner's instruments which are nowadays referred to as wave-guides, it is important to clarify the differences from the terminology of physics so that the student is not confused. In my book "Nuclear Evolution" and in Volume I and II of this series on the "Supersensitive Life of Man", I have taken great pains to set out the extent of our physical knowledge of the four types of forces: (1) Nuclear forces, (2) Electromagnetic forces, (3) Weak interaction forces and (4) Gravitational forces which are the weakest of all. I will assume the reader is well acquainted with the considerations brought forth in these previous publications in order to penetrate deeper into the wider and much more important cosmic aspects of life on Earth.



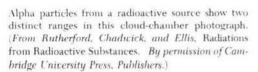
Model of molecule or sapphire. 1939 conception

Is there yet another force that does not resemble the first four physical forces but interpenetrates them and subtly links them invisibly with our own consciousness? Is our own physical experience of the senses merely one octave of a radiating universe? Do the so-called stable matter vibrations of the crystal elements produce a radioactive electromagnetic excitation which can be detected in the presence of some exciting agent? Can that exciting agent be our consciousness which is lord of all vibration and experience of matter? Is our power of consciousness so great that when fully developed it can completely control the four known forces?

It is the writer's personal experience through countless physical experiments to be described in Volume V that consciousness indeed has power over free gravitational fall, as well as the strong nuclear forces, but he does not expect anyone else to believe it without firm evidence and the setting out of these experiments in repeatable form. The main concern, however, of the author is not the proven demonstration of so-called impossible physical phenomena which he has carried out for several professors of physics without the slightest effect on humanity. The main concern is that validation or proof becomes the personal experience of every student in everyday life.

None of the professors who saw with their own eyes did one thing about repeating the experiments in their own laboratories and with various rationalizations excused themselves, as they put it, from overturning all the fundamental concepts of science.

This naive approach which would rather have a mind boggled by the thought of overturning established knowledge than perform and perfect a simple experiment, is a reflection of today's lack of scientific integrity. The scientific mind of man can think up all the answers but its own nature is considered to be a forbidden territory. The vital consideration then, is that this fifth power of consciousness over the reality of all physically-known forces, shall not be used to further blind mankind in his ignorance of Self. Since it is the ultimate power and will one day be used to control the forces of nature, it is now important to consider its nature as a two-edged sword which cuts both ways. Will it cut through the boggled mind or will the cleverness of men, for the sake of their investments in their own fame and name and knowledge, use it further to delude themselves and others? Even the words and message of Christ have been used to establish systems of great power and prestige. Priestly kings with crowns have grown rich in earthly possessions by serving the organized groups who deceived mankind with their own spiritual pride. Today there is an arrogance of scientific pronouncements on every subject on which there is little knowledge, with the corresponding adulation of those who do not have the skill to investigate further. Hence we will outline the differences in scientific terminology in what is meant by radiomagnetic and radioactive aspects of human consciousness.



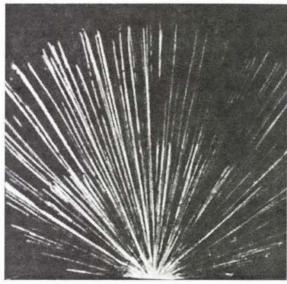
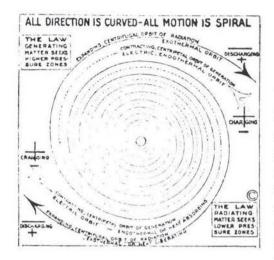


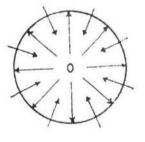
Fig. (75) Walter Russell's concept of centrifugal spirals unwinding incandescent spheres into cubes and thence into coldness of space.



Within the wave-field the centripetal spirals wind up light waves inwards into incandescent spheres and at their centers cease to be spirals.

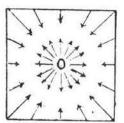
The terms radioactive and radioactivity are employed in Supersensonics with caution before groups of physicists with preconceived ideas. These physicists should not be discouraged from investigating the wave-fields of Supersensonics by the diviner's apparent ignorance of what physicists presently define as radioactive. This definition no doubt will change in the next 50 years but it would be a pity to delay this change by speaking too glibly about radioactive sources. Throughout this volume we shall try to show why certain subatomic radiations perceptible by Supersensonic methods are defined as "radioactive." Turenne, an earlier pioneer, preferred to call these disintegrative forces of nature by the name of "phenomenon D" in order to avoid confusion with standard physics.

During the period 1925-30 when radiology was making great strides, Turenne adopted the words) radiomagnetic so as not to use the term of radioactivity before any link could be physically shown. Now our nuclear physicists and particularly our less deterministic quantum physicists are saying that everything in nature, including solid rocks, produces a disintegrative radiation so a certain slackness has crept into the vocabulary of many spiritual and occult students of the universal energies, as if all forms of radiation were "radioactive". We are wiser to employ our own terms, to keep in mind the different polarities of Supersensonics, and yet the division is in our own consciousness and not in the phenomena which is connected together. Therefore we define here the meaning of the radiations of subtle matter so that the physicist will not get confused with his preconceived knowledge.



The radial universe

DEFINING THE NATURE OF THE MAGNETIC TYPE WAVE-FIELD. This is a radiation representing a sort of pressure within a system without radiation but sending out an electric tension. These pressures or tensions are to be found in static electric charges and produce a horizontal type wave-field along a wave-guide. These wave-fields emanate from any source of magnetism to be found in rocks or near a crystalline body and particularly around a bar or horse-shoe type magnet.



Consciousness when channeled along a wave-guide or through a selective instrument can pick up the weakest magnetic field even beyond the sensitivity of our scientific instruments. Pressures in the atmospheric composition of air molecules will produce these horizontal fields which are non-penetrating. Not all forms of crystal elements produce this horizontal wave-field. A witness of these radiations would be "Lunar light" which is secondary reflected radiation of electromagnetic waves which do not penetrate. It resonates with the nine elements found in the spectrum of lunar light. These nine elements do not produce "vertical waves" and are horizontal wave-field producers and are listed in Chapter 23_P. 427.

DEFINING THE ELECTRIC TYPE WAVE-FIELD.

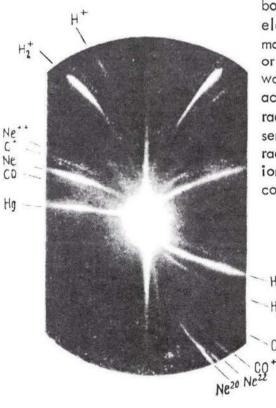


Fig. (76) Isotope parabolas obtained by Thomson.

This is a radiation associated with the excitation of molecules and atoms in which electrical energy is discharged. Wherever there is an electronic movement or current which oscillates there will be electrical radiation and the forces of the weak interactions which disintegrate matter. This wave-field is usually detected more than 8 inches away from a disintegrating body or above any oscillations from a generator of an escaping electric charge. The waves suggest a penetration through solid matter as they can be detected in the same way as radio waves or microwaves. The association of a sample on a Supersensonic wave-guide with a source of radiation such as another radioactive sample causes the test sample to have temporary "induced" radiation which amplifies its vertical polarity. In the scientific sense the test sample does not have the spontaneous emission of a radioactive element such as is revealed by the physicist's ionization counter. The character of sunlight is ionizing on contact and is a witness of vertical type waves.

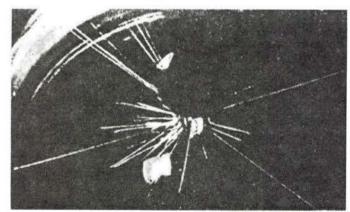


Fig. (77) Disintegra-

Pictures of disintegrating atoms similar to Turenne's disc of atomic angles.

RADIOMAGNETIC & RADIOACTIVE FIELDS.

Physical radiesthesia, as expounded by certain physicists who identified atomic radiations, claims to complete the physicists' periodic table. Those such as Turenne detected the elements of the transuranium type as part of radio-disintegration and included them on their wooden wave-guides as early as 1935, five years before they were discovered. The ability of Supersensonic methods to detect effects of cosmic radiation upon all forms of creation, animal, plant or mineral, and even upon forms present only in our consciousness, is due to the methods of amplifying. Such amplifiers may be solar energy, magnetic energy or radioactivity as defined by physicists. The term "radioactive" in its fullest sense in Supersensonics is reserved for a component present in a penetrating vertical wave-field which provides active disintegration through release of some exciting energy from the nuclei of atoms. Whether this released energy is in the form of non-ionizing light allowing the atom to return to its ground state, or whether the atom is able to take in cosmic radiation different from the four known energies and re-radiate it on its own peculiar subtle thresholds of existence is not yet clear. Supersensonics merely detects the facts by direct perception and allows the operator to form his own theories by the dozen. "Radiomagnetic" is a term used to show there is a nonpenetrating excitation in the horizontal wave field due to some ionizing effect and to differentiate its polarization from that of a vertical wave-field.

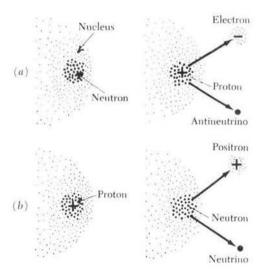
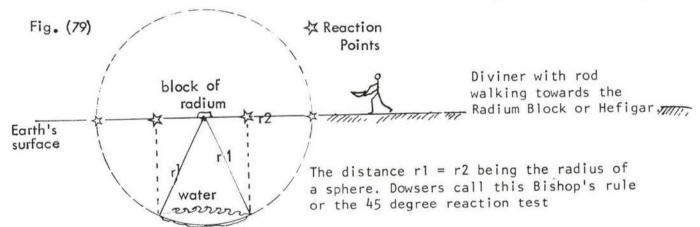
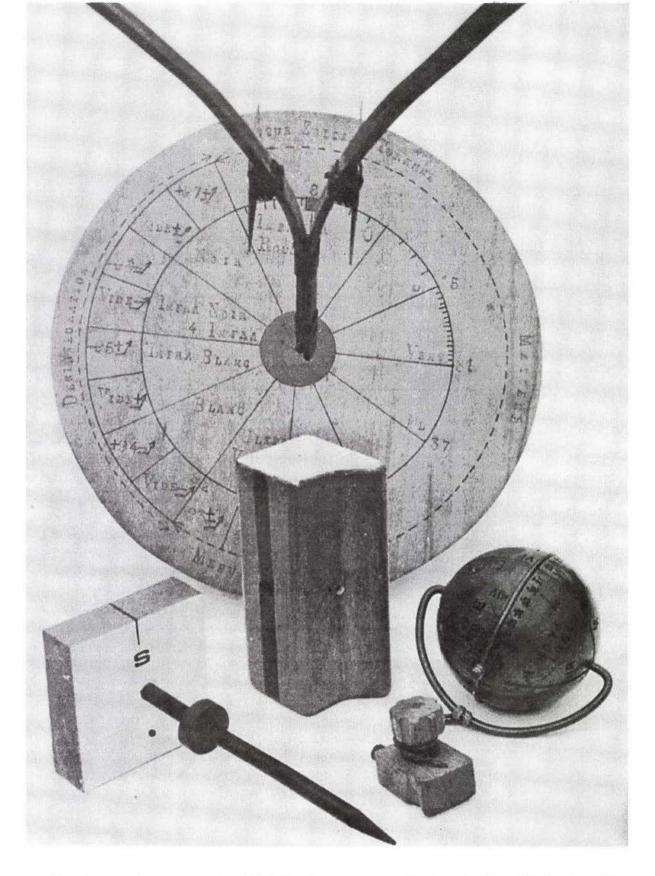


FIGURE (78) Beta decay (schematic). In (a) a neutron in the nucleus ejects an electron and an antineutrino and is thereby converted into a proton. In (b) a nuclear proton ejects a positron and a neutrino, leaving a neutron behind. In either case, the nucleus recoils.

LINEAR FIELD EDGES AS PART OF A SPHERICAL FIELD. By experimentation we discover that any rule or tape is merely a cross section of a spherical field measuring the diameter from the center. We find that the whole field is spiralling around the zero point in space. To reach this awareness in one's consciousness means that all created objects have such a spherical field of emanation which varies in its proportions according to its radiative powers. When a radium block is considered as a point in space as when a water diviner lays it on the ground, the radiations extend down and in all directions within a sphere and it is this which enables a dowser to get an indication of depth.



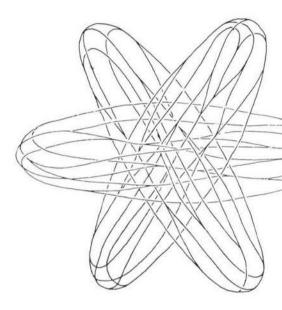
The diviner merely walks over the underground water and gets a primary reaction or pull on his rod. From the center reaction point the diviner can walk on the west and east sides of the water or buried object and get another reaction equidistant from the first one. He then merely measures the distance on the ground surface from the edge of the field to the center; this gives the depth because the radius of the sphere is the same. There are other ways of depthing by Supersensonics and these will be given later as the student becomes more aware of the total ramifications of what he is learning. The radium block or the special selector magnet positions perform the same function of amplifying the biological radio systems of perception which we have called the divining faculty. It must always be kept in mind with healthy skepticism that the instruments of Supersensonics will do nothing by themselves, but they give a direction of motion dictated by their form and shape and their composition. (See using the Turenne rule p. 117.)



The picture shows a group of divining instruments. Center: Radium block, Atomic fundamental ray disc and magnet-fitted rod, all made by Turenne. At right is the Chaumery and Belizal radium stimulated pendulum which can be tuned to almost 400 different vibrations in nature. At left is the HEFIGAR which combines all the above features with modern concepts of stimulated wave propagation.

9

RESONANCE THE LAW OF SIMILARS.



The law of similars is an old name given by the Alchemists to explain the sympathetic vibrations between substances with the same or similar influence on the biological system. Not only did they regard this natural phenomenon as acting between the human world and the surrounding environment but also between objects and entities beyond the human worlds. In Homeopathy we find the law of similars being used to explain the apparent connection between a remedy obtained from one of nature's plants or minerals and a certain disease pattern in human beings. By potentization the remedy is believed to trigger off the body's own natural immunizing processes by stimulating the field-forces produced by the disease. The difficulty of practicing Homeopathy with its thousands of remedies to fit so many personal patterns of response is that the modern physician does not have the time to make a detailed analysis when the overheads and cost of employing staff are so great.

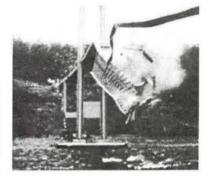
In older times when life moved at a slower pace the several hours' time required for diagnosis was not disproportionate to the fees, but with today's trend towards the "cure all" drugs, it is possible to see a new patient every half hour. Furthermore the discovering of broad spectrum antibiotics has led the medical profession to forget about the vast number of remedies simply because to get exactly the right matching vibration requires not only considerable experience but considerable knowledge of the properties of herbal remedies.

The science of Supersensonics brings to this problem of diagnosis and the prescription of drugs, natural remedies and nutrition, a method that results in an even quicker and more accurate detection of similar properties through the use of selective detection equipment such as magnet-fitted pendulums and the more sophisticated methods of radionic apparatus. The law of similars in Supersensonics is referred to as THE LAW OF RESONANCE simply because so much is known now in physics about resonance and vibration and this new knowledge enhances the absolute science of Supersensonics.

In November 1940 the Tacoma Narrows Bridge in the state of Washington was destroyed by wind-generated resonance. (Courtesy Professor F. B. Farquharson, University of Washington.)







However, before we go on to discover more about electricity and magnetism and to give more details of the more recent appliances, the student will need some basic principles on resonance, the nature of similars and sample witnesses in order to understand how the various equipment gives such quick and remarkable results.

DETECTION OF A SIMILAR.

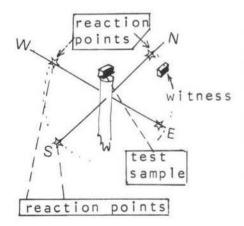


Fig. (80)

Diviner walks around a post or radium block with a witness identical to the test sample and finds the magnetic lines of force act as carriers of the resonant reaction Throughout this volume we shall be referring to anything with a radiation pattern similar to another object, as a "similar", in order to simplify the terminology and to retain the brilliant insights of the early alchemists into this phenomenon.

What takes place between a test sample, called a witness, and the object to be found (or the disease pattern in medicine) can be determined by experiment. The witness sample gives the diviner a selecting power which can be demonstrated simply by holding the witness in one hand while using the pendulum or forked rod and placing another test sample or object with the same vibration on top of a post and walking around it. The pendulum or rod will react between the two similars when the diviner crosses through the cardinal points of the earth's field. It shows an attractive influence at north, south, east and west of the pole.

When the test sample is laid on the top of a radium block stood vertically and its duplicate is in an adjoining room the diviner holding another duplicate sample witness can sense the line of connection between the two duplicates.

Because the earth's magnetic field can be sensed in the hands of anyone without the aid of a divining instrument, one must be aware that any duplicate patterns or samples can give a reaction at the north, south, east and west points. A simple demonstration of a <u>similar</u> is to use one hand as a witness of the other. Although they are of opposite polarity, they have identical vibration

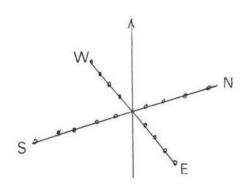
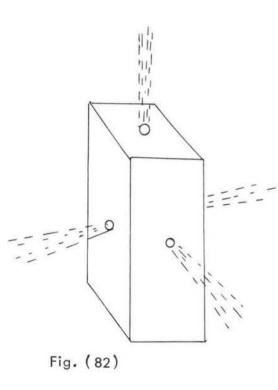


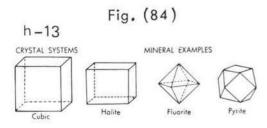
Fig. (81)



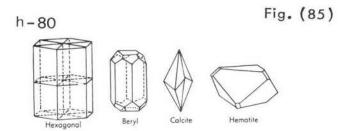
patterns in most healthy people. Stretch out your arms on each side of the body and slowly rotate your body through the cardinal points of the compass and note the sensation in the fingers and palms. The line of connection is sensed between one hand and the other as we rotate through north and south axis and even more strongly between the east-west directions. It is obvious that we need never get lost if we can realize that the human being is also a magnetic compass even far more sensitive than a sluggish compass needle. The human body standing vertically acts as a radium block does when stood vertically. The use of a radium block amplifies the diviner's own powers just as a sample witness amplifies the signal from a similar object.

The radium block in this experiment is stood vertically in order to make use of the penetrating power of the vertical wave-field. During initial training the beginner should keep the sample on the same level as his hands so that the 8 inch horizontal field above and below the sample being tested can be checked by alternately changing the orientation of the radium block from a horizontal to vertical position. In this experiment the attraction and connection between the two similars takes place by the intervening vibrations passing through the same horizontal plane shared by both samples, the difference being sensed between the vertical and horizontal fields.

WHAT TO USE AS SIMILARS.

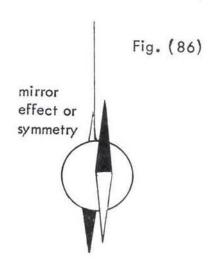


The student may think up his own examples. They could be two pieces of colored ribbon cut from the same roll, or some material element such as two pieces of mineral or two identical glasses of water. The use of color similars is suggested in order to show the connection with the electro-magnetic spectrum and to reveal the changes in the detected influence. The student is asked to try divining the color test sample's purely local influence sensed immediately above the color and its field extending laterally along the horizontal belt of radiation. Also measure the edges of the field where a reaction occurs between the two color

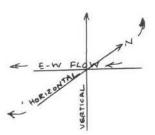


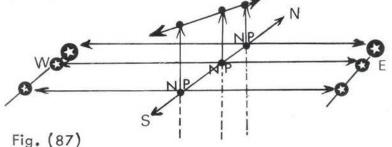
samples. By this radium block test the existence of a link between similars is shown as a universal fact of resonance. Though this link will be found to be strongest at the north-south and east-west axis aligned with the world's electro-magnetism, this link will also exist in every direction whether magnetic or non-magnetic. The link between similars becomes perceptible by the methods of Supersensonics when radioactivity (or light energies) is applied at either end of the link by using the radium block.

THE UNION RAY.



When the law of resonance is tested between two similars we find some invisible connection between them. This union can connect not only colors and minerals but even similar geometrical forms. The union is detected only if the objects are related similarly to each other's axis, i.e. parallel to each other. It appears that there is a wave field interchange between two identical drawings, two identical photographs, etc. If one of these is upside down or one of the similars is inside out, like a glove, the union ray is not found. However, by inverting the magnets of the Turenne type pendulum it will detect the sympathy between symmetry instead of identification. This shows that identity between objects, as well as identity between humans and their external universe, is an energy of consciousness in terms of the union ray. Between two similars and between two similar thought patterns there is a primary force or wave-field which can be detected with Supersensonic instruments. At the point where the pendulum or rod shows equality by a cross-oscillation back and and forth across the Neutral Point (or Null Point - N.P.) the diviner detects a beam-like wave-form, perpendicular to the primary field which connects the similars.





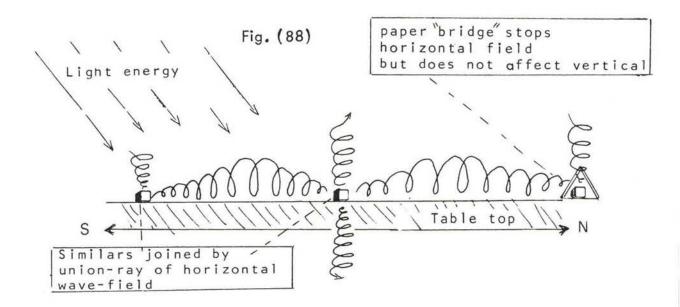
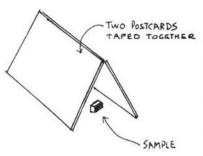
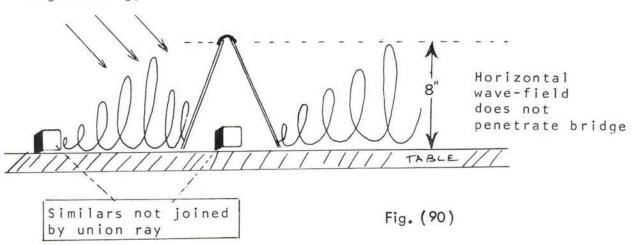


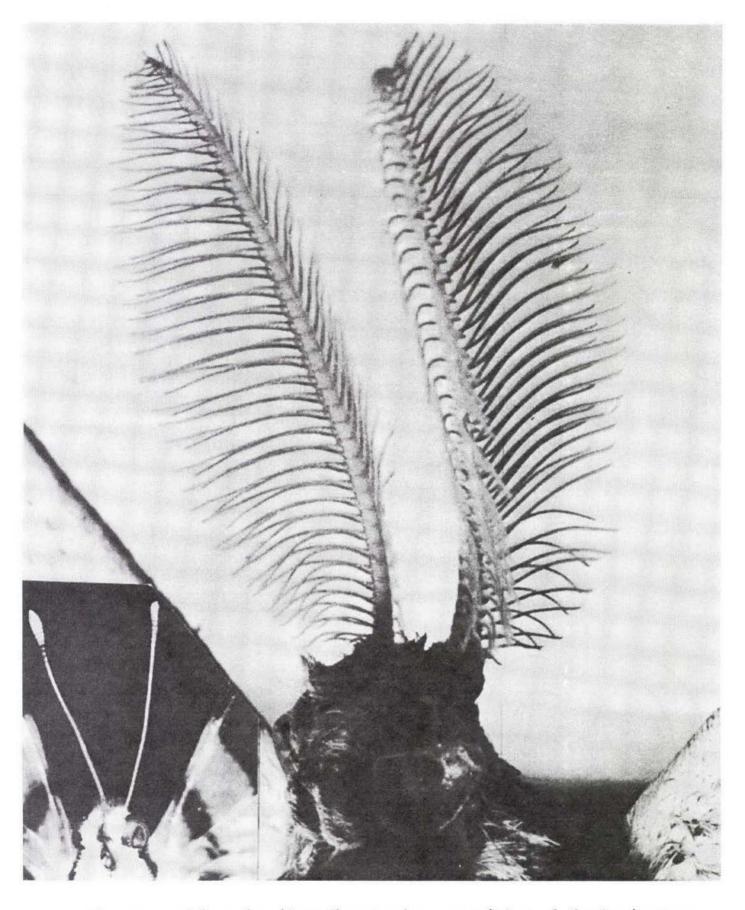
Fig. (89)



Within 8 inches of the table surface and above and below all objects the union ray will consist of a horizontal wave-field which can be stopped by other matter such as a piece of cardboard or a wall. It is of the non-penetrating type of radiation while the vertical field will pass through most substances. One can test this by joining two postcards together, having the edge of one hinged to the other by neutral tape or paper so that they can be stood on end so as to resemble a bridge or house roof. Using this "bridge" we can test by placing a finger or sample below the "roof" to see if the horizontal field passes through. This filter can also be used to show the effects of radiating one of the samples with light energy. By keeping one sample in the dark, the influence of white light and colored light upon the sample and its similar can be researched. Even the effect of a stronger light being played on one of the two samples can easily be observed. Therefore in research we must be certain that experiments intended to provide accurate readings of the Null Point, will be evenly illuminated.

Light energy





The antenna of the moth and butterfly makes them expert diviners of vibrational patterns since their survival depends on this ability. This is nature's own Radar.

10

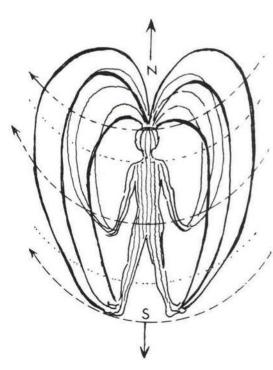
THE EXCITED ANTENNA

AND THE "LINEAR ANTENNA"

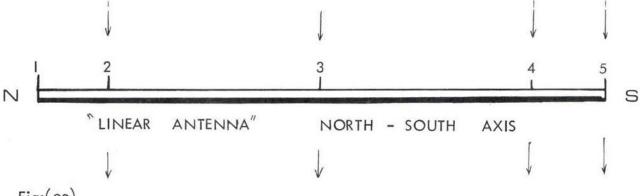
Fundamental to the law of resonance is the phenomenon common to all vibration in the presence of an exciting source of radiation or energy of any kind. This is true for sound energy, visible light energy or the invisible energies of physics on either side of the electro-magnetic spectrum. This resonance phenomenon is the setting in motion of vibration through sympathy with a fundamental exciting wave-field. Whether this fundamental field is the universal field, the gravitational field or some other unknown centripetal factor is immaterial at this point of our investigation. First the diviner learns basic principles and assumptions and then we test them out ourselves as Supersensonic operators with the skills acquired. Then we can make up our own mind about the facts, once we have experienced them and understand the various wave-guides.

It is impossible to argue with this approach because if we don't understand something before we begin to argue about it we are merely making opinions which are worthless as far as nature is concerned. Let us personally get firsthand experience of nature's structures and then argue about it later.

Fig. (91)



Lay a stick or a tape, any strip of wood or metal in the north-south orientation. Here in this experiment on universal field phenomena we could even use a human biological antenna laid out along the N-S meridian with arms touching the side of the body and legs closed. In all cases the same general field will be detected positive (+) around the north end and negative (-) to the south. The magnetic force of the earth is affecting all and everything upon the earth. Now we will demonstrate by experiment that all "bar antenna" or the linear stretching out of matter along the north-south axis is excited by the east-west flow according to the laws of magnetic resonance. Observe by means of the pendulum or rod with magnets specially tuned to the east-west flux that there are five basic reactions which divide the "linear antenna" at five nodal points of E-W force. (Shown in the diagram next page at right angles to the "antenna".)



Fig;(92)

The east-west force is "tuned" by swiveling the fitted magnets so that the needles are inverted, that is, the north pole is opposite the south pole. The distance between these E-W fields, at right angles to the N-S fields between the nodal points 1 and 2 and 4 and 5, is always in the proportion of 1.3 to 10, with this latter figure 10 representing the whole length of the antenna. It does not matter in Supersensonics whether this "linear antenna" is a line of carbon on paper as produced by a pencil or Indian ink or some steel or ferrite rod. Any ferrite straight line antenna will produce these boundaries. Once the pendulum has been tuned to the E to W oscillation, we find another oscillation at the point 3 on the antenna which gives the same reaction half way along its length. This reaction at the five points on the linear antenna is shown at 1,2,3,4,5 on the normal antenna by the pendulum gyrations and oscillations. The stimulated or excited antenna gives a different reaction and we will deal with this later in this chapter.

This normal pattern of the 1 to 5 antenna is universal for all bar magnets aligned N-S and any other material shows this same pattern of the link between two similars. Outdoor diviners can estimate the total distance of a detected object by getting an assistant to measure the distance between resonant nodal points 1 and 2 which proportionally for practical purposes works out to 1/7th of the total distance from the diviner to the distant object.

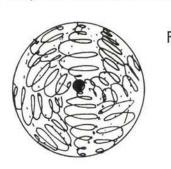
MAGNETIC RESONANCE & THE LINEAR ANTENNA.

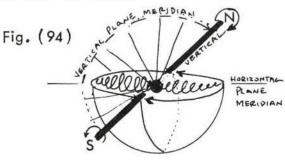


The Vertical meridian is at 90 degrees to the Horizontal plane. Both are North South while the East—West flow follows the magnetic equator at right angles to both the Vertical and Horizontal.

Let us observe through our divining instrument of rod or pendulum the patterns formed in the links between two similar objects. In the dowser's case between the sample witness in his hand and the distant underground stream, composed of water similar to the sample witness, there will be such a field set up with the various boundaries at the points 1 to 5. There is an obvious relation to the links present in a magnetic field of a bar magnet which the student can find by detecting a distant object by Supersensonic methods. A point the experimenter might note here is that two objects on a small table which are close together, makes perception of boundaries more difficult for a beginner because the 1 to 5 linear antenna is dominated by the sample witness's pendular wave-field. By expanding the field boundaries over a larger distance, this factor can be avoided.

For an example of the effect of distance we can find around every linear antenna of iron (element number 23), the influence of the field in positive (+) or negative (-) terms extends 5 meters (approximately 16 feet) and the gyrations to left or right extend to that distance of 16 feet from the sample. Let us consider a "linear antenna" as being so short in length as to become almost a point in space as with a small iron magnet, and we then find the field has the pattern of a circle with a null point in the center. So long as air surrounds this point, the influence detected will be found to be in the form of a sphere, the circle detecting the boundary of the field merely being a horizontal plane in this sphere. This is because the horizontal wave-field seems to give off ionization to the air surrounding a sample. When the sample is placed in a vacuum the horizontal wave-field disappears and only the vertical electric field is evident.





MAGNETIC EXPERIMENTS WITH CONSCIOUSNESS.

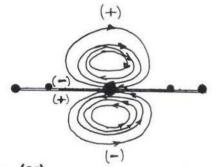
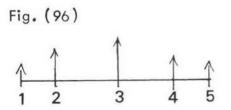


Fig. (95)



One of the many reconstructions of the Ark of the Covenant showing Egyptian influences.

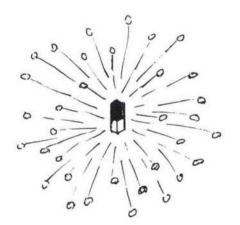


Now in order to become familiar with the role of our consciousness in the observation of these fields we shall describe an experiment with a bar magnet as a model "bar antenna" of the linear type which can be duplicated by drawing a pencil line serving as a "linear antenna" on paper. Similar forms produce similar effects, as we can prove by taking any sphere such as a toy balloon or ball and finding the Supersensonic polarities of the earth's field (+) positive in the north and negative (-) to the south of any hemisphere above the equator level. Below the equator the polarities of the southern hemisphere are reversed. The magnetic field of the earth and all objects upon it appears to exist due to effects of the gravitational field upon the earth. Hence the "linear antenna" can be said to be a function of the east-west flow which causes the gravitational field. The divining equipment such as the diviner's rod and the tuned string length of the pendulum each display the 1 to 5 pattern. In fact, the forked rod usually consists of two "linear antennae" each made of a strip of whalebone or some flexible wood or wire. Each of the strips gives the 1 to 5 antenna pattern when the rod is examined as a sample on the testing table.

Let us draw a line on paper and verify the 1 to 5 reaction of the crossing E-W flow at the different points. However, if we make a mark at the first of those points by breaking the line with a cross, we find it has created an interference. A radiesthesic image in Supersensonics has as much power to change the field-force detected, as something more concrete and solid like a "bar magnet". The new reaction causes a pendulum or rod to give a reading at a position which is at the same distance as the cross has been drawn on the linear antenna but measured from the opposite end of the antenna. Before we go on to find the more complex effects on a bar magnet acting as a "linear antenna" let us postulate that in our consciousness it is possible to create the equivalent of a human thought pattern by the non-living means of a wave-quide such as a linear antenna.

This will help us to understand the results obtained by some of the more professional equipment later if we can test out these postulates on a bar magnet. Not only the bar magnet but any "bar antenna" can be caused to vibrate exactly in any requisite range of frequencies to match any sample, whether that sample is an actual material substance or merely a "thought pattern" of some material substance.

Fig. (97)



The reason for this effect of consciousness is complex and is explained and gone into in depth in the author's course on yoga meditation but for our purpose the student can briefly assume that the mind is a subtle material vibration, albeit at much higher frequency range than ordinary matter. The mind-stuff, being of a material nature purely distinct from the spiritual realms beyond mind-stuff, (called pure spiritual consciousness), can simulate any thought pattern. This mind-stuff can select any frequency in the electro-magnetic spectrum of a magnet which represents its own pattern and resonance.

Supersensonics uses this common law of resonance with all physical and subtle and unmanifested fields which activate the mind-stuff by energization of consciousness. It is the consciousness of the operator which resonates to the requisite frequency, and this lies in spiritual domains beyond "thought" and "mind". Students wishing to know more about these spiritual realms may take our correspondence course on the nature of consciousness. The antenna merely acts as a wave-guide for tuning consciousness as the student may now find out in the experiments which follow in this chapter.

VARIABLES IN MAGNETIC FIELD DIMENSIONS

ane pl U ipti Magnetic IGHT

Before we begin our actual test of an excited antenna's parts and field edges it might be of interest to know that a diviner can detect a magnetic field's distance according to its strength and height above the ground. Both the observer/diviner and the magnet are part of a spherical field we call the earth planet and although the small magnets used by diviners on their selective instruments are not much affected, the field dimensions will increase considerably in octaves if the magnet whose field we are examining is placed at different heights from the ground. Thus instead of a 5 meter (16 feet) radius at ground surface level for the short magnet just mentioned, it will extend further to 8 meters at 14 cms height, 10 meters at 32 cms height, 28 meters at 50 cms, 90 meters at 86 cms and so on. By placing the short magnet on the rungs of a ladder with these heights one can verify and find that at 6 feet above ground the Supersensonic effect gives a range of 2 miles and for a magnet 9 feet up about 30 miles distance. There are some rare diviners who can negate these distance effects as well as enhance them through control of their consciousness.

Since the normal perception of distance is based on the common laws of vision which are psychological/geometrical rather than physical and actual, buildings and mountains appear to expand in height as we walk towards them and subtend smaller angles as we walk away from them. The physicist who measures the height with an instrument or tape measure knows that mountains and buildings do not shrink and expand, yet this is accepted as normal. Although the science of optics has never explained it, either by geometry or physics, humans navigate safely by calculating distance according to these laws of seeing and perspective and do not question the rational explanations which attribute the shrinking and expanding to a function of the mechanical lens of the eye. Professor Vasco Ronchi of the National Institute of Optics in Florence has written some interesting papers which bring up these fundamental problems.

UNDISTORTED DIPOLE FIELD, similar to that set up by an ordinary bar magnet, would exist around the earth in the absence of any external influences. Such a geomagnetic field would extend indefinitely into interplanetary space, becoming gradually weaker

Fig. (98)

The fact that the ancient Egyptians built the pyramid as a Supersensonics navigation radiation instrument and knew of this interrelated connection between electricity and magnetism seems to have escaped the notice of scientific investigators. Yet whether we are dealing with a Supersensonic "linear antenna" or an oscillating radio antenna we find that distance of the signal varies in proportion to the height above the ground. The connection between the common laws of resonance and the laws of similars is obvious to those researchers in the fields of radio-propagation.

THE EXPERIMENTAL "LINEAR ANTENNA"

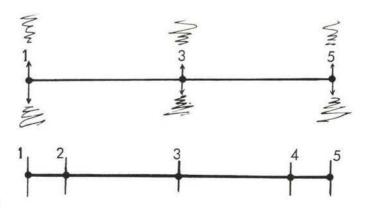
All things upon the earth are either magnetic / para-magnetic, that is, their molecules are either lined up parallel to the earth's lines of force such as a compass needle, or, if dia-magnetic, lie across the north-south axis and line up east-west. The action of magnetism in its various forms is very noticable on the diviner's hand, causing the radio-magnetic influences to register positive (+) or negative (-) effects on a pendulum or rod. The experiment we shall now do will show that the nodal points on the same "linear antenna 1 - 5" with five lines of E-W force, crossing over a piece of N-S orientated tape, which is dia-magnetic, are just as easily detected.

Let us peg a north-south orientated 6 feet length of tape by one of its ends to the ground. For this experiment the peg can be a nail. Instead of the normal 1-5 point linear antenna described with the previous magnets and lines drawn on paper we can detect the pattern of the excited radio antenna or a vibrating oscillation with the nodal points showing E-W pendulum reactions at only three of the points 1-3-5.

Fig. (99)

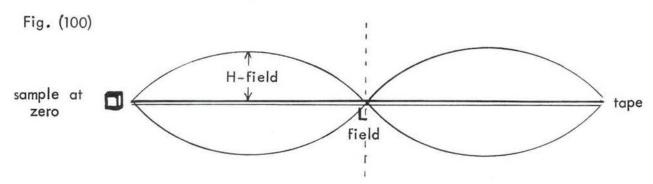
Excited Antenna

The Magnetic Antenna or LINEAR ANTENNA



The electric pattern of the excited antenna 1 - 3 - 5 was found by Turenne, a professor teaching radio-propagation at a military academy in France, and inventor of the Turenne coil which superceded crystal radio tuning. Since he was a radiesthetist or a diviner, he was led to speculate that placing the "linear antenna" (the length of tape) on the ground had brought about some change and that this had replaced the magnetic pattern of the 1 - 5 linear antenna. This caused him to study the effect of placing a bar magnet and later a radium block at one end of the "linear antenna" aligned north-south. By observing with a diviner's selective detector he found what took place when a test sample was placed at zero on the tape's end, when the stimulator, such as a radium block had already been put on the "excited antenna". Hence the idea of the Turenne rule was born for measuring the field-edges of subtle ionizing and disintegrating elements. Whereas in Supersensonics all rules are mental creations, the pioneers actually believed the rules possessed their own capacity to measure changes and polarities. For Turenne, in the year 1908, the results showed that the radiative influence due to the test sample at zero ceased to be merely localized around the sample in a horizontal belt.

The detector showed that the sample's energy field expanded to fill a whole new band having the tape down its center. Turenne found that if the test sample was radio-magnetic, a circular radiative influence was produced, while the usual polar (+) or (-) influence produced elliptical field edges. By walking along the tape while holding a witness similar to the test sample at zero the operator aids detection of these "wave fields" as follows:



Turenne called this the "pendular wave-field" which was found by using the tape as a wave-guide and amplifier and a magnet or radium block as a stimulator.

However, we can see now with hindsight that the word "Pendular" is quite unnecessary because the diviner's rod will also give the same reactions at the end and edge of this field by a dip of the rod in exactly the same place as the pendulum gives a crossoscillation. Some do not even need a pendulum to sense the edge of a field and merely use a tingle in the hand to signal a resonance reaction.

The edge of the field which shows the boundary of one polarity, is detected in the same way at right angles to the direction of the tape length L. Hence we speak of one dimension along the axis of the wave guide's "linear antenna" as an "L-field", and the corresponding excited amplitude as an H-field. More of H and Lfields will be given later but first we must investigate magnet resonance more deeply to get a thorough understanding of the experimental wave-guide and its differences from conventional

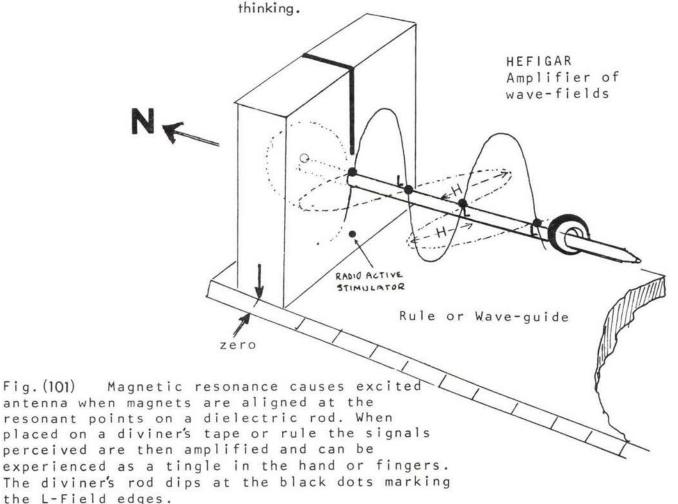
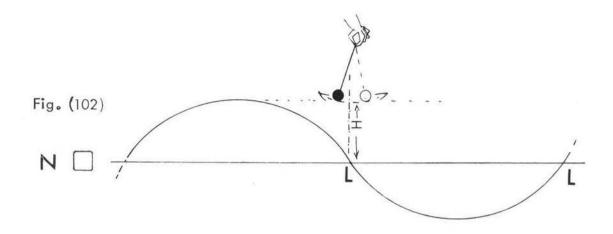


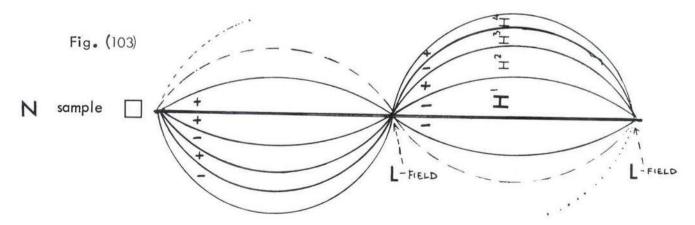
Fig. (101)



DETECTION OF L-FIELDS.

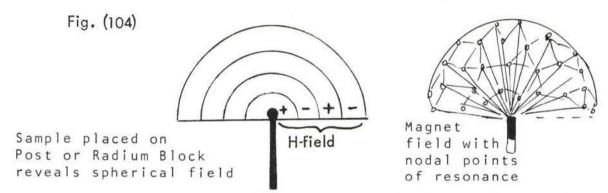
The experimenter now walks out at right angles to the tape from a point halfway along the tape wave-guide where the length of the pendular wave-field is designated at L and finds the edge of the field is revealed by a cross oscillation of the pendulum or a dip of the divining rod. This shows the width of the wave-field, which is designated as H.

If the operator walks along the tape past the length of the field at L, there is another neuro-muscular reaction of opposite polarity. If the field starts at the sample with a positive (+) gyration at zero then the duplicate field beyond L will be (-) negative. The phenomenon is repeated again and again until four fields have been found with alternating polarities, just as we find around a magnet.



Walking at right angles to the direction of L the operator finds three more reactions which are replicas of the first H-field edge, thus giving four concentric field edges. When the excited antenna is created by addition of a radium block, then a test sample set at zero on the tape produces a four-fold influence both lengthwise at L, and crosswise at H.

So much for the results of a horizontal antenna, but if we place the test sample on top of a vertical excited antenna such as a post stuck in the ground or on a vertical radium block, the influence then detected is a spherical field and will yield a circular measurement. In that case the radius of the circle will be the H-field. This is shown in the diagram below.

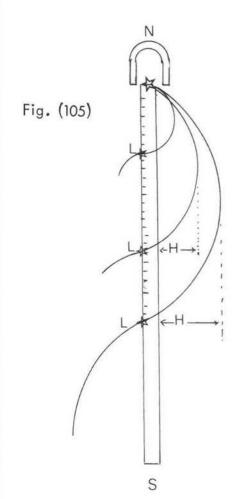


Since all H-fields are proportionally the same dimensions for a specific sample, only the innermost radius or field-edge needs to be measured, as the remaining edges will measure the same. Samples in these excited circumstances produce radiative effects like those of a magnet.

However, there is one outstanding difference. A test sample which gives a radio-magnetic reaction when laid at the zero of the tape will spontaneously produce these wave-fields without any outside stimulation such as a radium block; but samples whose influences are only positive (+) or negative (-) will require a radioactive stimulus on the "linear antenna" before they will give the neuro-muscular reaction to their corresponding wave-fields. Whether this outside influence stimulates the sample or stimulates the detecting faculty of the biological system is a question that the operator can answer for himself with his Supersensitive training.

The general view among most operators is that these wave-field edges represent molecular vibrations, because a sample of a metal like copper, at normal temperature, will give an L-field of 7.5 meters, while the same metal heated gives an expanded field depending on temperature. Also the altitude of the test sample can modify the L-field just as it modifies the boiling point of water.

THE PRINCIPLES BEHIND THE CONSTRUCTION OF RULES.



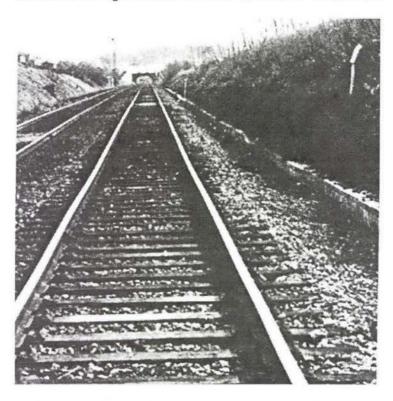
Since merely alignment with the earth's magnetic field on the north-south axis produces a stronger radiation and acts as a stimulator, it is possible to create a sample's wave-field by placing the sample at zero of a length of tape or wood as an excited linear antenna aligned N-S. Whenever this is done the pattern of E-W flux nodal points on the linear antenna 1 - 5, due to the earth's magnetic field resonance, disappears and is then replaced by the sample's own wave-field corresponding to its own molecular and atomic vibrations.

Such a tape or <u>linear antenna</u> is then called a <u>rule</u> and measures the wave-fields produced by specimens of animal cells, plant cells or the chemical elements of nature. A part of a plant or animal will give the sample the vibration of the whole system unless this is modified by the consciousness of the operator as being limited to its own part.

The construction of the different rules as conductors or carriers of the wave-field in a single direction can be made of tape or wood. The <u>linear antenna</u> so created in this way functions because of its alignment with the earth's electro-magnetic field. The vibrations imparted or enhanced by this alignment are derived from the earth's radio-magnetic component, because when any article or sample detected as being <u>radio-magnetic</u> is placed on a tape or detecting rule or wave-guide the same results are manifested when the rule is artificially stimulated by a radium block.

PROPORTIONAL MEASURE DEMONSTRATED BY LIGHT WAVES. Any rule by itself alone will give a field with a nodal point of 5 meters from zero and the reaction is repeated at 10 meters from zero but when a pile of spectral color ribbons, piled in their correct order with violet on top, is placed at zero the nodal point of 10 meters representing the L for white is given. The final conclusion is that an L field of 10 meters can be determined as a sign of light's radioactivity but this measurement is purely proportional in our human consciousness, since whether we measure in meters or feet or any man-created units, the result is the same. Light therefore appears to pass through space to affect our consciousness of spatial distance or along our measures on the rule at intervals dependent on the limits set by the consciousness of the observer.

Magnetic vibrations corresponding to an L field of 5 meters then produce corresponding vibrations in the atmosphere which are a harmonic of light waves with an L field of 10 meters.



Irrespective of all the differences in lens and visual pigment construction of the eyes, the nature of Light and consciousness combine to produce a proportional shrinkage of all material objects as shown in the laws of perspective. The inverse square law is supposed to explain this effect of telescoping of human experience of vision by saying that "light expands" or contracts proportionally with the distance. Yet the physical bridge in the picture gets proportionally smaller with distance away, even when it does not in reality get smaller at all when measured by ordinary physical yardsticks. Stars, suns and mountains all shrink or expand with distance proportionally in our consciousness, and the basic plank in the theory of Supersensonics is that our consciousness is responsible for this phenomenon because it is Light and works on the same laws as light, so we do not notice anything strange as the universe around us expands and shrinks continually as we move towards or away from it.

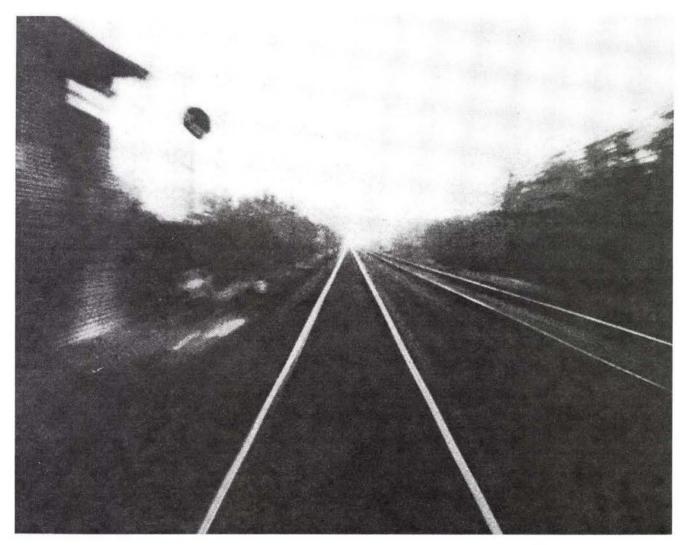


Photo - Newsweek

Does starlight expand with its distance away? Scientists say that the universe is expanding but to our vision it is also shrinking in our consciousness as it expands with distance. All our senses behave the same way. Supersensonics questions this. Is the Universe really "light" expanding or are we ourselves expanding our consciousness? Thereby making the Universe shrink and get further away? How can we tell?

GRAVITRONS & LEVITRONS.

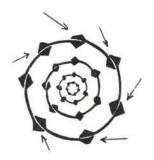


Fig. (106)

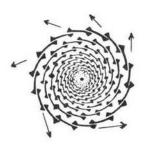


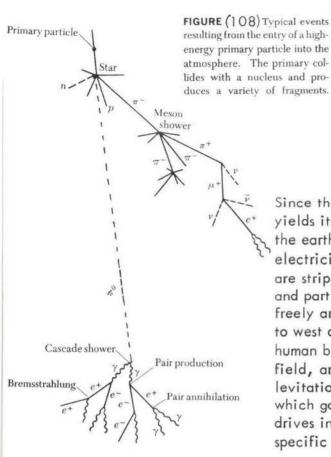
Fig. (107)

The universal field and the gravitational forces flowing into the center of every system are counterbalanced in the creation by levitational forces such as light and radiation. If we think of magnetic fields and vibrating phenomena with all objects including humans as related to that of a blazing star, we can get some picture of the centripetal gravitational induction of energy and matter into its center, sucked in from surrounding high energy photons and cosmic particles from other stars. Because like every other object it is receiving this cosmic fuel, the star continues to heat up and send out energy and radiation which in a centrifugal sense must be more powerful than the gravitational force, in order to escape its being pulled back inwards by centripetal forces.



Obviously Supersensonics goes far beyond the physical centripetal gravity known to physics, which is the weakest of all forces known to science. The fields on our wave-guides appear to be measuring the boundaries of gravitational centripetal forces such as those of a magnetic field. The spiraling eddies create divisions of gravity around objects which suck in cosmic forces according to their particular patterns. Modern science has speculated that there might be a particle-wave called a Gravitron similar to other particles such as electrons, neutrinos, photons, etc. but about 12 times smaller than anything presently known. Supersensonics actually postulates that the behavior of these as yet undiscovered theoretical particles is controlled by Levitrons which are divinable phenomena. Until the cosmic universal field containing both gravity and levity comes into contact with these field edges of an object, there appears to be a universal homogenous vibration, such as light-waves have before their invisible energy hits an object.

As light or radiation is caused by the outwards thrust of levitating cosmic forces, it continues to radiate endlessly through space until it hits an object and is absorbed as "energy" by that object and its subtle gravitational field. It can be said to be formless, infinite, unquantized "proticity".

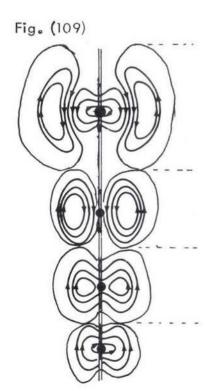


Neutral pi mesons that form decay into high-energy gamma rays which then produce cascade showers. Charged pi's decay into mu mesons which then break down into electrons of both signs. The radiation reaching sea level is made up of about 70 percent mu's, about 30

percent electrons and positrons, with about 1 percent remaining pi's. Paths shown by the dashed lines are those of neutral particles, which leave no visible tracks in detectors.

Since the photon of light is a proton plus an electron and it yields its electron to the atoms of oxygen and other elements in the earth's field, proticity can be said to be the cause of electricity. In Supersensonics we postulate that free electrons are stripped off photons of light as its energy is partially reflected and partially absorbed by our atmospheric atoms and then float freely around in the gravitational field of the earth in their east to west direction. We can see clearly without needing proof that human biological systems, being also objects in the same universal field, are proportional subdivisions of the whole gravitational/ levitational matrix. N.B. See my book "Nuclear Evolution" which goes into this more deeply from the viewpoint of the human drives in consciousness caused by absorption of light (color) of specific frequencies.

INVESTIGATION OF THE MAGNETIC FIELDS

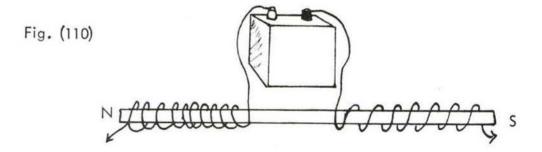


By using our bar magnet as a standard model-field representing all those objects upon the planet which are interpenetrated by the PROPORTIONAL SUBDIVISIONS. terrestrial magnetism of the earth, which in turn is caused by the interaction of the gravitational field of matter and the levitational field of light energy, let us now look deeper into its structure as an invisible force field.

> We have seen by experiment with our Supersensonics perception of the field influences around any product of nature that we can learn to recognize the patterns of gravitational boundaries by bringing a small duplicate with a similar vibration near to it. These similars which are called a sample witness (or merely a witness by the radiesthesia investigators) will be studied in great detail in later chapters. However, we must first find out whether we can achieve closer analysis of a product by studying the effects produced on the atmospheric atoms by a magnet. We can postulate that what we will find out about a single magnet on our experimental table will be true about the fields of all magnets all over the universe. However, since we do not have a laboratory on earth as big as the universe to test this hypothesis in terms of ordinary physics, we can only use the methods of Supersensonics, which are not limited to space and time, and then use whatever relationships and proportions we "divine" by testing with more exact conventional methods.

THE EQUIPMENT NEEDED.

To perform this experiment it is best to avoid the spherical field of a single point found in a very short magnet by taking a very long magnet so that the details will be more distinguishable to the beginner. This can easily be provided at home by making a simple electro-magnet in the form of a solenoid through which a small current from a 6 volt torch battery is made to pass. For those who are not familiar with a solenoid it merely means here that your copper wires are wrapped around the magnet in opposite spirals for each half of the magnet. We can arrange the solenoid north-south in such a way that the end of a wire connected to the battery which attracts the south-seeking pole of a pocket compass is placed towards the north end of the solenoid and the end of the other wire is pointing south:

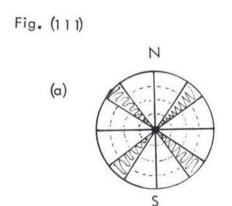


This can be stretched out on the ground as an electro-magnet to some 10 meters or approximately 32 feet long. Take the magnet fitted pendulum or rod and divine the differences between a N-S orientated magnet on a table and the long magnet laid out along the earth. If you have not made such a Turenne type selective detector you can do this by pinching lightly between thumb and finger a small magnetic needle in order to make perception of the diviner sensitive to the solenoid's field as a whole entity.

When the needle is held or arranged horizontally there will be selection of the horizontal magnetic influence with its positive (+) and negative (-) pole or the radio-magnetic (+ -) node usually found over the center of a compass. When the needle is held vertically there will be selection of the vertical electric field with its negative and positive poles and the radioactive (+-) node over the neutral point at the center.

As a comparison the normal sensation, when the bar magnet's field is causing a positive gyration on a pendulum, is for the diviner's rod to become "heavy" and there is a sensation of pulling and twisting down. When there is negative (-) gyration on a pendulum the equivalent sensation on the diviner's rod is a "lightness" (levity). At the edge of a field the normal pendulum reaction is a to and fro oscillation but a rod gives a sudden rise or fall to denote the edge of a field.

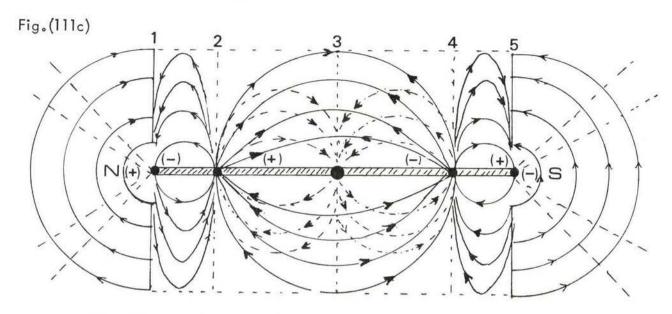
When a diviner walks around a long solenoid magnet on the ground with a "witness" of the magnetic field at arm's level, the normal gyrations of the pendulum and rod detected from a small magnet on the experimental table change from those polarities mentioned above to gentle to and fro oscillations and a gentle pulling down of the rod. There are perceptible differences for the areas where there would be normally a positive (+) or negative (-) reaction. The diagram (a) below shows a very short magnet of 1 cm (1/2") with its circular spheroidal field-forces, and diagram (b) shows the iron filings pattern of the usual field over a bar magnet of say over 2 inches:



(b)

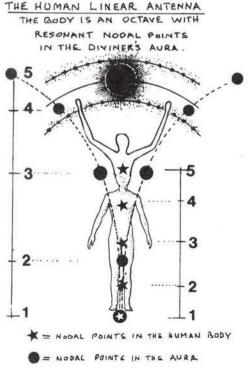
S

Below in diagram (c) are the patterns of the fields of the long magnetic solenoid with alternating positive and negative field edges:



The Linear Antenna 1-5 pattern of a bar magnet showing field edges and resonant points between alternating (+) or (-) flows of magnetic lines of force as detected with a magnet-fitted rod or pendulum.

Fig.(112)



Walking along and over the solenoid the operator notices the divining reactions and differences between field edges in the areas represented in the diagram.

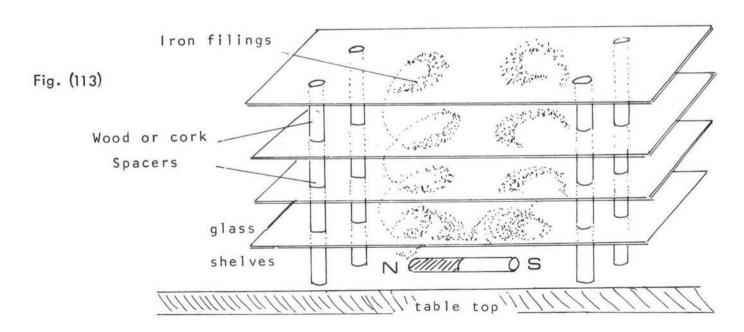
Across the solenoid which has become a "linear antenna" the diviner senses the five nodal points of the east-west flux spaced exactly in the same proportions of the antenna 1 to 5. This cross-section plan of the basic H-field and L-field pattern is not only the structure of the magnetic field of all conventional magnetism but also represents the effects of magnetism on all objects of matter which are interpenetrated by the universal field, including the human "linear antenna" which we are now beginning to investigate as the "observer" or "diviner".

Now walking away from any part of the extended solenoid, the observer with trained biological selective perception of the fields, who is now holding the needle magnet between thumb and finger, "feels" the slight pressure to which he has become sensitized. The diviner finds the various points of pendulum oscillation or the dip of the divining rod on both sides equidistant from the solenoid electro-magnet. When these points are joined together on the plan they show the edges of the field surrounding the solenoid.

The magnet used in this experiment gives a field of 5 meters (26 feet) at around level for the length of the first "L-field" and the same for the first "H-field" shown on the diagram. Measuring the field beyond this, the diviner finds another reaction and polarity change from (+) positive to negative at the edge of a second field. Going out further still from the solenoid magnet there is another polarity change. All together there are four polarities detected with radio-magnetic edges denoting the neutral point between them. This diagram of the linear magnetic antenna shows a complex field extending by four phases of 5 meters each from the ends of the electro-magnetic solenoid, to an outside edge 20 meters away. Each "H-field" measures the same 5 meters on both sides and therefore the early pioneers called this an "H-field" of 5 meters. Going on to compare the "H-fields" and "L-fields" of other substances with this standard "model field" of the known polarities of the magnet, we find the same general pattern.

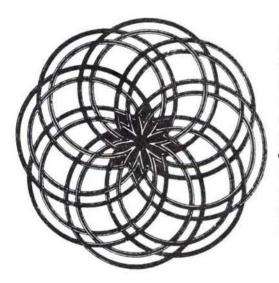
CHECKING OUR RESULTS.

Let us take a shorter magnet of say 6 inches or 12 inches in length and we will find the same general pattern is produced around it on the experimental table. As soon as you begin to detect influences mark the change of polarities and the field edges on a piece of white paper on which the magnet is lying north-south and then on a piece of paper lying on top of the magnet. Yet we have only measured a cross section on one plane of the plan, while in reality the actual field is a spiral spherical shape we can see by taking several sheets of glass and spacing them say an inch apart over the magnet, tapping and agitating some iron filings onto the glass as in the diagram below:



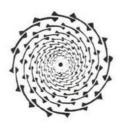


The iron filings will spread out with tapping and vibration and take the shape of the lines of force in such a way that we can observe the form of the field structure in several dimensions and cross sections of the magnetic field. Now check the edges of the field boundaries which extend from this magnet with the nodal points which you detected marked around it on paper. Extend outwards to discover the same pattern for all magnets.



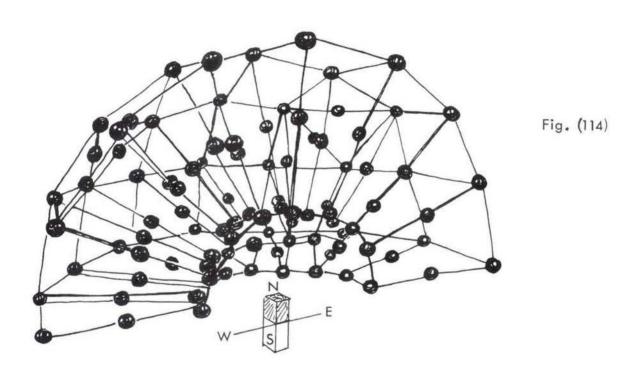
Now place the 6 inch magnet vertical on its end and it can now be considered a single point in the horizontal plane. We find all of this magnet considered as a linear antenna 1 to 5, has now been compressed into a point so that the detectable result is only a circle. Whether the small magnet of 1/2 inch was previously examined in its vertical or horizontal position, the dimensions remained the same as for the 6 inch vertical magnet. The conclusion is that all magnets are surrounded by a wave-field which is not linear in the real sense but is really a spherical radiative influence with the magnet as its central core. This sphere of detectable subtle fields appears to be made up of two hemispheres oppositely charged.

If the magnet examined is on the experimental table, the observer can determine the polarity below the table level. If the magnet is examined on the ground one detects the top hemisphere as if it were filled with air and there should be another hemisphere of influence below the earth. Evidence of this positive/negative influence below the level of a magnet can be provided by any magnet by suspending it in the air or placing it high on top of a post. Below the magnet's horizontal plane the polarities in the lower hemisphere will be found to be reversed.



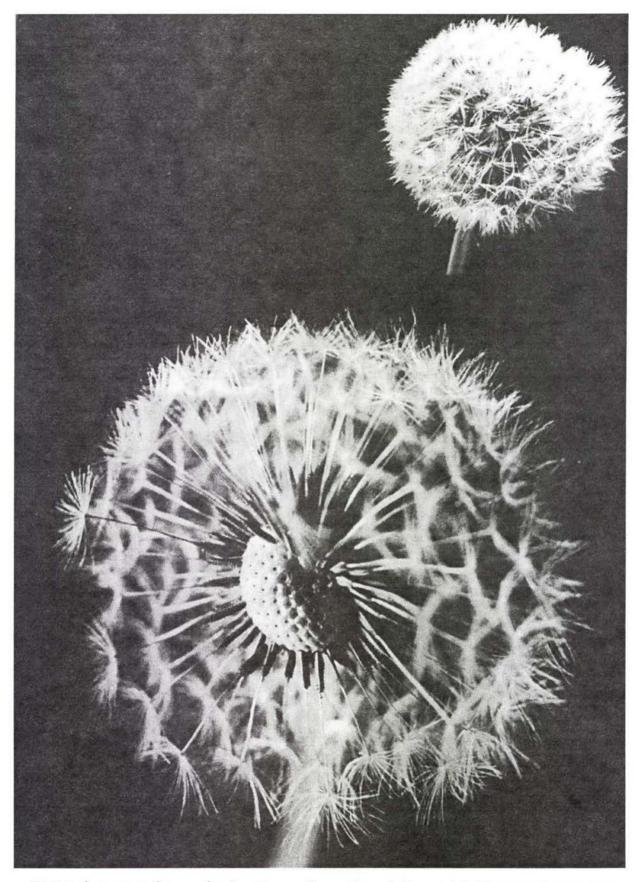
SOME CONCLUSIONS.

In conclusion, around every magnet there is a spherical complicated invisible field consisting of several shells with several lines or fundamental rays of force passing through the horizontal magnetic type field with its bias (+) positive north and (-) negative bias south. Also each "linear antenna" collects the east-west flux over the five nodal points of its "antenna 1 to 5" proportions. Even when the magnet is so short that it can be imagined as a domain such as a single molecule of nickel steel and produces a spherical field, these five nodal points must exist even if they are not separately detectable with a pendulum.



The visual analogy of the magnet's field should look like that of the dandelion ready for seed dispersal. (See photo.)

To conclude this chapter, the same picture of the 1 to 5 "linear antenna" is found by Supersensonic methods over every substance when its length on the north-south axis is greater than its east-west breadth. Therefore this east-west flow of free electrons produces magnetic stress effects in all matter whether paramagnetic and aligned parallel to the north-south axis like the suspended needles of a compass, or whether the material substance tested is dia-magnetic instead of paramagnetic.

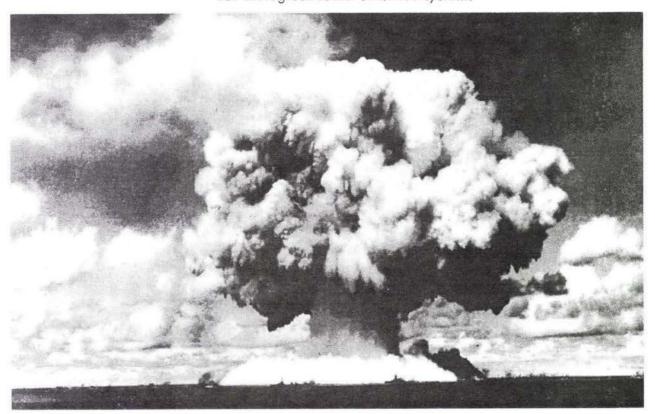


Nature has many thousands of patterns of growth and dispersal built around a common archetypal form of the spherical spiral. Here two dandelions grow their seed dispersal system almost identical to the magnetic field of a short magnet. The wave-fields of Supersensonics are of similar shape even though a rule only detects color effects along one radius of this form.

All matter is subjected to a north-south strain including a magnetic biological stress in our own bodies which the operator uses as a divining instrument. Since magnetism is inseparable from electricity in nature, the one force merely being a manifestation of the other in horizontal and vertical planes at right angles to each other, it can be postulated that they both originate from the universal east-west flow of free electrons. Therefore in all matter, whether on the earth or in some other part of our own galaxy, this universal drift of electrons should follow the east to west rotation of the galaxy and consequently cause an E-W strain within and around all particles of matter and spiral movements of energy. This E-W strain and its effects on gyrating fields of energy both physical and biological, will be examined more closely in our next volume in this series THE SUPERSENSITIVE LIFE OF MAN but in the meantime it would help the student to prove or disprove it through the biological use of his own Supersensonic training. Whether the student accepts this E-W flow postulate or not at this point is at present irrelevant to our investigation; we are merely asked to hold the concept in our mind in order to effectively explain that a fundamental energy of radiation is responsible for most of the test samples' influence upon our biological radio sensitive system.

Fig. (115)

Beautiful and Awe-Inspiring
Mushroom of Destruction
the underwater atomic-bomb



Biological cells are radio sensitive at different thresholds of material existence. Within their own atoms of Hydrogen, Helium, Carbon, Oxygen, etc the forces and radiating energies of the atomic bomb exist. Proticity which holds the nucleus of each atom together in our cell life is as strong as the force displayed in this picture but consciousness is 100 times more powerful. The explosion you see was caused by consciousness and thought, not by anything in nature.

11

ELECTRICITY & RADIATION.

For the purpose of explaining the link between light and electricity, we shall refer to the word "radiation" here not in its usual Supersensonic meaning of all waves of vibratory phenomena emanating from a radio-stimulated sample or an excited antenna, but in its ordinary physical sense of light or energy, such as sunlight or starlight or radiation from some radioactive substance. All matter radiates according to our Supersensonic faculties but in science this term "radiation" is usually kept only to describe electromagnetic energy, which is ionizing and travels at the same speed as light, such as radio waves.

CLASSICAL PHYSICS & PHOTONS.

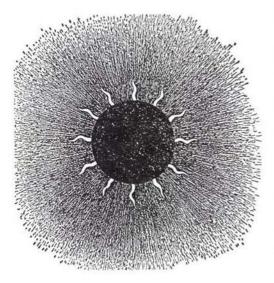


Fig. (116)

According to classical theory when radiation in the form of an oscillating electromagnetic wave of energy strikes a free charged particle of matter such as an electron, the oscillating electric wave-field makes the particle oscillate at the same frequency as that of the surrounding wave-field. The particle itself in turn radiates its own electromagnetic energy in all directions much like an antenna scattering the radiation of radio waves at the same frequency as that of the original exciting radiation. The photon theory shows however that the scattering of the radiation contains, in addition to the original wavelength, another radiation of greater wavelength which is associated with its linear momentum. The "energy" transported by "radiation in free space" is divided by the speed of light in order to calculate its momentum.

More will be said on the nature of carrier-waves both from the standard physics viewpoint and the Supersensonic viewpoint of carriers such as "rules." There does not seem to be any conflict but merely an extension into an as yet forbidden territory which certain attitudes of consciousness prevent us from entering. Here we must master the concepts of a photon-wave of radiation in order to discriminate carefully between primary radiation, such as that from photons with their full momentum in free space which we call light, and the secondary reflected radiation which we

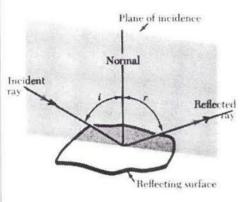
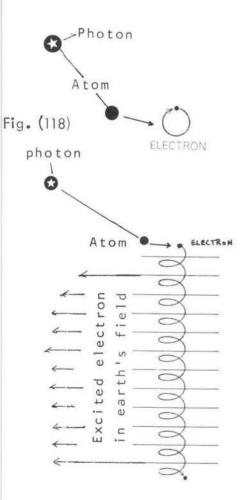


FIGURE (117) The incident ray, the reflected ray, and the normal to the reflecting surface all lie in one plane, the plane of incidence.

REFLECTED RADIATION.



looking at its color through some medium such as a prism or diffraction lens and detecting its spectrum lines. Secondary or reflected light which is polarized by hitting a surface and rebounding back from the material and thence to our eye does not contain this primary ionizing momentum.

A photon, which is defined here as a proton or quantum of energy and appearance which is then released an appearance with an atom.

call color. Scientists know the type of primary radiation by

A photon, which is defined here as a proton or quantum of energy plus an electron which is then released on contact with an atom of matter, can strike and rebound from any free electron which is not bound to any atom of matter. If an incident photon rebounds elastically from such free electrons floating in the earth's magnetic field, the photon in the first place communicates some of its radiant energy to the electron and ionizes it (excites it) and so the reflected photon has much less energy afterwards. But if its energy is less, then the frequency of its wave oscillations will be less after the collision with the free electron. This means that the scattered photons of reflected light will have a lower frequency and a greater wavelength than the original photons. The difference between the two types of radiation, primary and reflected respectively, increases with the angle of scattering and can be easily calculated in physics and is called the Compton effect.

Now to come to the significance of this in Supersensonics requires us to have as bold a hypothesis as Einstein did in 1905, when he assumed that each photon on striking an atom can release only one electron, because a photon if it is absorbed by an atom at all never shares its energy among a group of other electrons, but delivers all its energy to a single electron. Here we have a past explanation of the law of similars, that communication takes place only between resonant systems or between energies which have similar structures. Hence for a group of atoms to share the photon energy in a wave-field of light radiation there must be receptive components such as single electrons in a state of readiness to receive, otherwise the incoming energy will be rejected by the

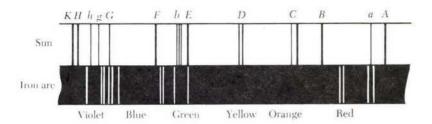


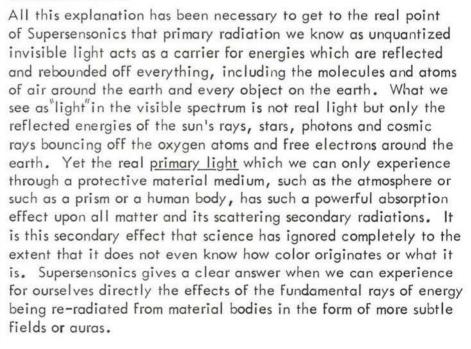
FIGURE (119) Fraunhofer lines (above), and spectrum of iron (below). Only the brightest lines are shown. Coincidence of lines G and E with the iron lines shows that iron is present in the outer part of the sun.

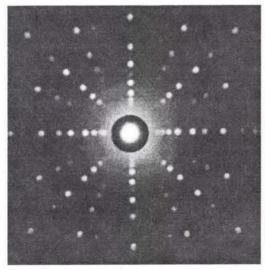
material atoms or to people and groups of people we have the same effects but at different energy thresholds of communication. The reflected light from objects irradiated by the sun's rays at different times of day will affect the angle of scattering whether those objects are atoms, electrons, or human cells composed of atoms and electrons. Hence "Radiational Physics", as we sometimes call Supersensonics, in order to discriminate between it and ordinary physics, takes into account not only the observed object but the field in which the object is energized as well as the observer's orientation to the incoming radiation.

group. Whether we apply this to particle physics or to groups of



CARRIER WAVES & INVISIBLE LIGHT.







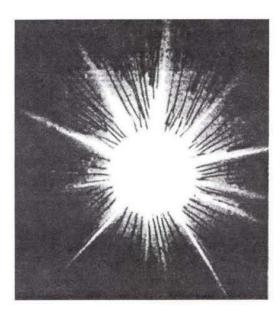


Fig. (121)

Black Light which we refer to as invisible light has the same method of propagation as radio waves or any other kind of radiation. The medium through which light passes in space is of more importance in Supersensonics than the speed of the radiation or light. The intermediate transmittersof subtle energies are oscillatory waves which excite the medium or universal continuum, so these carrier-waves are no different from those produced by radio-transmitter.

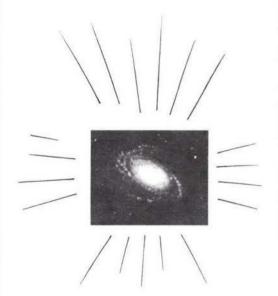
All waves of light are invisible as they pass through colorless and transparent space and what we see as light rays are only revealed by the dust or clouds or objects which absorb it. The

LIGHT AS A MEDIUM.

To start a wave motion there must be some connection or coupling between the source of the excitation and the medium surrounding it. To use a familiar image, let us suppose we drop a stone into water and watch the circular ripples spread out over the surface of the still water. The disturbance causes a movement outwards from the stone with constant speed. As the waves sweep past a floating cork, energy is imparted to it up and down, and it begins to oscillate around its original position. But the cork does not move forward with the passing waves showing that the medium stands still. Only the form of the wave moves along at the characteristic speed of waves in water as one part of the medium receives energy and passes it on. In other words waves are able to transfer energy without the transport of any matter. The vibration in a sound wave travels through the air and oscillation of the molecules of the surrounding air takes place in waves, but the air does not move forward. Unlike these wave-types we are told by science that light waves and radiation are non-mechanical and do not require the presence of matter for their propagation; that they can travel in a vacuum. Yet sound also does not need matter because by simple experiment we can prove that a sound oscillation in a vacuum, although inaudible to our senses, still travels through space; if we put something inside the vacuum with the sound, it will vibrate and show sonic patterns.



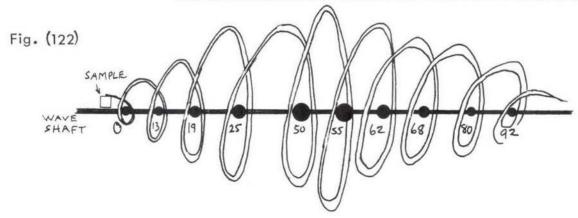
VELOCITY OF LIGHT.

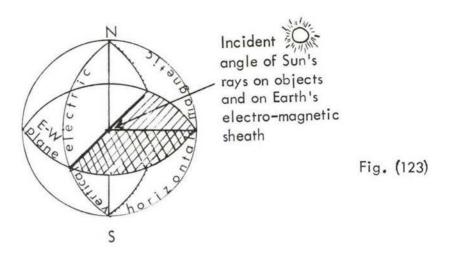


In Supersensonics the key to understanding the velocity of light is not in the speed of the photons, but in the characteristic speed of the medium. The value of the speed depends on the properties of the medium and not on the form of the particular wave or the waves of energy being transmitted. This velocity of light has always been measured by science in relation to the speed of light in a vacuum, as if a vacuum were total emptiness. Yet, here on earth, we know that a vacuum is full of radiation from all the cosmic rays and stars travelling in every direction from all ground. If the light radiation wave-form is travelling in a uniform medium, the wave speed will also depend on frequency slightly but for our purpose of comparing the relationship between waves of light and the force-fields detected by Supersensonic means we must be ready to look for some consistencies and expect some inconsistencies with known phenomena. Could it be that light does not travel, that only the energy travels through it?

EVIDENCE OF A CARRIER.

The manner in which the Supersensonic wave-fields are detected by the diviner in resonance with various spectral colors is itself an indication that there is some resonance phenomena between the waves of light on one hand and the fields detected. Therefore an entire chapter will later be devoted to color frequencies. However, it is important at this point for the student to grasp the connection between the electrical vertical planes forming the earth's magnetic poles and the nature of the carrier-wave which in Supersensonics can be a tape, a rule, or even a drawing on paper, and with an experienced diviner, even a thought. The fact that the "subtle-matter fields" assume specific dimensions based on the nature of the carrier or stimulator at the zero of the rule is evidence of the existence of the carrier or stimulator.





The fact that the orientation of a rule or "linear antenna" type carrier, to the N-S axis, acts in the same way as light, suggests that radiation or its medium has a property capable of serving as a carrier of wave-modulations similar to the way water carries the energy of the wave motions. The photons which science considers to be the transmission of energy through space equivalent to electrons are well perceived through the diviner's pendulum reactions, which vary with the colors (wavelengths) or impulses received from the objects illuminated.

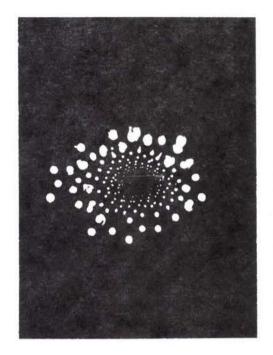
ARGUMENT FOR A SUBATOMIC ETHER.



Alternatively it can be argued there is an additional subtle invisible colorless medium or etheric akasha which is all-pervading, through which light energy and thought passes in the continuum of the universal field; this medium being resonant with our consciousness, accounting for the connection between two similars, each being vibrators of the same frequency in the same medium and transcending time and space.

Since Supersensonics uses the artificial creation of oscillatory waves which perform the work of a carrier of information about a sample on a rule, the conclusion is that the carrier so used, such as an excited rule, actually measures a definable rate of oscillation in a given time (frequency of vibration).

Fig. (124)
High Voltage photographs of a finger tip discharge by Prof. Wm A. Tiller, Stanford.



Supersensonics reveals the close connection between light and radiation, its spectral colors, and the generation of the magnetic field of the earth. For instance, if the student takes a narrow card, say 6 inches long, and sticks on small squares of paper with the true spectral colors, the field will read differently when the card is not aligned exactly north-south.* This short test allows a diviner without any compass needle or without knowing the angle of the sun, to know the directions of the earth's magnetic field. The fact that our own biological system when stretched out with arms in antenna form can sense the earth's magnetic field force at the finger tips and particularly strongly at E-W axis, shows that our consciousness is linked in some way to light and its colors. Having demonstrated these facts for many years from the platform to thousands of people, I am still continually amazed that it means little to them. Although this is a key to our own Supersensonics faculties which leads to the sensing of the environment without any aids or divining instruments, we will go on to study some more obvious rules and wave-guides than our own biological receptivity to color.

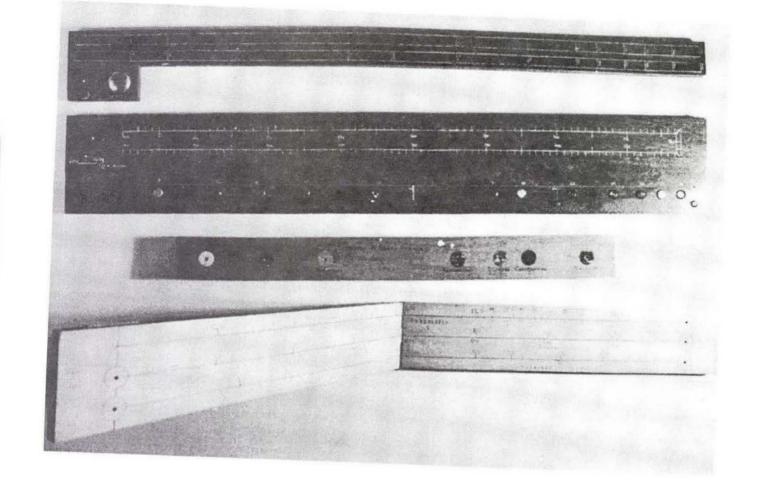


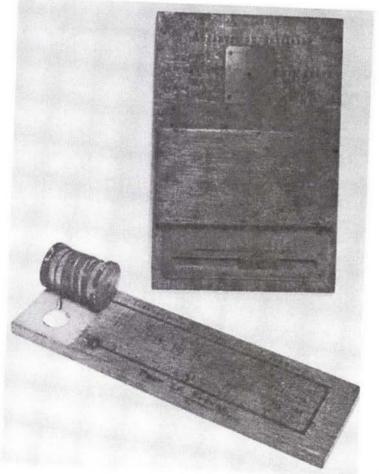
By working with a radio-exciting amplifier such as the radium block or any other ionizing source of stimulation, the existence of a universal link between similar fields of vibratory phenomena can be demonstrated as acting or interacting with the biological fields which interpenetrate man's nervous system. In my book, "Nuclear Evolution" I have shown the essential relationships between light of different frequencies and the chakra system and its biological/psychological intake of cosmic life energies. I indicated therein that the resonance effect between cell life and biochemical changes was a universal fact throughout all nature. In this Volume III the student is now given some of the methods used to verify these conclusions about these universal links.

By using Supersensonic amplifying methods we can discover directly for ourself without any external authority or guru telling us that the strongest link between two similars may be experienced parallel to the world's electromagnetic fields north-south and east-west. Our trained perception reveals the link can also exist in every non-magnetic direction as well. The law of similars and its link with the laws of resonance becomes perceptible to us when radioactivity is applied at one end of the Supersensonic link by use of a radium block. The Supersensonics faculty in man can detect the existence of nodal points of disintegrative radioactivity and the normal activity of invisible fields of radiation.



Fig. (126) Each star in this galaxy is a nodal point of energy vibration. Each one radiating its spiral oscillating cosmic rays in all directions in the universal field. Light radiation in space is travelling in every direction at once, each star exchanging its own radiation with each other. Every person functions as a star but in a different harmonic octave. The nodal points of cosmic wave trains are about 6/1000ths of 1 mm apart whereas for humans they are about 13-80 cm.





part of the author's collection

Above pictures show museum pieces of original wave-guides made by pioneer radiesthetists circa 1908-1935. Top down:

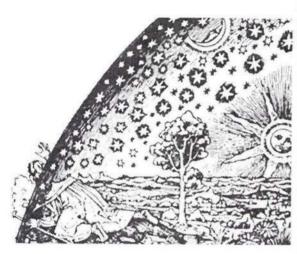
- 1) Rule for measuring Homeopathic potencies by George Discry of Harze, Belgium.
- 2) Wave-guide rule by George Discry who tested its efficacy on the stamina of racing pigeons.
- 3) "Functions of the human body by metallic elements."
- 4) "Turenne Universal Rule."

 At left: Original precision rule for wave-fields in the Turenne system.

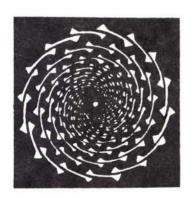
 Thermometer coil for fever by "wave system of Turenne."

12

CONSCIOUSNESS & LIGHT ENERGY.

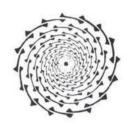


The present view of physics is that there is no evidence of an ether or all-pervading medium as the carrier of gravitational waves and light. The attempt by earlier physicists to make ether an absolute frame of reference and by the twentieth century to conclude that there exists no such universal frame of reference, have all been made on the assumption that light travels at a constant velocity in a vacuum quite independent of the motion of the source in relation to the observer. Einstein's relativity formula shows that no material object can have a speed, relative to any observer, that is as great as the velocity of light. The resulting ideas have grown familiar to physicists although they have led to some surprising results, suggesting that theoretical ideas about familiar aspects of nature should not be trusted blindly, but must always be open to new points of view. Einstein himself gave warnings about the present drift of scientific thought, brought about by his own theories, because he saw clearly that what was a highly imaginative concept was taken literally as a fact. Many scientists do not bother to read his later works and ideas because they were seduced by even more highly imaginative theories such as quantum physics.



Quantum physics, while providing evidence at micro levels of the nucleus of matter, has provided absolutely no proofs in the macro world and has had to invent certain unreal ideas in order to adjust to reality. These concepts and postulates are outlined in the following way in order to proceed beyond them into more light on Supersensonics:

- 1. Antimatter exists along with its logical consequence an antiuniverse and an anti-observer with the capacity of annihilating ordinary matter and thereby creating something called "nothing" and releasing radiation.
- Objection: Logically self-contradictory, like God denying his own existence.)



- 2. (a) Time reversal or <u>backward flow of time</u> can account for left-handed or right-handed mirror reflections of natural phenomena. When time flows back along its tracks on a cylindrical shape it would retrace its path symmetrically.
 - Objections: If it were a cone-shaped object the spiral path would trace out a new pathway. If reality of space and matter or even light rays consist of spiral fields then we cannot repeat their sequential flow by merely reversing the flow of time. The classical physics view of time is that time does not run backwards in the sense that omelettes cannot revert to raw eggs nor can weathered rocks become whole again; neither can radiating bodies like the sun take back their own radiation. Obviously grown-ups cannot grow back into small children again, and so time appears to flow in one direction only.
- 2. (b) Present concept of measuring physical events with time --modern physics asserts that the proper way to define a physical
 quantity is to set forth a prescription of how the quantity is to be
 produced and measured rather than trying to convey its meaning by
 relating it to other concepts. Another way of saying this operational point of view is that we can fix the occurrence of all
 material events by relating them to a fixed exact time clock.
 (Objection: Time is man-made psychological experience of
 interval, just like meters and feet.)

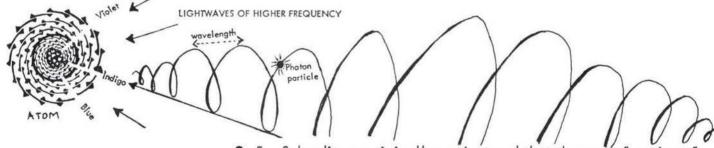


- 3. "Time measurement" means the scaling off of a time interval just as "distance measurement" means finding the length of a distance interval, but in quantum physics the principle of indeterminacy says that the variables are such that no accurate pinpointing of both time and place can be predicted. Either time of an event in an atom is measured or its position can be calculated, but not both together because of hidden variables.
- □ (Objection: The vibrations of atoms or parts of atoms used for time standards are on the other hand regarded in physics as the most accurate clocks but only at one place in the universe on planet earth. Travelling at the speed of light their vibrations run much slower.)

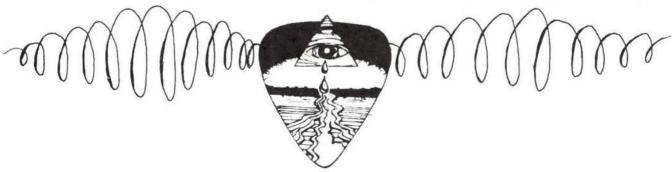


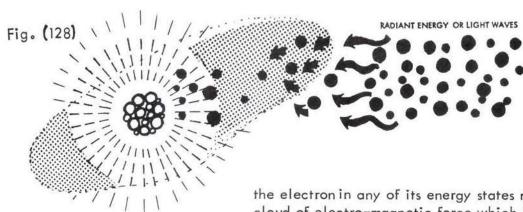
4. Heisenberg shows that in every process of measurement or observation there must be an actual physical interaction between the observer and what is observed. In order to "see" an electron in an atom, visible light waves are too long to produce any effect. Therefore, in order to "observe" an object such as an atom or its nuclear parts, radiation of very short waves has to be used. The very process of observation alters what one is trying to observe. Moreover the alteration is entirely unpredictable since there is no way of telling in advance how electrons or protons will recoil from this attack on their natural state of being. In every case of every experiment, whether a physical or "thought experiment", that is designed to give an exact value of a given quantity, it is impossible to avoid a loss of information on the value of some other quantity. Hence all particles are not definite extentionless points which can be fixed in time but are "smeared out" in space. Objection: Quantum physics offers no evidence of "subtle matter" smeared out through space.)

Fig. (127)



• 5. Schrodinger originally conjectured that the wave function of light waves or photons represents the density of an electric charge at various places. In this view the charge of an electron is not confined to a definite region but is "smeared out" through the whole of space; the density of the charge is highly concentrated in certain locations (nodal points) but thins out rapidly in different directions in ways prescribed by its wave function. This picture of



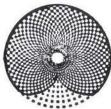


the electron in any of its energy states may be viewed as a fuzzy cloud of electro-magnetic force which is found at limited spots but not in sharply bounded regions of space.

(Objection: Does not bring in the observer in his observation of density through the senses.)



Atom



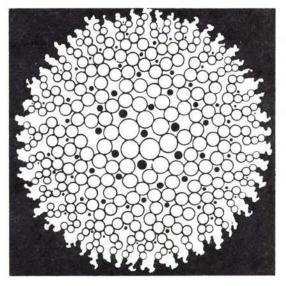
• 6. Max Born considers the electron to be a localized particle rather than a fuzzy attenuated cloud of energy and his view assumes that the wave function will determine the probability of finding the electron at various points in space. Born's idea is close to Einstein's interpretation of electro-magnetic waves as "guides" for the distribution of photons of light.

Born's interpretaion says that the probability of finding a particle, for example an electron of hydrogen, in any given small volume of space is \(\psi^2 \). On this basis the distribution of photons will represent only clouds of probability and will not claim to show where an electron is, but merely where it is likely to be found.

(Objection: The act of observing theoretically does not bring in the limitations of the observer's consciousness, if any.)

EXCHANGE PARTICLE	TYPE	FUNCTION	RELATIVE STRENGTH OF FORCE	LIFE OF TYPICAL PROCESS
pion	strong	holds nucleons together to form nuclei	1	$10^{-23} { m sec}$
photon	electromagnetic	binds electrons to atoms and joins atoms to form molecules and crystals	10-2	10 ⁻⁸ sec
not yet identified	weak	makes leptons interact with each other and with heavier particles	10-14	$10^{-9} sec$
graviton (not yet observed)	gravitational	causes universal attraction between macroscopic bodies	10-40	very long

THE NEW GOD-COSMIC DUST.



With these six outlines the <u>dematerialization of the atom</u> and its electrons is complete. The indeterminacy principle gives the impossibility of fixing the position of an electron in its orbit; Born's considerations make the orbits themselves dissolve in a cloud of probability. We can see that this highly successful numbers game validated by the achievements of quantum physics and chemistry is no more exact than any other religion but merely switches the gods from the idea of an Ultimate Being and makes new ones out of elementary particles with just as many variables as any of the former gods who were not confined to exact numbers games.

Our objections to the above six views are listed briefly after each one but the most profound considerations having to do with the observer's own separation within his own field of consciousness, as a separate and localized piece of mental substance, were only briefly touched on by Einstein in his General Theory and almost never by any physicist or mathematician since. Hence the whole physical act of "seeing" is not questioned and the psychological aspect of experiencing of matter and light energy is never even thought of as unusual. Hence the observer who measures time and distance according to common sense, never questions his own limitations or his own level of consciousness because his basic assumption is that his assumptions and equations are "self-evident".

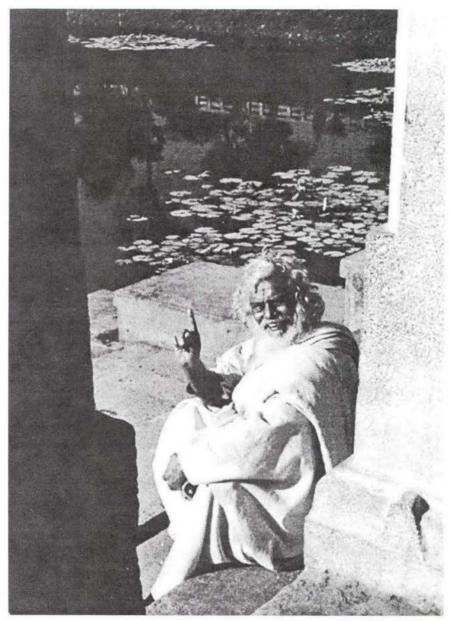
A person whose own consciousness is separated from space, will see 11 spaces or intervals between the 12 dots. A person who has integral consciousness will see only one space between all dots because their mind is not linear.

The mental trick we play on our self by saying anything is selfevident leads us to the examination of the act of "seeing" and how physical fields impinge on our consciousness. Nothing is "self-evident" without a Self to confirm and deny it is so; such confirmation will depend on the self-knowledge or ignorance of the observer of Self.





Fig. (129)



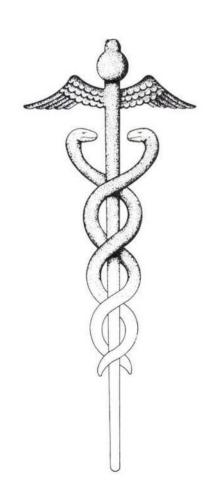
C C.HILLS. 1961

An Indian seer who has realized the true nature of Self and points to the One without a second. Taken in 1961 by the author at Bodhi Gaya where Buddha was enlightened. He would remain motionless in bliss for days without even moving to eat, drink or excrete. His body was filled with light and his face shone like a rainbow.

13

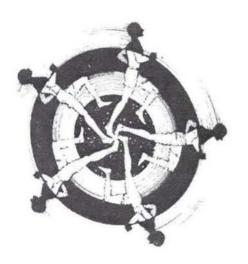
VISION & CONSCIOUSNESS.

To outline how we see objects with external light and recreate these images of objects with the internal light of consciousness requires a revolutionary insight which denies the exclusive physical character of optics as explained by modern physics. All optical phenomena is made up of physical, biological, and psychological factors and the end product always takes place in the mind. Any ray of light which enters the sensory mechanism of eye, passes as a neuro-electrical stimulus into brain cells and then further is analysed by our conceptual seeing. It begins with the lumen and ends with the lux. The elements of vision, i.e. light, color, image are definitely psychological and these make up the apparent world of the external universe by which each person imagines, in his own way, the world of reality which sends the stimulus to his eyes.



There are many who view "consciousness" as merely various neuro-physiological states of activity and claim that the question of consciousness and its definition is largely a semantic one. They tend to think the world is basically as physics sees it: the reality is made of physical objects and we are ourselves such objects. There are some philosophers and physicists who argue that all theories of matter are true operationally but the concepts of time and space are merely abstract products of consciousness. The concepts of physics are structured on the basic foundation of our knowledge of coordinate systems and their validation by our senses. However, the validation of our external world by Supersensonics involves alternative methods of validation, unknown to ordinary science, but which need not give conflicting results and may even be supportive of much of our physical, biological and psychological disciplines.

To consider the nature of vision we must include the physical and biological aspects and not identify the experience of "seeing" as a self-aware entity entirely with consciousness. The consciousness cannot see any more in any physical situation than its own self-limitations, whereas the body - cell system has feedback programming processes going well beyond the threshold of conscious awareness.



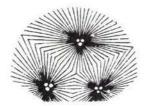
The nature of vision and the light which permits it to take place must be dependent on consciousness which is non-physical. Yet it is also dependent on processes which are chemical and electrical. The decay of energies of light such as cosmic rays in the human biological absorption of energy for the production of consciousness may indeed involve the weak interactions, even though they play little role in the chemical and electrical production of psychic electricity. The gravitational forces being much weaker still play even lesser roles in the production of visual bio-psychic phenomena, although in astrological terms they are said to condition the emotional and mental fields which organize the physical body's perceptual mechanisms.

IDENTIFICATION.

The complex process by which the mind identifies with the external world is described in a series of 24 tapes on "Rumf Roomph Yoga" on which students are working to produce books. The purpose here is to set out some framework for understanding the biological and psychic transfer of energy. If you are looking at a red object, you will see photons reflected in secondary radiation from the object which are absorbed by the retina causing a particular train of nerve impulses to be sent to the brain. As a result of complex processes of identification, the conscious person will experience the color red as a sensation. The conscious sensation of red cannot be clearly identified internally as being identical with any particular wavelength of photon energy. Internally it does not produce any perception of a mechanical quantity such as velocity or frequency of vibration. Brain cells

automatically differentiate the signals crossing the neuronic synapse and recognize the color red without any conscious effort. An animal has similar recognition of nerve impulses from the biological viewpoint. In fact, many animals, such as the rat, guinea pig or dog, have even more developed senses of smell, taste and hearing than does man.

Yet there are still scientists who persist in saying consciousness does not exist and our society accepts much of the present theory as fact, that the mind is bounded and limited by the physical limitations of the brain, that our human mind functions one-to-one with sensory brain processes. This theory however is not supported by any data or experiment which proves this definition of mind, nor is there the slightest proof that what we call "consciousness" does not exist. Yet the unscientific declarations of the materialists are emphatically taught and believed as facts with even more enthusiasm and utter self-righteousness than those of any religionists in the whole of history. This self-righteous falsity is not confined to Marxists who believe it to be scientific, but to a considerable majority of our scientific intellectual university professors. Therefore to write this book at all is to be swimming against the mainstream of so-called scientific opinion. The concepts which follow therefore are written with full knowledge of the arguments against them, all of which have been examined by the author for their intellectual integrity and found sadly lacking.



Physical entities, whether atoms or brains, manifest through very few modes of interaction with the rest of the physical world and are presently understood only in terms of quantitive measurements or physical equations which assign numbers to certain kinds of operations in the physical world. The science of Supersensonics uses numbers to indicate the presence or absence of an entity or its wave-field in just as valid a measurement in proportional terms as the current physics uses in exact terms. However, the

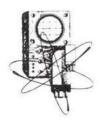
knowledge gained is on another level of intelligence, in another domain of consciousness which is not to be identified with the data-processing of the brain.

What man has so far called "consciousness" has been the display of normal behavior, movement and physical outward manifestations of life activity. Yet a functioning machine that performs operations is not so regarded, because such a system is not judged to be aware of its own sensations, feelings and functioning as a self-regarding entity. Whether consciousness is part of the physical world or not is of no concern to our Supersensonic investigation because such a question depends entirely upon our definition and assumptions about the term "physical world". What we "see" therefore, either physically or in its larger sense of awareness, will depend on how much we let nature decide what is physical or not physical, instead of projecting our own human limits and ignorance onto nature.



In order to understand what follows we must first decide how we can measure consciousness. How does our consciousness modify the measurements when we "see" them or read them? There are four ways of approach; let us number each of our considerations as follows:

- 1. Measure it with present physical measures and sophisticated devices, feedback machines, etc.
- Prove its existence through description, theory, analogy, analysis, or interrogation of another entity.
- 3. Bring about a direct conscious perception of the existence of another conscious entity.
- 4. Measure it with nature's own proportional bounds and limits included in the objects themselves and the subjective processes of "seeing" and "sensing" by Supersensonics.

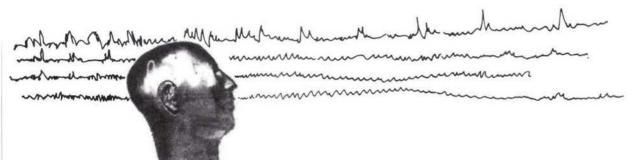


Consideration Number 1.



If consciousness is measurable by physical equations at all, that is, if it is scientifically considered to be a physically real quantity, then by our own definition of "physical world" it should be theoretically measurable. Measurability is fundamental to all physics and the difficulties of measuring certain phenomena have caused the birth of Einstein's Relativity and Quantum Mechanics. Relativity has only partly solved the fundamental problem which Einstein encountered in classical physics, and, as Einstein himself said, only raised larger universal problems in a much bigger universe. The physical theory of Relativity is confined to understanding velocity and time but does not investigate the psychological relationship between space and time nor the psychic relationship of light (color) and time. * Therefore we must go much deeper into our whole method of validating knowledge and into the mechanism of perception and "seeing" itself. It is not merely a question of directly or indirectly measuring physically real quantities, but also determination of the limitations of their measurability by the methods used to determine their physical reality. All the present methods of science for determination of physical processes are merely space-time localized operations. They do not include the observer nor the total environment in which he is an essential part. As a result, physical measurements can only be used to establish the probable behavior of an assembly of particles in a narrow space-time configuration. Consciousness is obviously not a group of particles, even if our human behavior by analogy is humorously similar to the nuclear reactions of particles under attack from some external force.

^{*} See "Nuclear Evolution" by Christopher Hills, published 1968. Available from University of the Trees, P.O. Box 644, Boulder Creek, California 95006.

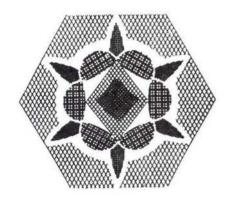


Even if we do associate "consciousness" with a collection of particles in the neuro-physiological states of the brain, we must see that it comes back to identification with those states as being the physical reality. Hence method Number 1 is an invalid approach to measuring consciousness.

Consideration Number 2.

The second attempt is to create a theory and derive from it some general experimental proofs. Can we interrogate another consciousness in order to establish that it really exists in something other than ourself? To conclude that "the other" is conscious merely because he has energy, moves around, displays some outward appearance of conscious behavior, is not justified, because not only animals do this but also machines. We cannot determine merely by speculation or description of its external movements that "consciousness" is present. Otherwise our scientific minds would attribute consciousness to whirling galaxies and other moving natural systems in addition to the movement of energy and firing of neurons in brains.

Even if we take the storage of artificial intelligence in a computer and reduce consciousness to logical operations and then interrogate it, the reply to the question "do you have consciousness?" will be a set of carefully defined words which are themselves defined in terms of external events. The various answers it is capable of giving will also depend on the level of understanding and enlightenment of the programmer as to the nature of consciousness itself. For an ignorant person the computer may appear to be enlightened if its replies indicate it has a higher level of intelligence – having been programmed by an enlightened person who anticipates not only the obvious questions, but the next state beyond the present conscious level of the interrogator.



Whatever the computer says, it cannot convey to the interrogator that it possesses consciousness or even the ordinary consciousness of logical order without making a dogmatic statement which at the end of its train of logical operations, has already been completely determined. This means all coordinates and limits have been accounted for and there is no further level of the computed system remaining which can be called "consciousness".

Consideration Number 3.



The third consideration in the measuring of a conscious entity is the "self" problem studied for thousands of years by Raja yogis and the transcendental mystics. How to achieve Super penetration of the other system we call an intelligent conscious entity and experience it directly as oneself? Who sees what? How do we enter the brain of another individual or experience the intelligence of a computer by linking the presence of that consciousness directly to our own perception? Unfortunately, few people are prepared to undertake the discipline of perfecting consciousness itself by yogic techniques in order to achieve direct perception of reality.* To most scientists there is a total lack of knowledge in this area which prevents them from resolving this question. This does not mean the knowledge is not available, only that the present field of scientific enquiry is very narrow and that scientists generally are ignorant of the work of thousands of years of efforts to understand this problem of the validation of knowledge.

The author's 3-year course in direct enlightenment deals fully with the self-discipline needed to achieve true knowledge.

Available from University of the Trees, P.O. Box 644, Boulder Creek, California 95006.



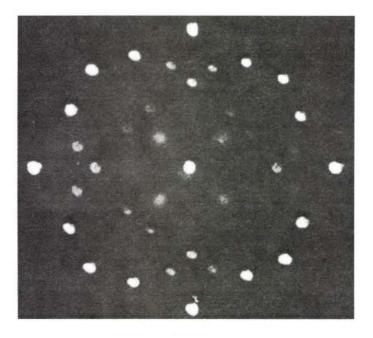
My own paper entitled "Yogic Methods of Knowing", given at the World Conference on Scientific Yoga in 1970, was only one attempt among the 800 yogis and 50 western scientists present to validate knowledge of an enormous field of which most westerners are entirely ignorant.

If I were to pass judgement on the general ability of the human race to understand this third consideration, I would say that it will be a long time in the future of human history before such a vast re-orientation of individual consciousness permits our social life to transcend the present ideas of ego-centric consciousness, because the earth and its populations seem headed for one of its darkest ages where the Truth is twisted and violent selfrighteousness becomes the dictator of most of human life. I would hope to be proved wrong and see a sudden flip-over of these concepts of man's individuality through some small change of attitude. We could wish that it will be applied by science and amplified somewhat like our cybernetic revolution and its computers. However, these small changes of consciousness are not only difficult to perceive, but difficult to achieve. The cosmic intelligence works in strange ways so I must not judge or limit man, but instead give some positive techniques by which we can detect small changes in consciousness of ourselves and others. In this Volume III we are concerned with the detection, by Supersensonic means, of changes in the "consciousness fields" which allow us to directly experience changes in the consciousness of another individual entity. Whether that entity is human or an insentient system like an atom, our methods must be able to measure the intelligent self-awareness or degree of consciousness in another system. Whether that intelligence is artificial, as in the information stored in a computer, or natural as in the universe itself viewed as a vast computer, will not make any difference to our Supersensonic way of learning to "see" the external universe all over again through a different slit in the veil which covers reality.



A NEW EXAMPLE NEEDED.

An example of such a small change in consciousness in the mind and not merely in man's thoughts can be found in an area of study which has been taken for granted for centuries, namely our total ignorance of the mechanics of "seeing". At the end of this chapter we deal with the illusions of present day optics in order to show that the apparent world we believe is so real, is indeed a phantom effigy. Our ignorance of how we measure with our eyes is typical of all the other senses which produce similar phantoms in our consciousness. Yet because the external world appears to be real, even a small change in the consciousnes of an individual making an external measurement will be a difficult adjustment in spite of being faced with fresh new insights. This adjustment is even more difficult when the change must come within a researcher or an individual making a measurement of another brain or intelligent system existing on the next level of consciousness. Any change in such a higher mind or attitudes in consciousness, will always produce in some way an equivalent change in the physical brain activity of the consciousness doing the measuring. But can the measurer understand these internal changes; whether they arise from looking at wiggly lines on a chart recorder or not? Such changes in brain activity will happen, whether the consciousness doing the measuring is present on the next level or not, but the results will be always limited by the consciousness which is making sense of these sensory signals in terms of its own levels of intelligence. Everything is "true" from the viewpoint from which it is seen or spoken; therefore what is needed are geometrical measurements which will give the same result for everybody; we could cite as an example taking a sextant angle of the sun's diameter.





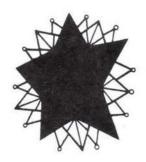
Such an angle does not depend solely on the optical mechanical nature of each eye, because the physical construction of each material eye acting as a lens is slightly different. What is needed is to discover "laws of seeing" which go beyond the physical-chemical process of the receptors, so that humans will realize that light, colors and images caused by radiation are strictly cerebral entities.

All visual stimuli are reactions which are subjective and exist only within the brain of the receiver. Quantitive measurements depend on the presence of something called "consciousness" whether they are made by machines or not. Hence we shall conclude this chapter with detailed considerations of the role of consciousness in perceiving rays of light and in our "seeing" and measuring of the external world. First we must clarify our view of some scientific notions in order to proceed further.



Consideration Number 4.

The evidence from modern physics suggests that consciousness is a non-physical entity or quantity. The concepts of non-physical quantities is certainly not strange to the world of physics and there are many examples where axioms and mathematical constructs have been used in the process of deduction in order to arrive at scientific "Truth". These non-physical entities have been used to deduce the reality of physical systems which in many cases have been unprovable but have allowed science to control events through useful postulates which are purely "mental" in character.

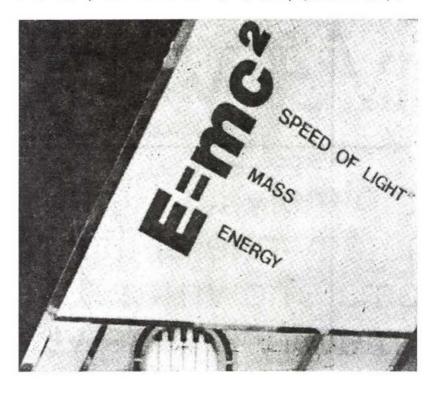


Einstein's comment on Newton's use of such an axiom as "every action has an equal and opposite reaction" is that it is an untestable notion, because we do not have a laboratory big enough, nor do we have mathematics nor measuring devices accurate enough to test whether this is true for the entire universe. There is some evidence for the black holes in space where this axiom may not hold up as Truth, but this does not prevent us from using it as being true at this local level of experience in this part of the universe.

In physics there are also concepts of virtual particles and virtual images of patterns which have no real existence in strictly physical terms. There is no way of showing whether or not these virtual realities have a real physical existence and yet they can be accurately measured by our consciousness. The whole question of unmaterialized energy in potential fields can be thought of as not being physically real, even though they can be quantified but not measured. Although we can deduce them as mathematical entities in our mind and consciousness, there is no way of performing any act of measurement that proves their actual existence.



The remaining chapters of this series of volumes are devoted to the detecting of boundaries which exist around and in entities which are, like ourselves, physically present within the gravitational flux and the electro-magnetic fields, and therefore re-radiate light. The ability of human consciousness to detect these field boundaries in nature and sense these entities through non-physical methods of knowing and then check them against existing physical knowledge can bring about a vast change. Consideration Number 4 will enable the Supersensonics operator to determine the relationship between consciousness and physical reality.





PART 2

LIGHT and CONSCIOUSNESS

PART II

PRELUDE

LIGHT & THE PHILOSOPHY OF SCIENCE.

In order to understand phenomena a student must first understand the observer of the phenomena. The methods of validating know-ledge and their spectacular results in modern science have become highly sophisticated and stylized. Like some musical developments that first begin as a pure expression of thought and feeling and then become highly fashionable and eventually reach a zenith of perfection, science has reached a point where we must seriously look at its fundamentals.



One of the disappointing aspects of science is the few scientists who understand how our perception works. The mental tools we use to validate it and even reason itself, have evolved into our present acceptance of certain basic assumptions which are alleged to be unchallengeable scientific Truths.

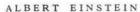
One of these assumptions is the velocity of light in a vacuum and its earth-time measurement in seconds. Another is the whole concept of measuring to get comparisons without investigating the subjective and objective relationships of the observer. Another is the inability of physical scientists to regard thought energy as they do invisible light. Light is just as mysterious and unknown and unquantized until it meets and comes to rest in an object or receptor. Another is the mistaken belief that we actually experience "light" as a physical and tangible energy when in fact what we see as light is as intangible as any other electromagnetic radiation. What we call "light" as the experience of effulgence is purely a psychological function of our senses. It is confused in science with the radiation we cannot see and feel and sense. That experience of "light" which we sense and see and measure as brightness or lux is the activation of our internal light consciousness. The research a yogi does in consciousness is the contemplation of the internal light of awareness and it has little to do with religion. Although devotion and adoration of light

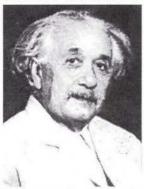
may become the ultimate spiritual goal, it has little to do with the personalities of swamis or scientists. The creative originator of the most elegant theories of matter can be a swami and a yogi, just as the scientific inventors of mathematics and quadratic equations were also yogis and seers.

It is my belief that those who can peer deeply into the heart of matter and discover the secrets of nature will eventually find God waiting there to receive them. That God for me is consciousness – pure and refined of all its ego-centric concepts of space and time. Einstein was such a man who sought to objectify that superior spirit who reveals himself in the slight details we are able to perceive with our frail and feeble minds. The fact that he failed to so objectify, brought him towards the presence of a superior reasoning power and to the later understanding of science as a subjective method of obtaining Truth. This later development of his thought is a long way from his brilliant earlier work on relativity which had so molded the mathematical operations of the scientific method.

Quantum physics which took the study of nature into the microcosm, in the same way that Einstein took physics into the macrocosm, admits to the impossibility of ever directly experiencing objectively the nature of matter and radiation, but mathematical operations lose contact with any reality and lead the subjective observer into a barren universe of humanistic limitations and logic where God - (Pure Consciousness) becomes totally unnecessary.

The purpose of Part II is to achieve a synthesis between the objective and subjective modes of knowing in a discovery of the nature of light. The light of consciousness and the light of the radiating universe combine in that experience of both psychic and sensory perception, which we call the observer.





His theories brought revolutionary advances to physics.

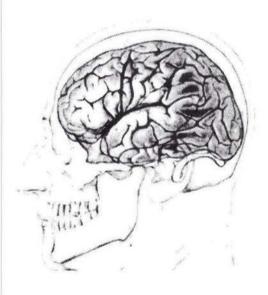


To the author "light" as an external radiation phenomenon is the same identical thing as the internal light of consciousness which perceives it. Such a statement may smack of religious dogma, but my belief in this one postulate is that it comprises the one commandment in which all other religious and scientific sentiments are to be validated in both the subjective and objective modes of perception. If the student can keep this commandment, pure and unsullied by any personal opinions or ego-centric thoughts, the result is certain enlightenment. Whether we use mathematics to prove it or merely contemplate its deepest significance, we must inevitably come to the direct experience of sages and yogis who could only describe it by allegory and analogy.

Man has gone a long way from the understanding of such a simple statement and his phosphoresence of the mind is more of a block and a hindrance to the <u>direct experience of light radiation</u> as consciousness. Therefore I have set out in this Part II the progress of man's long journey through the wilderness of the mind and its so-called scientific validations of reality. I see no conflict in the results of science with the methods and instrumentation described in Part III and in most cases there is validation from a totally different angle of view.

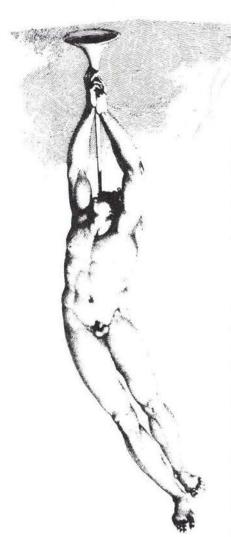
It is without doubt an impossible task to shake the fundamental pillars of the scientific edifice as Einstein did, without the help of those who see the implications and who set out to validate them experimentally. Einstein himself validated nothing and was not even interested in direct experimental proof, although he designed many thought experiments for others to perform. Such a man who could peer into the depths of space without going outside his own door, using a pencil and the back of an old envelope as tools, shook up the entrenched views of several hundred years of science and invalidated one of his own heroes, Newton.

He himself now suffers the same fate at the hands of quantum physics, a discipline which is rooted in the one commandment - the Principle of indeterminacy, a statistical approach which has now become the dominant philosophy in many fields of science including physics, electronics and chemistry. The models used by quantum physics have had to rely even more on speculative mathematical theories than did Einstein. Because Einstein felt that the universe was already determined and quantum physics believes its own articles of faith that it is indeterminable, the gulf between them has widened and polarized the attitudes of scientists all over the planet.



Although the edifice of thought and the operations which spring from its concepts which we call "science" has become even more formidable than in Einstein's time, it is my belief that it is still possible for consciousness to roam the many worlds of this universe unrestricted by human limitations created by human ignorance. Einstein held the view that the whole intelligent universe in which man has been set as an observer was only apparently unpredictable and indeterminate; that such brilliant formulations as Quantum Theory are the product of human ignorance and that eventually man's mind would discover the secrets of nature to reveal an inherent predictability to all events and to uncover predetermined patterns of energy in nature.

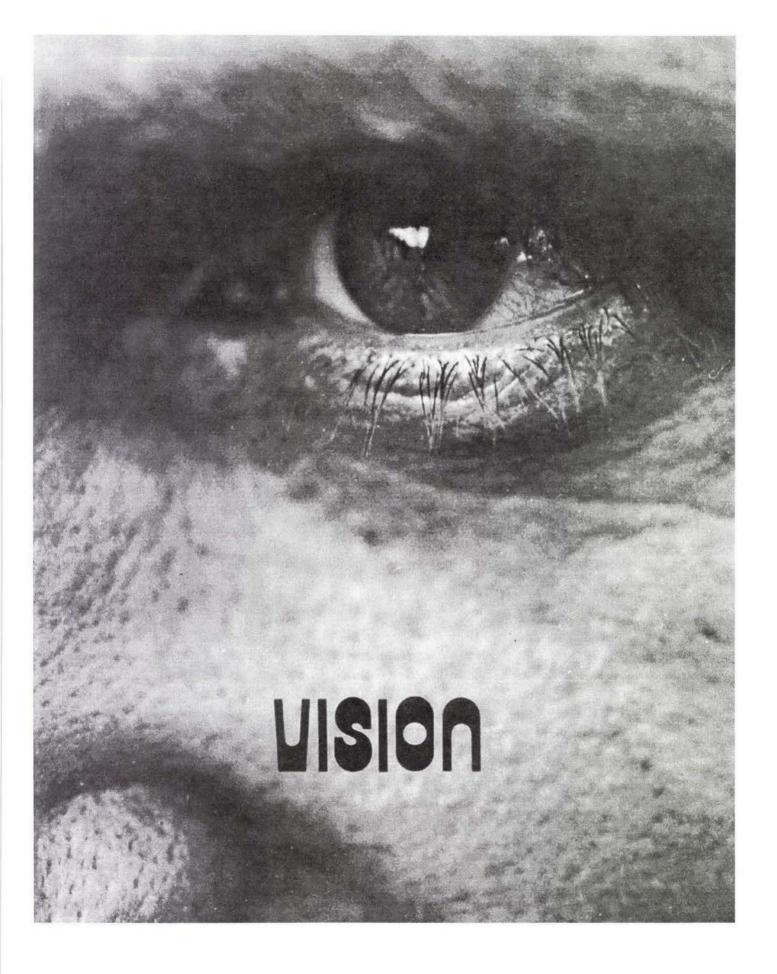
The purpose of Supersensonics is to provide the non-mathematical tools to enable any human being to roam the universe and ask any intelligent question from the Supreme intelligence and get an answer that can be validated either by scientific method or in one's own meditation room without going beyond your own door. Whether you use these tools to prove the <u>deterministic</u> aspects of vast fields of energy and discover their eternal timeless configurations or whether you use the Supersensonic detectors to probe the <u>indeterminate</u> nature of mathematical representations of atoms, is of no consequence to the author of these works. This is frankly not where it's at.



It is certainly possible to solve all these metaphysical riddles by asking the superior intelligence in nature what it is doing and how does it perform its myriad acts in the cosmic circus. But the ultimate purpose of Supersensonics is to become a master of consciousness and to realize that however incredibly sensitive our tools become, they will never be greater than their users.

"What a piece of work is Man" said the poet Shakespeare. To open up the universe of man and his biological god-given tool of the human body and all its psychic centers, including the mind of man with all the limitations it places on consciousness, is the purpose of Part III. But to understand the relevance and application of our mental tools and how we misuse them is the purpose of Part II.

Between the use and misuse of consciousness lies the sorry story of man on this planet. It is a story summed up in the allegory of the Bible in Genesis verse 11 depicting the Tower of Babel. There are some who see a bright future for man and some who are depressed and full of despair at the depths of man's ignorance of himself. Every tool given to man so far, including the sharpness of his own mind, has eventually been used against himself. It would be idealistic to think that man will suddenly behave any differently with the tools of Supersensonics. In our personal consciousness we have been given free will and choice to go to the left or to the right or even to stagnate. The author maintains a philosophy that whatever way man goes, whether by total destruction or by allowing the utmost cruelty and ruthlessness for millions of innocent people, the ignorance of man, which causes this suffering and misuse of consciousness, is only a limbo state. This blind and confused state precedes the reality of the ancient and eternal ONE who is ultimately revealed in the quality of pure consciousness and light in every man.



14*

THE NEW OPTICS.

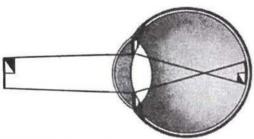


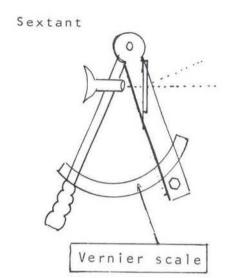
Fig. 30 The lens system of a nearsighted eye has high refractive power; it bends rays together easily. Therefore, the diverging rays from a near-by object are correctly focused on the retina, and the result is a clear image. Notice that this image is upside down; to the brain, however, it is right side up.

The complex example of how we see objects and experience "light" which we shall use to illustrate the problem of perception (in Consideration Number 3) is deduced from the work of Vasco Ronchi who was referred to me by Professor Occhalini in 1962 when I was in Florence. However, I put off going to the National Institute of Optics in Arcetri because the time there was taken up with another friend, Professor Roberto Assagioli who was interested in my use of the divining faculty to determine the hidden psychological states and thresholds of consciousness by Supersensonic methods. When I returned to my home in the mountains of Jamaica, I found a paper waiting for me called, "Do we see what we really see?" by Vasco Ronchi. This sparked off in me a new insight into the profound implications of a psychological law of consciousness which was at work in our physical measurements with the eye and with our instruments.

The fact that our eye makes psychological adjustments to angles which normally can only be measured by instruments made a deep impression. After all the sun was visually about the same size in the sky as the moon, yet we knew it was thousands of times bigger. Mountains and light houses grew smaller as we increased our distance away from them yet we could use inverse square laws to calculate their height or distance. It was remarkable that people with slightly differently constructed eyes could all get the same results with an instrument. It seemed so obvious that we never looked into this psychic expansion and contraction of physical objects.

[★] Chapters 14 to 17 concerning the science of vision may be skipped by those not interested in mathematical or scientific validation as offered by Prof. Vasco Ronchi.

Fig. (130)

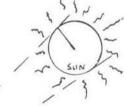


Angle subtended

Earth

by sun's diameter

I had been trained in astronomy and navigation and as an officer during World War II had to take a sextant angle of the sun everyday at noon as a check of our latitude and longitude. Several people would join me in taking this "sight" at precisely the same second as the sun reached its zenith. We would all check our vernier scales to make sure we had the same exact angle between the sun's lower limb and the horizon. There was never more than a second of arc difference which could be accounted for by instrumental error. We all observed the same contraction in the sun's diameter in order to calculate its center. Since astronomical navigation uses oblique spherical trigonometry to calculate from the center of the sun to the center of the earth the semi-diameter of the sun is an important optical measurement.



Sun's semi diameter from earth's center

The science of optics has always had the task of studying light, colors, images. Without any doubt these three terms indicate the most extremely variable concepts and are in the exact sciences the most elusive of physical and psychic entities. For hundreds of years very little progress was made until the scientific community realized that it was difficult to draw general conclusions while working with such uncontrollable elements as light, color and images. These three elements are still today very little understood by physics or psychology.

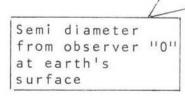
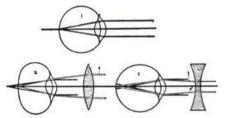


Fig. (131)





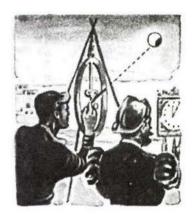
Fig. (132)



Normal and Abnormal Vision

 Normal eye, with rays of light converging at focal point on retina; 2. Hypermetropic eye, with rays converging behind retina; 3. Myopic eye, with rays converging in front of retina; 4. Rays of light corrected by proper lens; 5. Biconvex glass; 6. Biconcave glass.

Fig. (133)



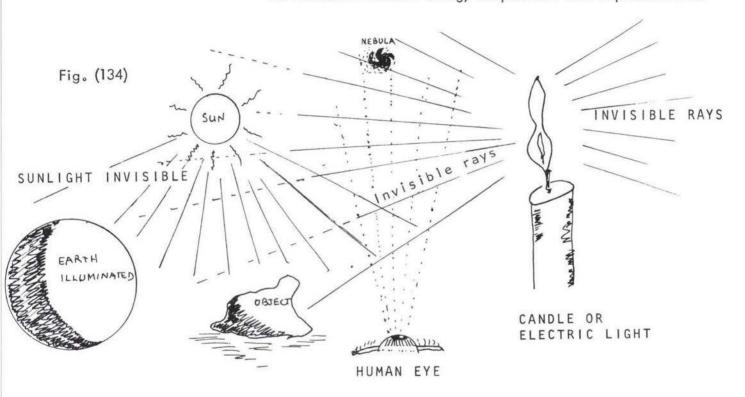


Early this century the study of optics was altered radically when the physio-psychological process was eliminated from physics and a working hypothesis substituted in its place. This hypothesis of the telemetric triangle, by which all vision is explained today, renounced, in practice, the study of the real phenomenon of vision with all its physical-biological-psychological complexity. By using a mathematical representation we have formed a convenient body of knowledge but we should recognize that the images studied in this way are not the true images but merely conventional ones which are not seen in reality at all, as we shall see later.

Exactly the same method has been adopted for the study of light. Instead of measuring the light actually seen by an observer, an ideal eye has been mathematically introduced as an onlooker of all physical measurements, constant and perfect and without psychological variables, to which all photon measurements are referred as a standard. Here again, Ronchi states, people renounced the study of the true phenomenon and replaced it with a convention.

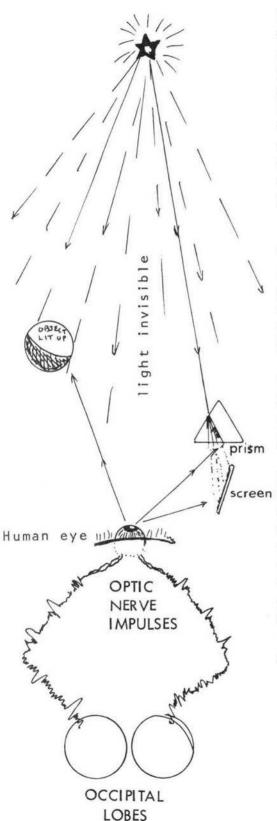
Owing to the capricious and variable nature of the observer's eye people renounced the study of color as a real phenomenon and introduced conventional standards, color charts and systems, and then referred all measurements to specific frequencies of the color spectrum without asking how the spectrum arises in consciousness and what are the real processes of optical recognition.

In this way a conventional optics has been built up and this body of knowledge is considered as a physical exact science. Conventional optics has proved useful and most of the most wonderful discoveries of science owe their origin to the spectrum and the conventional concepts of light. Vasco Ronchi is the only physicist I know who I have found prepared to discuss the implications of physical concepts which do not conform to reality, and who, while giving all credit to the great researchers, insists from a practical point of view, that the continuing of illusions and ambiguities do not favor progress. A more realistic approach is therefore needed to clarify the nature of luminous phenomena and replace the existing conventions with less mathematical and more realistic representations of what actually happens. The following is my attempt in a few pages to sum up the example of Vasco Ronchi's approach to optics so that we can go on to make some deductions of our own which have far-reaching implications for the subtle fields of energy we perceive with Supersensonics.



The first step is to disabuse our cultural notions which traditions have infiltrated into our reality. The first step is to rid ourselves of the habit of talking about light as if it were visible at all. What we mean is "radiation", the energy radiating through real space in the external universe which on contact with matter becomes light or lux, and then becomes what we call visible light. Here again I go even further than Ronchi and say that even visible light is not visible. Only the irradiated matter is visible when it is lit up, but the light which travels from electric lamp to the object to make it visible, or from the sun through the sky is as invisible as your consciousness is. You can test this out by trying to see any light passing.

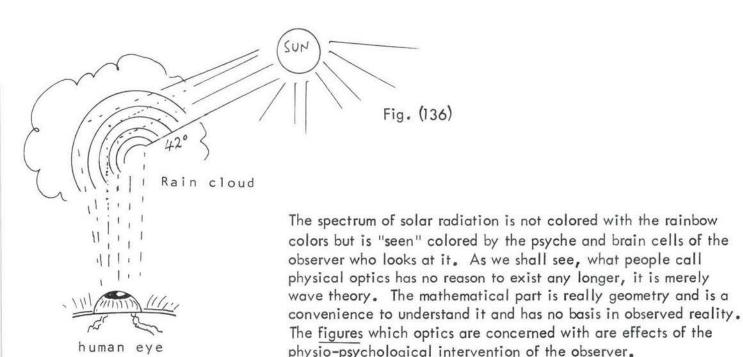
Fig. (135)



It must be explained that there is a psychic light called lux and an external light or radiation called a lumen for which scientists use the same term light. Up to now no one has expressed the reasons why we have the illusory conviction of regarding the psychic internal experience of lux as the same as radiation. To look at a star and regard it as a luminous point is a general expression which is right, but to be more precise, that which is seen is a psychical effigy. The point is not luminous, it is a radiation source, its rays having no color, so being perfectly transparent yet capable of stimulating the human eye and creating the experience of luminosity within the brain.

The lack of terms to specify these conditions in our western languages indicates the conceptual misunderstanding which dominates our thinking about these concepts. The ancient sages, who used Supersensonic methods of knowing, did not make this error and coined the word Akasha for radiation in space and Kasha for what we call the visible manifested light.

What Ronchi says about vision applies equally to all stimuli, including sound, which impinge on our senses and enter into consciousness which makes sense of them. These stimuli are effigies which exist only in an apparent world and arrive more or less deformed by our psyche from what we call the real world of physical entities. In order to discuss them we shall have to resort screen to schematic representations of a mathematical nature, either numerical or algebraic or geometrical. These representations are clearly not the real objects of sensation, nor are they equal to them because the representations are simple and schematic, while the objects themselves are very complicated. This becomes very important when we teach pupils that refraction and dispersion of light are optical phenomena. They are phenomena common to all wave-field propagations and become optical only when one looks by eye at the figure projected through a dispersive medium onto a screen such as a solar spectrum.



ERRONEOUS CONCEPTS
OF THE EYE.

Fig. (136)

Source

Visible

Photoelectric

Today the human eye is regarded as a detector almost identical to the sensitized emulsions of photography and the activity of photoelectric cells. The agent capable of stimulating the eye, such as radiating electro-magnetic waves called light, is of the same nature which acts on the other detectors. All previous research of the nature of light processed by the eye regards all radiations and all wavelengths as a physical study which science now calls the physics of radiation. Yet the physiological and psychological processes which turn this invisible radiation into something visible and luminous are omitted from study.

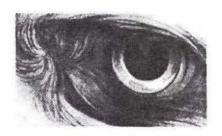
Students should avoid the use of the words "visible radiation" because in fact no radiation has ever been seen by anybody. It has often been imagined, represented by geometrical rays and forms, or thought of as waves or photons, but all radiations, including optical radiations, are colorless and invisible. What makes them visible is the operations in consciousness which go on inside the head where the "optical radiations" are recognized as light or luminous. For those radiations which do not stimulate the human eye beyond the infrared and ultraviolet, no proper name has been invented; we can use the term "non-optical radiations".



DEFINITIONS.



DOG'S EYE



EAGLE'S EYE

Optics is the science which studies the radiations capable of stimulating the sensory detector of the human eye and leads to the study of luminous and colored light which have a psychic reality.

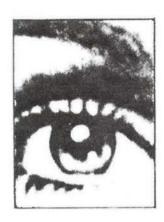
Photography is the science which studies the detection of radiation by means of sensitized emulsions and has nothing to do with optics. Only the figures and reflected light from the photograph itself are rays which have to do with optics. Here it can be said that photography and what is recorded on film is not exactly what is projected by our geometrical representations in the mind. It is also not representative of reality as it is experienced, as we shall see.

Photoelectricity is the phenomena of a science which studies the detection of radiation by means of photoelectric cells and devices which yield electronic results and has nothing to do with optics.

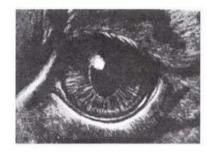
<u>Radiational Paraphysics</u> is the science which uses Supersensonic methods of detection of field forces which modify the visual field by psychic means and is therefore part of the new optics.

The field of <u>Photometry</u> was born out of the work of those who believed that light was a <u>physical phenomenon</u> and as such measurable by physical methods and instrumentation. How can it be possible to measure light if this is a psychic entity belonging to the internal world of the observer? Who would ever try to measure the internal light experienced in dreams? Yet our experience of radiation as light is just as psychic as any dream, even if we disagree through ignorance of the process.





THE PROCESS OF SEEING.



It would be thought by most people today that the photometric quantities on which the present nomenclature is based, i.e. quanta in ergs or joules, luminous flux in lumens, intensity in watts, luminance and illumination power would have something to do with the human eye. All these quantities are measured by photometers which consist of photoelectric cells connected to galvanic ampmeters. The human eye does not come into play at all in these measurements but at the end of the operations one always speaks of "light". Do we measure light without intervention of the human eye or do we measure invisible radiation? These quantitive measurements are conceived around the ideal average eye response to radiations of different wavelenaths and established by international convention. This would be alright if the visibility curves truly represented the response of the eye to the radiation stimulus. Unfortunately it is only an international convention and represents an ideal eye of constant characteristics which clearly does not exist in nature. One must realize that each eye behaves in a different way even in a single person. There is also a substantial change due to age so that a 50 year old person may have a sensitivity to light of only one-third of his sensitivity at 20-years old. A number of other factors such as pathology, nutrition, tiredness, etc. are very important to our sensitivity and most people differ in their adaptability to luminosity changes.

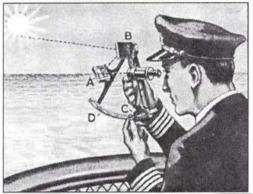
FOX'S EYE



Hence photometry is clearly not a psychic but a physical quantity we are measuring, which has little to do with how we actually see light. Let us now outline the actual process to determine what "seeing" "light" through the eye really means.

HOW WE SENSE THE EXTERNAL WORLD.

"SHOOTING THE SUN"



Here the navigator measures the height of the sun with a sextant. He sights on the horizon through the unsilvered half of the mirror A. Then he moves arm C until the upper mirror B, attached to C, throws an image of the sun on the silvered half of A. The pointer on arm C shows the altitude of the sun on the scale D.

Fig. (137)

Let us assume there is something called external that is physical, objective and independent of the observer; whether we believe in it or not need not concern the development of the discussion. The physical world is merely called external since it is external with respect to the observer. Each observer is considered as Self or "I" contained in a body which is an assemblage of atoms, molecules cells and organs. Within this mysterious assembly is the central nervous system and its connection to the senses of touch, taste, smell, hearing and sight. The study of physiology reveals the way in which the "I" or Self acquires the knowledge of the external world. The ancient sages have studied its mechanisms for millenia and in spite of modern science the exact behaviour is not yet fully known by science.

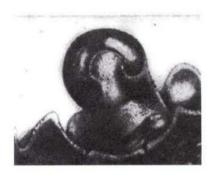
As a consequence of stimulation the sense organ is modified in such a way that pulses are sent along the nerves to the brain. Here the pulses are received in certain areas of the cortex and carefully analyzed and processed. Thus the physiological phenomenon becomes a psychological phenomenon. Each aspect of our physical activity involves a psychical component. To overlook this in our measurements is to assume a false unscientific attitude leading to incomplete results and faulty knowledge.

THE APPARENT WORLD.

The psyche uses the neural pulses conveyed by the nerves which connect the sense organs to the brain, to build up an apparent world. All the spikes which we see on our measuring chart recordings of neural propagation along the nerves, indicating the intensity of the stimulus, are of the same nature irrespective of the nerve or organ sending the message. From the qualitative viewpoint they look alike and differ from one another only quantitatively in number and frequency. It must be emphasized



that spikes conveyed along an <u>accoustic</u> nerve which connects the ear to the brain cortex are identical to those pulses conveyed along the <u>optic</u> nerve which connects the eye to the cortex. Each spike recorded along one nerve is identical to a spike along another nerve. Although they may differ in number of spikes per second and in their propagation times, the spike trains of a stimulus up to their reaching the brain cortex are physically identical.

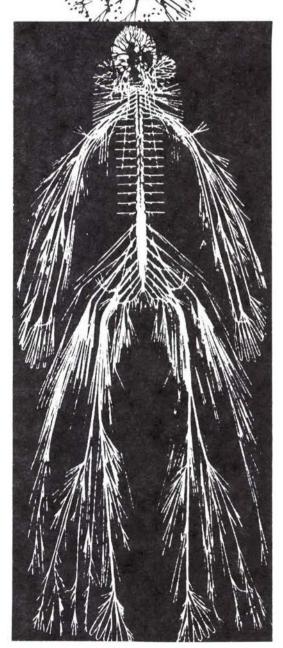


CRAB'S EYE

It is at this point that the process becomes strange, complex, and as yet unravelled by science. It is at this point that the phenomena of Supersensonics, radiesthesia, dowsing, divining and so-called extrasensory phenomena are no more mysterious than physical sensations because the psyche must then discriminate the spike trains coming from the different inputs and utilize them in order to get any picture of the so-called external objective physical world. To achieve this end result the psyche must represent them. In other words, psychical representations must be built up. The process described so far is all common knowledge among physiologists and can be gleaned from any textbook but Professor Ronchi goes on to prove that the whole apparent world is made up of such representations.

The process which was examined by Supersensonic methods by ancient sages and Mayan Indians and Egyptian initiates was well known in the East if not completely documented in the Western literature. It was of basic importance to life in the spiritual disciplines to become very aware of the phantoms produced by the worldly senses. Christ refers to it many times and uses many different analogies in referring to the Kingdom of Reality as not being of this world. The whole Adam and Eve allegory is an outline of the process by which the "Tree of Knowledge", the nervous system, tempts us to accept sensory knowledge as real when all it does is present comparisons. Comparative knowledge





THE TREE OF HNOWLEDGE

AND

THE TREE OF LIFE

being dualistic and not direct perception, was called knowledge of Good and Evil. Whereas the "Tree of Life", which made one immortal, was possible through the direct perception faculties of the nerve dendrites, brain pathways and trunkways of the neocortex. Up to now science has not been able to determine the functions of the neo-cortex and says that a person can even have a lobotomy and not impair the physical functions and sensory mechanisms of normal perception. The consciousness which uses this complex network of nerves could almost be said to live in a tree with all its many branches extending out like an antenna. The image that the brain might be the root of the tree and the nerve trunkways of the body the branches, was the origin of many ancient allegories not only from the Garden of Eden but also many other cultures. The Gita, written many hundreds of years ago before Christ, in allegorical form, describes the "Tree of Life" as being upside down and bathed in cosmic forces. If we look at our own nervous system and the brain as a root system sucking in nourishment of "prana" or life-force into an energy system, we begin to see that the experience we call ordinary waking "consciousness" is merely the imaginative psychic formulation of concepts and does not effectively lead to reality at all.

The nervous system or the "Tree of Knowledge" which grows on the roots of mental structures in the brain is only capable of picking up those gross sensory signals which are within the conceptual limitations of the mind. If we expand the mind and our mental openness then the sensory network is accordingly more perceptive of subtle signals previously hidden from consciousness. We become aware that our nervous system is only as limited as our consciousness is and that much of what we consider "real" and tangible is merely our faculty for comparison of one thing against another. We are convinced this is "hot" only because we have some relative idea of what is "cold", whereas semantically they are both meaningless concepts from a "truth" point of view.

Sages were aware that all comparative knowledge of Self or of the external environment was built up of what Ronchi calls "representations". Let us take up his argument further before we describe his main point.

THE PROBLEM OF KNOWLEDGE.

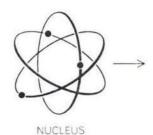


The paper, "Yogic Methods of Knowing," which can be obtained from the publisher, goes much deeper into those methods the Sanskrit seers used to validate knowledge. The present scientific method stands almost puny and ignorant beside their insights into the semantic reactions and the foibles of human illusory perception. It is too complex to be reproduced here so we will include it as part of Volume 4 of this series. However, Professor Ronchi describes the present scientific knowledge of the sensory mechanisms which we abbreviate as follows:

"Informations obtained in different ways are transmitted through different paths and are represented in different ways. Those conveyed through the neural path connected to the mouth are represented as flavors; those originating from the nose are represented as odors; those originating from the ears and arriving to the brain through the acoustic nerves are represented as sounds and noise. The information which reaches the psyche through the optic nerves is represented as luminous and colored patterns.

Flavors, odors, sound, noise, luminous and colored patterns as well as other entities, like warmth, cold, tickle and so on, contribute to the formation of the apparent world, which is essentially psychical, subjective, internal to the observer, and partly, even if not wholly, hard to be put in objective terms. Thus, the apparent world is an ensemble of psychic representations . . .

In addition to the above examined psychical representations of sensory origin, there are other more abstract psychical representations: namely, the mathematical ones. Concepts such as point, line, surface, volume are abstractions, which have been arrived at after centuries of study, and which lead to applications of vital importance, both in two- and three-dimensional geometry. The same can be said for the numbers, and for much more abstract entities, like the elements upon which algebra is based.

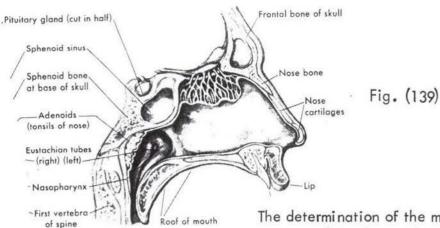


Now, our intellectual life, even at its lower stages, makes use of a great deal of mathematical representations. Any very small object is usually called a point. In other words, those people who adopt this term, refuse to define exactly the real object, and replace it instead with a mathematical representation, which is clearly far from being correct: the mathematical point is dimensionless, while any real object, no matter how small it is, has three dimensions. . . In addition, we can recall that, customarily, in textbooks for elementary school, the waveless surface of a lake is quoted as the typical example of an ideal plane, by missing the fact that, in the simplest situation, this surface is a portion of a sphere, or of an ellipsoid or even of a more complicated surface.



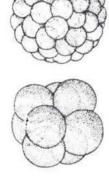
Substituting geometrical or analytical formulae for real bodies is a very useful method, or rather, we should say unavoidable. . . Amongst other things, no perfect thing exists on the earth. Consequently, no true geometrical figures exist. When one passes from mathematical representations to practical, experimental realizations, he is forced to introduce a new element of basic importance: the tolerance, that is the range within which deviations of the real object from its ideal mathematical representation are allowed.

Mathematical representations are schematic, simple and, for these reasons indeed, extremely useful. Because of their simplicity, our mind may elaborate them and draw some conclusions. If these are not confirmed by the experiments, one is led to suspecting that the mathematical representation was too schematic and that it is necessary to make it more complex to improve it, in order to render it similar to reality. Now, the fact that a mathematical representation is only a model which may be improved, gives evidence of the fact that it is not true: true things are just as they are and cannot be improved. . .

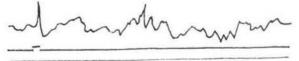


The determination of the mechanism through which each sense organ sends to the psyche the information concerning the real world represents an old problem. . . As far as taste and smell are concerned, we will limit ourselves to emphasizing that flavors and odors are quite subjective. . .

According to the modern knowledge of the structure of matter (or, more precisely, according to the representation of matter worked out by physicists today), we have that it consists of elementary particles, of few different types, each particle of a different type being equal to any other of the same type. The various bodies differ from one another since they correspond to different aggregations, but nothing must be added, in order to attain a given flavor or odor. Thus, flavors and odors do not exist objectively in the bodies.



Different aggregations of protons or electrons react differently with the substances contained within the mouth or within the nose. Thus, different trains of spikes are transmitted through the nerves which connect the taste papillas to the brain, and those which connect olfactory papillas to the brain. But still nothing exists which might be labeled as flavor or odor: there are only different trains of spikes along the nerves, and the spikes on the lingual nerve are of the same nature as those through the olfactory nerve.



Electroretinogram

Fig. (140)

. . . In addition, at the psychical central site, various different trains transmitted through the nerves of the mouth are analyzed, and represented with different flavors, according to their structure, that is the composition of the trains themselves. In this way, the sensation of sweet, bitter, salty etc. originates. The same occurs for trains of spikes transmitted through the nerves of the nose. It is practically impossible to describe to another individual how a sweet flavor is, etc. The representation he does is internal and it is impossible (or better, up to date at least it has not been possible)

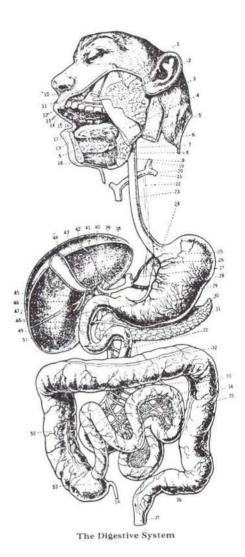


Fig. (141)

to externalize it. The only way which allows to let the others know what one means when he says "sweet" is to let them taste a substance which he judges as sweet, but, in principle, the psychical representation of various individuals are not necessarily identical. In general, they are not, since the representations are influenced by the previous history: experience, adaptation, body conditions (e.g. hunger), inheritance, race and several other factors which surely differ from individual to individual...

In addition, we like to note that flavor is felt within the mouth, in the very spot where there is the tasted substance. This fact, so obvious per se, leads to considering another very important aspect of the psychical representation: the localization. As said above, all representations are made by the psyche, but none of them is sensed within the psyche. Truly speaking, the place where the psyche is has not yet been determined. Perhaps, we are not far from truth when assuming that it is located within the brain and, for the sake of brevity, we will assume that this is the case. By psychic mechanism, representations are localized, that is, placed in some places, where we think by some reason, that there is the position of material responsible for the representation.

In the case of taste, since the material is in the mouth, flavor is localized within the mouth, and, more precisely, just in that part of the mouth where we know, on the basis of information transmitted by touch, that the material actually is. These topics allow us to understand a little more intimately the psychical elaboration which subserves the perception of apparent world."



1. Nucleus; 2. Dendron or dendrite; 3. Neurofibrils; 4. Chromatophile granules; 5. Nucleolus; 6. Axon; 7. Gemmules; 8. Axon hillock (by which the axon rises from cell body). The dendrons and axons may be very long.

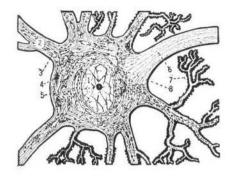


Fig. (142)



Professor Ronchi goes on to treat the complex reception of odors and sound waves in the same way, concluding that the "noise" actually heard and its "localization" is purely a psychical representation. He claims all the other sense organs cause the same "hidden hypothesis" to be made by every person, when receiving the waves or oscillations, i.e. that everybody hears the object sounding the same way, or feeling the same way with touch, or tasting, and that objects are "seen" the same way. This "hidden hypothesis" is, by the fact that is is hidden from the conscious mind, at once transformed into a firm belief, that is, into Truth. After having accepted this Truth, one soon asserts that the "sound" heard is a physical phenomenon and independent of self and that it is specifically localized where the vibrating body is which emitted it. Even the construction of language is based on this illusory hypothesis. Let us quote directly and abbreviate to get quickly to his analysis of vision:



"It is our opinion that if the hidden hypothesis had not led to the conviction that the sound is an objective and external phenomenon, nobody would assert that 'the bell is sounding', but he would say, 'The bell vibrates and I perceive a sound.' At least, he would simply say, 'I hear a sounding bell.'

On this respect we can say that several quarrels would be avoided if, instead of asserting, as often is done, 'You said this', one said, more accurately: 'I hear you saying this.' This appears as a shade of meaning, but the difference between the two statements is enormous.

This topic is very important, mainly in relation to what will be said in the following, so that it seems worthwhile insisting on some points.

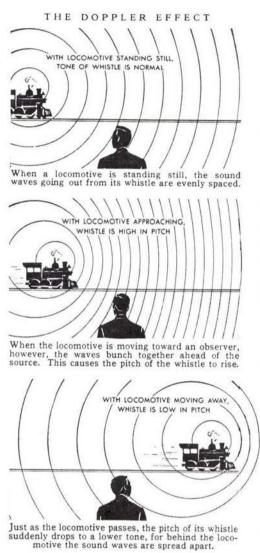
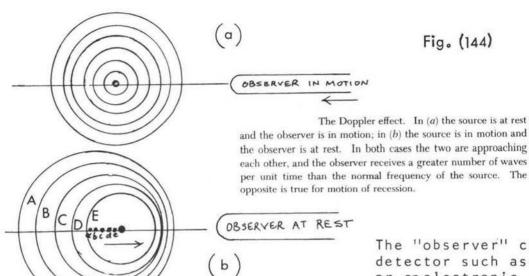


Fig. (143)

Let us consider first the so-called Doppler effect. It is known that if a source of waves, while vibrating, approaches to the observer, an increase in the frequency of the received waves occurs. Viceversa, a decrease occurs when the source goes away from the subject. Accordingly, the information which attains the observer's psyche is different in the two cases. The psyche takes it into account by representing them with sounds of different pitch. More precisely, the sound is of higher pitch when the distance decreases, and is lower when the distance increases. If the source-to-subject distance had remained constant, the tone of the sound would have been intermediate between the above said two ones. However, the source vibrates always in the same manner, in all these cases. But since the signals delivered by the source to the surrounding medium reach the ears in different ways, they are represented as different sounds. Thus, if two even though supposedly identical, immobile observers stand a few hundred meters apart, while a whistling train is running from one to the other, the whistle emitted by the train seems more acute to the observer towards whom the train is going, and deeper to the other observer, while people who travel on the train perceive a sound of intermediate tone.

Now, can one say that the sound was emitted by the train?
Which sound, among the above said three ones? He who insisted in considering the sound as an objective entity emitted by the source, would be faced with a puzzle rather difficult to be solved."

Now the explanation can be simple and elementary if one considers the sound heard as a psychical representation on the part of the observer but it becomes an unreal theoretical exercise if one assumes the sound is emitted by the object. The way the Doppler effect is explained in physics is that the velocity of the waves travelling through the medium affects the frequency of



The "observer" can be any kind of detector such as an ear or an eye, or an electronic device such as a microphone or antenna. In (b) wavefronts A B C D E were emitted when source was at a b c d e respectively.

vibration. When source and observer are in relative motion, the received frequency differs from the true frequency. Regardless of whether the object that moves is the source or whether it is the observer that is moving, or both, the result is that the received frequency is greater than the true one for relative approach and less for relative recession. For example, if the horn of an approaching car is sounding the pitch drops abruptly as the car passes the observer.

However, whether it is the medium that is so affected or the velocity of the compressional waves which is affected cannot be detected because the theory of relativity denies the possibility of determining the "absolute" motion of a bodily object. The contradiction disappears when we realize in our minds mathematically and schematically that the Doppler effect equations were "deduced" on the assumption that there is a material medium such as the air to which all motions can be referred. For light and other electromagnetic vibrations which we use for "seeing", however, there is no such frame of reference. The Michelson-Morley experiments to discover the existence of an "ether" are supposed to have proved that there is no such medium which acts as a carrier for light waves. In the equations for Doppler effects for light velocity in the theory of Relativity, only the relative velocity of the source and observer enters the problem, not the medium. The Doppler effect has been used in different mediums to measure differences in electromagnetic waves emitted by certain kinds of atoms embedded in crystals. Therefore physicists would argue that it is physical and not a psychic representation, since it creates effects by resonance with other crystals which can be measured.

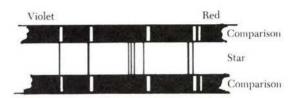
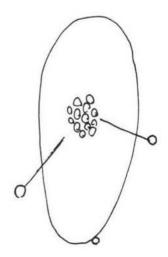
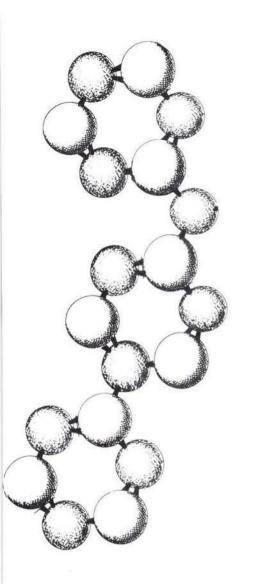


FIGURE (145) Doppler shift of stellar spectrum lines.

It is a fact that the Doppler effect works in a medium and the frequencies of the medium are added to or subtracted from, by the specific localization of the observer in respect to the source of oscillations. Although in Einstein's theory there is no medium called "Ether" required to propagate light waves, he regards electromagnetic waves as merely carriers or wave guides for photons. Einstein uses the Doppler effect to explain the shift in the wavelengths of light radiation coming from receding or approaching galaxies. Professor Ronchi is saying radiation is one thing and what we experience as the spectrum of light is another. In the same way he is saying that the observer is the one that localizes the sound by a psychic representation. In exactly the same way it is logic to my perception of light that the observer who experiences the observed red shift in the spectrum of radiation, undergoes some internal fundamental illusion by the psychic representation of light as it passes through the dispersive medium of a prism or diffraction grating.



As the inventor of the Ronchi interferometer, one of the very first uses of diffraction gratings over 50 years ago, and as an authority on testing optical systems, it is essential that we listen carefully and hear carefully and see carefully what he is saying, since the tendency of the mind is to dismiss the obvious with our hidden preconceptions on the nature of our own perceptions. For years 1 have held that light does not travel, has no velocity, and that the Doppler effect is an invalid explanation for light emanating from systems moving away from the observer or approaching the observer. I wrote a 30 page paper on it in 1963 for the Commission for Research into the Creative Faculties of Man, who in turn sent 600 copies of it to leading scientists, professors and universities. I did not get one reply! The danger of unseeing perception is that the mind rejects the simple and obvious by putting together psychic representations which appear plausible, but are as illusive as the actual sensory experience is itself. When the sages say all this

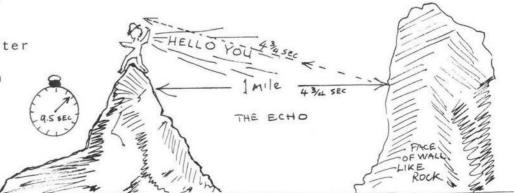


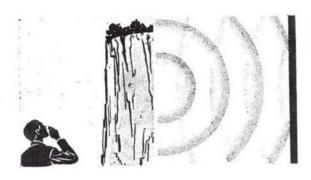
external world that you experience as a concrete physical reality is illusion, we automatically reject this, and yet modern physics has proved this to be so; that we do not have any idea of the real nature of matter through the use of our senses. So let us follow Professor Ronchi carefully with the full attention of our consciousness in order to see "what is" rather than listen to our own mental tapes churning out plausible explanations and making more theoretical representations with our psychic mechanisms. The very understanding of the measurements derived by our proportional means through Supersensonics in the latter part of this series, depends on our seeing clearly that our experience of reality and even the sense of sight has led us to form erroneous representations about consciousness and the universe it inhabits. Therefore let us use Professor Ronchi's investigations as a first base for our own revolutionary understanding of light and its perception in the human mind. Let us use one more accoustical example as an analogy of perception, provided by Ronchi, before we go on to the more tricky and more unbelievable illusion that we actually "experience" external light.

Fig (146)
Every sound is reflected from walls in rooms but when a sound comes back seconds later it has a different orientation. Because the reflected sound is heard long after the original sound, it "sounds" separate from the source.

"Everybody is familiar with the echo. Some elastic waves emitted by a vibrating body (which may even be a vocal cord of the subject) meet a wall and are reflected. They meet an ear following a path other than the straight line joining the source to the ear. The waves carry to the ear information concerning the new direction of propagation. Accordingly the psyche, by creating the corresponding sound, localizes it at a region of the space which differs from that where the body which actually emitted the waves is.

Customarily, one says that the sound is sensed in a point which is the symmetrical of the vibrating body with respect to wall surface.





Sound is echoed from a cliff in much the same way that light is reflected from a mirror. The diagram at the right shows how each sound wave is turned back upon itself as it strikes a flat surface. When they return to the source an echo is heard.

Fig. (147)

He who looks for the place where the sound is localized, without geometrical preconcepts, is often led to assert that it coincides with the wall. This phenomenon may appear unusual to those people who schematize a little bit too much. However, it is satisfactorily explained in terms of a psychological phenomenon of localization of the representations. (Fig. 148)



Fig. (148)

- . . . By now, we will limit ourselves to noting that, when one examines the phenomenon labelled as echo, realizes that a sound exists there where no emitting body is. The psychical mechanism referred to above accounts for it in a very simple way. How can it be explained by he who insists in considering sound as an entity emitted by bodies?
- . . . This may lead only to equivocal, if not wrong, conclusions. This educates young pupils to reasoning in a wrong manner and leads them to missing the distortions which have been introduced in the explanations, in order to attain some conclusions. It leads them to missing some phenomena, like those quoted above, for which it is impossible to consider the sound as something objective, connected to the vibrating source.

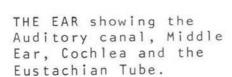




Fig. (149)

The acoustical mechanism includes a physical agent, a physiological process and a psychical conclusion. All this is unquestionable, nowadays, even if there are still some gaps in our knowledge, mainly in the later stage of the chain. It cannot be denied that the conclusion is psychical and it would be wrong to transfer it arbitrarily into the physical section, by missing the physiological-psychological contribution, like is unfortunately done by some scientists nowadays. . .

During the course of past centuries, the truly physical component, that is, the study of the external agent, was highly developed. It was disconnected from the remainder and thus physiological—psychological processes ceased to raise an interest. In order to make this separation complete, however, the subjective component had to be eliminated. Thus, in the field of mechanics, some objective measuring instruments like the dynamometers were set up, and a physical entity, the <u>force</u> was defined in the place of the <u>effort</u>. Then, the physiologists were left to investigate which sensation of effort was experienced by the various subjects when acted upon by certain forces.

Analogously, in the case of heat. Heat and temperature were defined, and calorimeters and thermometers were adopted for measuring these purely physical entities. Again, physiologists have been required to study the relation between heat and temperature on one side, warmth and cold on the other side, as they are experienced by various subjects.



Why has this same procedure not been adopted for acoustics? Effort, warmth, cold, sound, are all psychical entities. Forces, heat, elastic waves are the corresponding physical agents. The philosophical treatment should have been the same for all. But this has not been done. . .

The study of waves, either elastic or of a different nature, is a physical study, which is a part of mechanics or of some other chapter of physics, like, say, electromagnetism. Analogously, the wave detection with the aid of a physical device, either mechanical or thermal or electronic, is a physical process. But the sound is in no way included. One is authorized to start to speak of sound when waves penetrate within the ear. But this involves physiology.

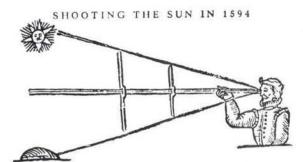
Accordingly, when some elastic waves emitted by a vibrating body are reflected at a wall and then are recorded with the aid of an oscilloscope, no acoustical process is involved. But if a subject receives the waves in his ears, represents them and localizes them towards the reflecting wall, then and only then the phenomenon may be regarded as acoustical. But this is also a physiological-psychological phenomenon. . "

THE EXPERIENCE OF VISION.

In order to understand his concept more fully, Ronchi gives the background of the problem:



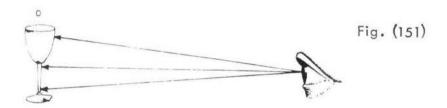
"Ancient philosophers believed that, to 'see' an object, a communication, a 'contact' between object and eye was needed. Therefore, the modalities of this 'contact' were sought for. The idea, which had long life and wide diffusion, was typically mathematical. It started from considerations of perspective, which had been the object of careful investigation by famous geometricians, like Euclid, in the Greek-Roman epoch. In fact, optics and perspective were strictly connected with one another for a long time.



This old picture of a cross-staff was taken from 'The Seaman's Secrets', a book by John Davis, printed in 1594. To use the cross-staff, the observer sighted from the base to the tip of the farther crosspiece and adjusted the two crosspieces to line up with the sun and the horizon. He then read the angular height of the sun from a scale marked on the staff.

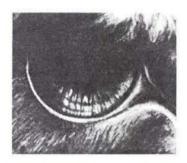
Fig. (150)

"This theory assumed that some rectilinear 'rays' came out from the eyes. They were assumed to be capable of attaining any point of the external world and of informing the eye from which they originated about the shape and color of the explored bodies. This information, conveyed to the psyche, allowed it to 'see' the bodies. These strange rays were called 'visual rays'. The eye emitting them was regarded as a point: the point of view of perspective. (Fig. 151)



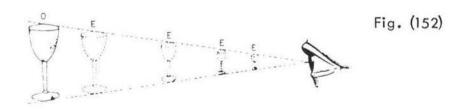
This theory was accepted by mathematicians for fifteen centuries at least. Upon it both "Optics" and "Catoptrics" of Euclid are based, works which are still integrally preserved. Even if they were not written by the famous Euclid, the author of the "Elements", but by a homonym author, they were anyway written during the IV century B.C. On the same theory is based the book "Optics" by Claudius Ptolemy, written in the 2nd century of vulgar era. It is noteworthy that, using this theory, a law of reflection was formulated which does not differ substantially from that accepted today. We may assert that decisive evidence against this theory was found in the XI century, but, in spite of this, it continued to be used by mathematicians for another five centuries as a working tool.

However, already in ancient times, there were some philosophers who refused to accept the hypothesis of visual rays, in particular, Democritus and his school. They believed that the communication between eye and object was mediated through something emitted



SHEEP'S EYE

"by the object toward the eye. In order to account for the perception of so many shapes and colors simultaneously, it was necessarily excluded that this 'something' was an exhalation or motion (as occurred in the case of smell and hearing) devoid of any organization. It was to maintain during the propagation the same order it had at the starting site. In other words, it was suggested that any object emitted at any instant and in any direction very thin integuments, having the same shape and colors as the objects. The properties of these integuments, also called simulacri or eidola (Greek term corresponding to our idol, that is, seen image) were even more strange than those of the visual rays. They had to propagate in all directions, without disturbing one another when crossing those emitted by other objects. Moreover, they had to become smaller and smaller, during their path, without changing shape and color, homotetically, until they entered without difficulty the pupil of an eye, wherever it was, provided it faced the object. Once entered the eye, the integuments had to carry to it the information needed by the psyche to reconstruct shape, colors and location of the object the integuments had left. (Fig.152)



The dispute between the supporters of one theory and those of the other one was debated with heat, in spite of the fact that the believers in the integuments constituted a scanty minority. For each group, it was easy to criticize the arguments adduced by the other one, but it was very difficult to give sensible demonstrations. In order to give an idea of the terms in which the discussion proceeded, we can recall that those who sustained the existence

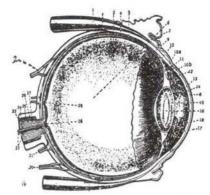


Fig. (153)

Side View of Eye

Side View of Eye

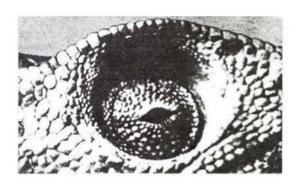
1. Lateral rectus muscle; 2. Vortex vein; 3. Sclerotic coat; 4. Choroid coat; 5. Retina; 6. Vitreous humor; 7. Conjuctiva palpebrarum; 8. Epithelium of cornea; 9. Ora serrata; 10. Ciliary body; 10a. Ciliary muscle; 10b. Circular fibers of ciliary muscle; 11. Canal of Schlemm; 12. Iris (with radial fibers); 13. Iris (sphincter muscle of pupil); 14. Cornea; 15. Aqueous humor; 16. Crystalline lens; 17. Zonule of Zinn, ciliary zonule; 18. Posterior chamber of eye; 19. Medial rectus muscle; 20. Long posterior ciliary artery; 21. Short posterior ciliary artery; 22. Central blood vessels of optic nerve; 23. Optic nerve; 24. Dura mater; 25. Subdural space; 26. Arachnoid coat; 27. Subarachnoid space; 28. Blind spot; 29. Yellow spot.

"of the visual rays wondered how the integuments of a mountain might penetrate within a 2 mm diameter pupil, like that of the eye. Those who supported the existence of the integuments wondered why the visual rays, in the darkness, ceased their exploration, and how it was possible that an eye could emit so long visual rays as to reach, say, the sun, the moon, the stars. The controversy dealt with the finer details of the visual phenomena too, which demonstrates that these phenomena were carefully studied. But now it is better to leave this topic and pass to consider one of the most important steps of the evolution of these ideas.



It occurred in the Middle-East, by the work of a famous Arabian: his name was Ibn-al-Haitham, better known with the vulgarized name of Alhazen. His contributions to the progress of optics are really high. Here we will limit outselves to showing the most important ones, that is, those concerning the theories of vision. First of all, he put in evidence a well-known physiological phenomenon, which had certainly been observed many times before, but without relating it to the mechanism of vision. Precisely, he noticed that if one looks at a very intense source, like the Sun, for some time, and then closes his eyes, he persists in perceiving the figure of the Sun, even for several minutes. This phenomenon, well-known today, is called in modern terminology the persistence of retinal images. The conclusion drawn by Alhazen is the following: the theory of visual rays cannot account for this phenomena, since, when one closes his eyes, no rays are emitted, no exploration of the external world takes place, and consequently, nothing can be seen. The theory of visual rays was thus destroyed. However, destroying has always been easy. The theory continued to be accepted since nobody was able to build up a better one. The great merit of Alhazen consists just in the fact that he indicates the way which brought forth the solution of the problem, even if he did not go along it up to its end. On the other hand, we must keep in mind that the time was not mature enough yet for a complete solution of the problem.

CHAMELION'S EYE



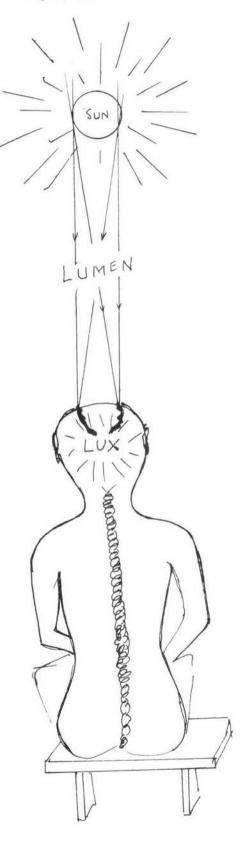
"Thus one had to accept the theory of the integuments, but it was necessary to eliminate the big difficulty constituted by the fact that the integuments had to decrease in size during their path, until they became so small as to enter the pupils of the eyes. Alhazen indicated how to avoid this difficulty and his line of thought is still valid, even if slightly modified. He remarked that the integuments of a star, which is so small, do not need any contraction along the way to penetrate into an eye. Hence, it is sufficient to divide the object, say a mountain, into a number of very small elements, each one emitting its own small integument along a straight line towards the eye, and penetrates it, wherever it is, without any difficulty.



Accordingly, the hypothesis can be formulated as follows. Each element of a body emits very small integuments in all directions. This can easily be accepted. Alhazen went on, suggesting a model which allowed to explain how all the small elementary integuments emitted by the elements of a body, after penetrating the eye, could preserve their order of succession and reconstruct a figure similar to the body, within the eye. This was a wonderful reasoning which was to bring, through successive improvements, to the concept of the retinal image accepted today. Without devoting here futher attention to Alhazen's work, we will limit ourselves to emphasize that his ideas had but a little and slow influence in the West. One of the handicaps was the difficulty arising from the language (Alhazen wrote in the Arabic language). Another handicap was the scarce communication between the Christian and the Muslim world. • •

Despite this confused situation, there was a general agreement on the idea that, whatever the mechanism was, information arrived to the eye and then to the brain, where the psyche provided to their representation. Accordingly, the seen world, the apparent world was a purely psychical entity.

Fig. (154)

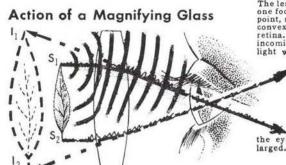




"Another idea took place, mainly by virtue of Alhazen. This is therefore another one of his merits. The problem concerning the nature of light could not be posed at the time when one was dealing with visual rays and integuments. The existence of a fluid or of a motion from the sources to the objects and from the objects to the eyes was not necessarily required. There was no reason, therefore, to speculate about the nature of this fluid. Truly speaking, in Aristotle's theory of vision a brief reference is made to this problem, but in vague terms only, which were no further developed. On the contrary, Alhazen asserted that vision occurred under the action of an external agent, capable of acting on the eye. He based this conviction on two points: first of all, on the persistence of the visual effects produced by very intense sources, secondly, on the fact that sometimes the action of this agent is accompanied by pain (it is easy to believe that a painful sensation is had, in Arabia, looking at the sun with the naked eye). Thus the idea arose of 'something' able to act on the eye. This physical agent was called lumen which is a Latin term, since Latin was the international scientific language of that time. The psychical representation, which is a consequence of the action of the lumen on the eye, was called lux. This distinction proves that the ideas were extremely clear, at that time.

. . . During the course of all these centuries, some valuable mathematicians developed some studies which, nowadays, could be said to be geometrical optics. . . But no theoretical concept capable of further developments was deduced. . .

Also the studies on refraction were pursued. The first experiment on refraction (through the surface of the water contained in a cup) was described in the already recalled book "Catottrica" by Euclid. Also Claudius Ptolemy dealt with it, and arrived at studying even the atmospheric refraction.



The lens is powerless to form an image if the object is less than one focal length away. It cannot bend the light waves from any point, such as S₁ on the leaf, sufficiently to focus them. But the convex lenses of the eye complete the focus at a point on the retina. Thereupon the eye sees the point on the line of the incoming ray at I₁. We can trace the action on the band of light which enters from point S₁.

THE CONVENTIONAL THEORY FOUND IN ALL TEXT BOOKS

the eye sees point S_2 of the leaf at I_2 . Thus the image is enlarged. It is also virtual. It cannot be shown on a screen. It can only be seen by an eye.

Fig (155)

"However, nobody was able to enunciate an acceptable expression of the law of refraction, even in the simplest case of a plane surface. Alhazen too devoted some attention to it, without obtaining, however, any relevant conclusion. . .

The most important fact in the field of optics at that time was the discovery of the spectacle lenses. . . It is interesting to recall that the lenses were shown to the scientists, they examined them and expressed an opinion that nowadays sounds paradoxical and is hard to be believed so that it has been carefully forgotten. They asserted lenses were 'deceiving', in that they let see one thing in the place of another. Thus, their use was not recommendable.

Lenses have not disappeared, because the craftsmen did not mind the verdict of the philosophers, and developed by themselves the manufacture and use of spectacles. . . And since the artisans were illiterate and did not publish papers, and at the same time, scientists refused to pay attention to such deceiving tools as the 'glass lenses', any trace of the inventor was lost, and finding him is hopeless.

The sentence of the scientist against the lenses lasted three centuries. Through this period, from 1280 to 1589, nobody wrote anything about lenses. . .

Ancient philosophers, when studying how one becomes aware of the existence of the external world, attained the conclusion that in no way we may believe in the information provided by sense organs since they may be wrong, like all human things. Apart from the metaphysical consequences deduced from this conclusion, the point we like to emphasize is that scientists who continued to have a certain confidence in the work of the senses, judged them reliable to different degrees, and attempted a sort of classification: touch was considered as the most reliable (however, even touch may deceive, as is shown by the well-known experiment,



SNAIL'S EYE

"according to which, when touching the nose with crossed fingers, one has the sensation of having 'two noses'). Sight was considered as the less reliable sense. This skepticism against sight was surely due to the fact that no adequate explanation was found of the mechanism of vision. •



All the philosophers arrived at the conclusion that one cannot rely upon the sense of sight, if what is <u>seen</u> is not checked by <u>touch</u>.

. . This conclusion, which nowadays is intentionally forgotten even simply as a historical-philosophical phenomenon, had very important consequences both practical and theoretical. It is sufficient to recall that it was regarded as correct by the whole philosophical and scientific world, without exceptions for two thousand years. This meant to paralyze the most rapid and accurate sense human beings have at their disposal for knowing and representing the external world. . .

Kepler regards material bodies as consisting of several points, among which those lying on the surface emit rectilinear rays of unlimited length, until they meet an obstable. He takes into account one of these points: it emits rays in all directions (Fig.156)

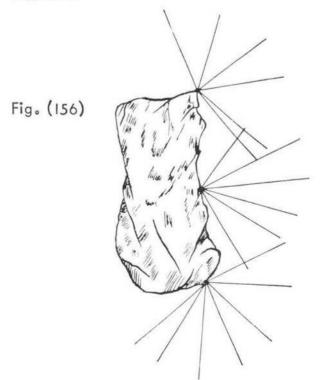


Fig. (157)

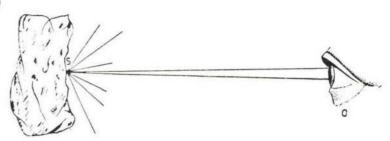
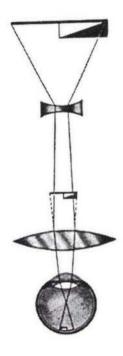


Fig. (158)



"If there is an eye in front of it (Fig. 157) there will enter a cone of rays having that point as vertex and the pupil as basis. The rays are refracted firstly through the cornea and then through the media internal to the eye, thus forming another cone, having its vertex on the retina and the pupil as basis. Kepler attains this basic conclusion by utilizing the approximate law of refraction, according to which the refraction angle is proportional to the incidence angle. He regards this law as valid for angles not larger than 30°. While performing these calculations, Kepler stresses a fact of great importance. He notes that if the incident beam were not limited by the pupil, but were as large as the whole eye-ball, after refraction the rays would not have a point in common, but would envelope a caustic surface. This fact had already been demonstrated by mathematicians before him, in connection with a sphere of water. However, instead of drawing a conclusion analogous to that attained by his predecessors he notes that if the beam is diaphragmed, just in the way operated by an eye pupil, the refracted beam practically concentrates into a single point, which is the cusp of the caustic.

Thus Kepler not only discovered, for the first time, the role played by the pupil as a diaphragm, but also focused the attention on a fact which had to open a new future optics.

In conclusion, Kepler showed that all the rays emitted by a point of the object, after having entered the eye, converge at one point of the retina. Here the stimulation of the sensitive organ occurs and the transmission of the signals to the brain and to the psyche. The psyche now has to represent the received signals.

The diagram shows what happens when you look through the "wrong end" of a pair of field glasses.



COW'S EYE

"The fact that the rays stimulated a tiny portion of the retina indicates that they were emitted by a pointlike source. It follows that the representation must be a figure of extremely small size, that is, a small star. We now know that the rays convey to the eye also information on the quality and the quantity of the energy emitted from the considered point of the object. This allows the psyche to ascribe a luminous intensity and a color to the starlet. Kepler, however, did not mention this. He concentrated his attention on the geometrical aspect of the problem, and this certainly meant a lot.

Once the psyche has ascertained that the representation must be a luminous and colored point it must localize it at the same place where the object lies. The way by which this problem was tackled reveals Kepler's great insight. In order to localize the luminous point at the place of the object the psyche must be able to estimate through the information contained in the stimulus acting on the retina the position of the object-point in space.

Now the direction of the rays which arrive from that point to the eye determines the position (Fig.159)of the excited retinal point. Therefore, the psyche, once informed about this position by the nervous pulses, soon derives the direction of the object-point.

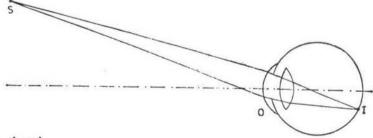
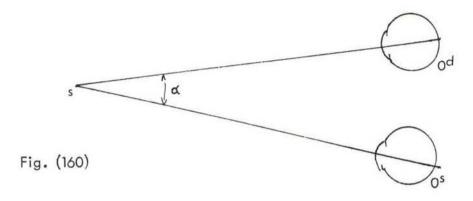


Fig. (159)

"However, the eye-object distance is still to be determined. This is the most difficult task for our psyche.

Kepler points out, first of all, that when we use both our eyes, we rotate them in such a way that the visual axes converge onto the object-point. Thus a real triangulation is carried out, the interpupillary distance serving as basis (Fig.160). Now the psyche, which can evaluate the angle (today called the convergence angle) by using the information arrived via the nerves from the muscles, has at its disposal the necessary means to evaluate the distance of the object-point and to localize there the luminous point.



However, Kepler noted that even when using a single eye we perceive the objects in the same way as when we use two eyes. Accordingly, the psyche must be capable of evaluating the viewing distance of the object-point even on the basis of the information conveyed by a single eye. Since the viewing distance is evaluated through a triangulation, it follows that this operation can be done even by a single eye. Therefore, there must be a triangle available. Kepler found the solution of such a difficult problem in the triangle (Fig. 161) which has as vertex the object-point and as basis the pupil diameter. He calls this distancemeasuring triangle (triangulum distantiae mensorium). In other words, he assumes that the eye is capable of sensing and evaluating the divergence of the rays which constitute the sides of this triangle.

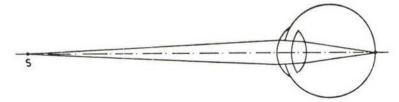
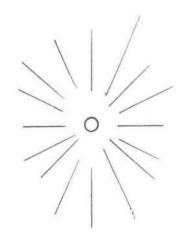


Fig. (161)



"As a summary of his study, Kepler enunciates the following rule: the psyche localizes the luminous point in the vertex of the cone of rays which attain the cornea. Now since, when the psyche has created the luminous point and has localized it, the observer says that 'he sees the object point', the above rule can also be enunciated as follows: the luminous point is seen in the vertex of the cone of rays which reach the cornea.

In the case of a large object, we may repeat point by point what we have said above. In this way, we have on the retina a figure similar to the object. The psyche of the observer, being informed by the signals arriving through the numerous fibers of the optical nerve, reconstructs point by point the external figure and localizes it at the distance and in the direction deduced by the distancemeasuring triangles of the different points. In other words, the figure seen is like the external projection of the figure formed on the retina.



This is, schematically, the key of the mechanism of vision according to Kepler's conception. We are faced with a complex phenomenon, of the type previously described for the other sense organs: a physical agent, a physiological process and a psychological representation at the end of the chain of events, with external localization in front of the eyes. The apparent world, the one which is perceived, with its figures, its brightness, its colors, is therefore a psychical product, is a creation of the observer, is an ensemble of effigies, that is of figures which have not a body but only an appearance.

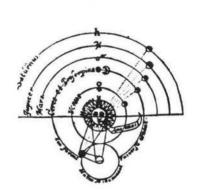
Kepler's three laws of planetary motion were only part of his search for celestial harmonies. This depiction by Carl Nordling is courtesy American Museum of Natural History. "Kepler's contribution does not consist only in having given these ideas (which as general trend may be included among the current ideas of his time and even of previous times). He also began to examine how the psyche, by analyzing the retinal stimulus, may derive the elements and the information necessary to localize its effigies, that is its representations, just in correspondence of the real objects, in such a way that the apparent world did not represent a mere dream, a pure illusion but could fulfill the important vital task for which it had been created: the knowledge of the real world, which has an enormous importance for both the intellectual and material life of human beings.

Nowadays the ideas have gone ahead, but their development substantially followed Kepler's line of thought.

However, the course of events was not very simple: the evolution of the ideas was quite unexpected. The work of Kepler (who has brought also other contributions of basic importance in the field of Optics) was neglected and forgotten in such a way that it is unknown to the majority of the scientists today. Only few know the determinant influence it had on the development of science. Kepler is known as an astronomer, for his laws of the motion of planets. But, in the field of Optics, he is known only for having designed a telescope with converging eyepiece (note that he never even built that telescope).

It is rare to find people who are convinced that the apparent world is a psychical entity and that light, colors and images are psychical entities. Accordingly, it seems worthwhile to discuss a little this point, since the fact that all over the world almost all of the cultured ambient, even the scientific one, has ideas so far from the demonstrable truth, is really astonishing and casts a sinister light on the value of science in general. This phenomenon is actually so big that it cannot pass unnoticed without an adequate comment.





"All the more important that several elementary and frequent observations, at everybody's level, should check completely and clearly demonstrate the statement that the apparent world is a psychical entity, depending on the observer's eye rather than on the surrounding objects. The simplest of these observations can be made by pressing an eye with a finger, in such a way that the eye-ball rotates a little within the orbit: the apparent world splits at once, and one of the two copies rotates concordantly with the rotating eye-ball. Clearly, the objects are not split nor in motion. Thus, everyone should ask the question: what is the second figure, the one which rotates together with the eye?

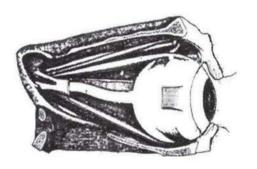


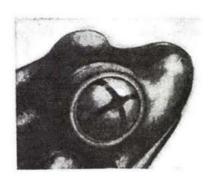
Fig. (162)

Next, if one rotates an eye on a side and the other eye on the other side, both the copies of the apparent world move: each one moves concordantly with the corresponding eye, and nothing remains there where the observer said that he was 'seeing the object', before rotating the eyes.

This phenomenon, so common and so simple, seems to be explained only by considering the external world as an effigy related to the eyes. Indeed, one should rather say that the apparent world which one sees when he uses both eyes, without any pressure on them, is an effigy created by the cooperation of both eyes, and that when this cooperation is somehow altered, each eye creates its own effigy.







"On the other hand, in order to have a demonstration of this point, it is not necessary to produce a diplopia (or splitted vision, as termed by oculists) either by acting mechanically on the eyes, or by ingesting an excessive quantity of alcohol or with other tricks. Even in the ordinary binocular vision, very often, the effigies created on the basis of information which reached the psyche through both eyes are not able to combine together. If one looks at a watch placed on a table at a distance of about 30 cm from the eyes, and at the same time he introduces a pen about midway between the watch and the nose, he cannot see either one pen or one watch, but the cases are two: either a watch is seen between two pens, or a pen between two watches. And still one knows very well that there is only one watch and only one pen.

Why then experiments like this are ignored and people assert that the figures which one sees 'are the objects'?

To answer this question, one could repeat the consideration done in the previous chapter for flavors, odors and sounds. One tacitly assumes that all people see the same figures when faced with the same objects. Then one thinks that these figures are independent of the observer and therefore that they are physical entities. Even if some experiments demonstrate the contrary . . . one forgets about them and does not consider them: the apparent world has become the real world.

This way of thinking has contributed to the teachings in the school system of education where optics is still considered to be a branch of physics.



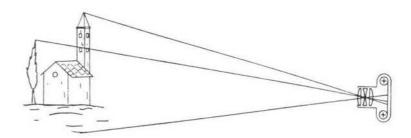
THE DIFFERENCE BETWEEN VISION & PERCEPTION.

"The evolution of the ideas regarding sight has been much more complicated and challenging than that regarding the other sense organs, because the role played by sight in everybody's life is much more important than that played by taste, smell and even by hearing. We will deal with it in detail in the following in particular when we examine the behavior of the eyes when viewing through optical instruments. We will find new and important elements for appreciating and admiring Kepler's work, and for improving our point of view about the mechanism of the sight sense and the confidence we may have in it.

By now, however, it is expedient to insist in examining the mechanism of direct vision, that is of vision in the case where nothing is place between the eye and the object, which may alter in some way the propagation of the rays.

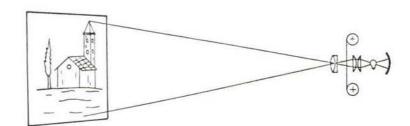
In this connection, for the sake of clarity, let us consider an optical process which is widely adopted nowadays. By means of a lens and of a film, let us take a picture of, say, a church (Fig.163). This is today schematically represented by imagining that some radiation, emitted in an orderly way by the elements of the church, penetrates beyond the lens and is distributed in an orderly way on the radiation-sensitized film. Here the energetic action of radiation on the grains of silver salts takes place, some modifications occur, which after the processes of development and fixing, result in an orderly distribution of opaque silver grains, imbedded in a transparent layer of gelatine.

Fig. (163)

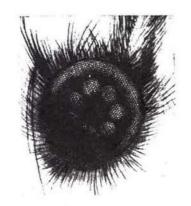


"Now, this picture, after having been transformed into a positive slide, is placed in a projection set and projected onto a screen, possibly even by means of the same lens used for the shot. On the screen one sees a church, with many details similar to those of the original church. But nobody would state that the picture on the screen coincides with the true church (Fig.164).

Fig. (164)



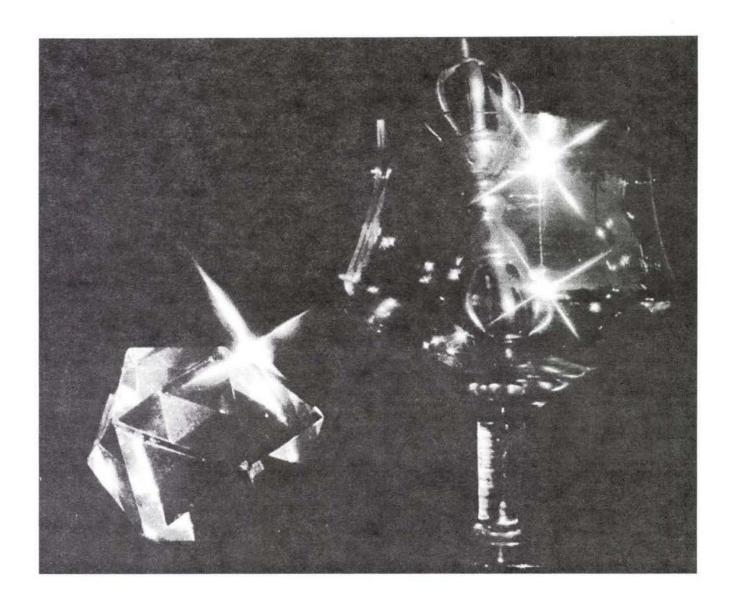
Why, on the contrary, in the case of vision, one states that the figure seen is the object? However, the analogy between the mechanism of the visual process and the above described one of the picture taking and projecting, is very strict.



MOTH'S EYE

But the reason why this parallel has been drawn is not only that it facilitates the understanding of the mechanism of vision by those who hear it for the first time: the analogy goes further, and it seems worthwhile to treat the question in some detail.

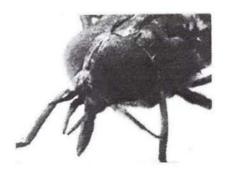
Thus, in the case where the lens is a low-quality one or it is not properly at focus, the image on the film turns out to be blurred. The figure on the screen is blurred too. However, if the image on the film is improved with the aid of some optical or mechanical tools, for instance by narrowing the lens aperture or by adjusting the focus, or by inserting an 'additional lens', also the projected image becomes sharper. It is well known that the same occurs with the eyes: if they are altered, or if the dimensions of the eye-ball are such that no sharp image of the external objects can form on the retina, the observer sees confused figures in place of the object. These figures become sharp as soon as the retinal image is improved by means of additional lenses, that is by means of spectacles.





ORION _ 1500 LIGHT YEARS AWAY FROM EARTH

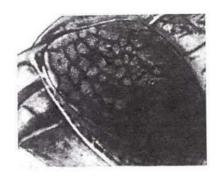
For instance, it may happen that the lens presents some defects, so that the picture of a very far tiny source appears surrounded by 'streaks'. Sometimes, in order to obtain some decorative effects, these 'streaks' are intentionally sought for by placing a suitable tissue or a close net in front of the lens. It is well known that the projection on the screen turns out to be a figure surrounded by several rays. 'Like a star' somebody might say. But this is just the case. The 'rays' which are seen around the stars, in the sky, during a clear night, and which are perceived also around the lamps of outdoor public illumination, when viewed from a distance of a few hundred meters, do not physically exist. They are the external projection of the deterioration of retinal images of the lamps, caused by the small defects or irregularities contained within the eye media of the observer. An optically perfect eye would allow the perception of the star not surrounded by rays.



FLY'S EYE

"It may happen sometimes that the sensitized emulsion presents some defects, for example, there is no emulsion at some places of the film. Therefore no image forms at these points, and the corresponding part of the church is lacking in the projection. The same occurs also for the eyes: if, for some reasons, a so-called scotoma forms on the retina, that is a portion of retina becomes insensitive to optical radiation, the observer sees in his apparent world a dark patch, devoid of any structure.

The defects may be not only in the shot, but also in the projection, either because the projection lamp is not good enough, or because the projection mechanism is not functioning properly. The same occurs also to human beings, but here giving examples is more difficult since the cases are rare and involve psychical rather than physiological anomalies, so that, in general, they are found in psychiatric tests.

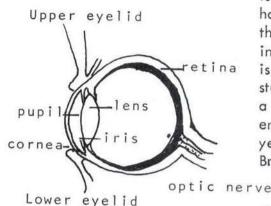


MOTH'S EYE

In any case, both the usual 'dreams' and the more complex 'hallucinations' demonstrate that the psyche can create some luminous and colored effigies and distribute them at different distances. In a dream, this happens without any external stimulus; during the hallucinations, it happens by altering in an unpredictable manner the information received from the external stimuli.

Kepler's theory is a true masterpiece. It will never be appreciated enough, mainly because it presents serious mistakes, which at that time were formidable merits, but then seriously affected the scientific trends in the following years, as will be described below. We start by putting into evidence that its character was prevalently mathematical, that is schematic and





"simplifying. The object body is represented as an ensemble of geometrical points. The radiation emitted from the body is simply represented by the paths, that is, by an ensemble of straight lines, forming stars (in mathematical sense), each star being centered at a point of the surface of the body. The eye is schematized as a spherical ball, at least in the part of interest having homogeneous structure. The fact is not taken into account that within the eye there are fluids with different refractive indices and even a gelatine lens. Note that at that time (that is, in 1604), very little was known about lenses, the only studies of them being those which Giovan Battista Della Porta, a Neapolitan author, had the courage to write in a booklet entitled 'De Refractione'. This book had been published eleven years before (in 1593) and apparently Kepler never saw it. Briefly, one can say that nothing was known about lenses.

The effect on the retina was considered point by point, without taking into account its cellular structure, which was not known yet. This was an ensemble of extremely schematic and simple models, which, just for this reason, were extremely useful for initiating a study, which then had to become more and more complex and is not yet concluded.

HOW OUR CONSCIOUSNESS PERCEIVES DISTANCE.

The point on which it is worthwhile to concentrate our attention now is the distance-measuring (or telemetric) triangle. To have discovered it and to have ascribed to it such an important role was a grand idea. However, the question arises whether that function that is the psychical evaluation of the distance from the objects to the eye, can be performed or not by such a triangle.

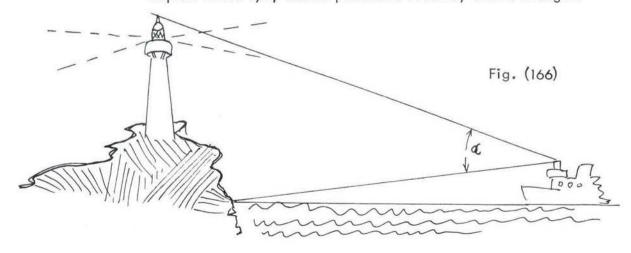




Fig. (167)

The relative size of a pair of hands at 20 and 40 cms from the camera. The angle that is subtended by the nearest is twice as large as that of the furthest. But the linear dimension of the more distant hand is not half the size, as demanded by theory.

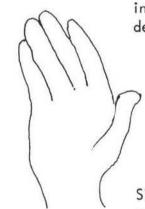


Fig. (168)

angles as small as few seconds of arc, in such working conditions?

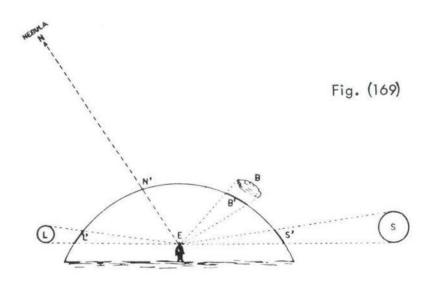
And still, each observer is able to localize the effigies even at distances of several kilometers. Clearly, this cannot occur by virtue of the telemetric triangle.

This point was the matter of many investigations by psychologists, who put in evidence a mechanism for the evaluation of distances by the eye which is much more complicated than that imagined by Kepler, and the question is nowadays still open. . .

The object-to-eye distance may be evaluated with very good accuracy, provided it does not exceed a few meters. When it is of the order of a few tens of meters, the observer experiences a systematic error which increases with increasing distance. Beyond a certain limit, changes in the distance cease to be appreciated, in the sense that the objects lying beyond that limit are all deemed to be at the same distance from the observer.

Since the effigies created by the psyche for representing the external objects are localized where the psyche deems the objects to be placed, one arrives at the conclusion that the effigies coincide with the objects only when the objects are at distances from the eyes which do not exceed a few tens of meters. Beyond this limit, the effigies are localized nearer than the objects. The deviation is greater the farther the objects are from the eye. Finally, at large distances, all the effigies are localized at the same distance from the observer, no matter how large the distance of the objects is or the difference in distance.

"Moon is at about 300,000 km and the Sun at 150,000,000 km. The distances of the planets vary within wide limits, but are always of the order of millions of kilometers. The fixed stars are so far that electromagnetic waves, in spite of their speed of propagation of 300,000 km/sec, need four years to attain the Earth from the nearest one, while they need even many hundreds of centuries for arriving from the other stars, like the extragalactic nebulae. The so-called falling stars are only at a few tens of kilometers from us, since they are due to the destruction of the meteorites in their passage through the Earth atmosphere (Fig. 169).



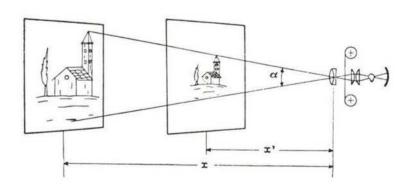
But each observer perceives all on the same surface: that of the vault of heaven. There is no doubt that the figures seen on the vault of heaven are neither the celestial bodies, not the true clouds or the falling stars, but they are only effigies which the observer's psyche created and localizes how and where it can. Since the psyche has at its disposal no clues to sense such large distances, even if so greatly different from one another, the effigies are all localized as far as possible, that is at the distance beyond which it does not possess any information about the situation.

"Many people do not easily accept this line of thought, because they are convinced that they are seeing the true clouds, the true stars, the true Moon and the true Sun.

Pursuing our discussion is expedient to help dismantle this conviction to become more and more familiar with the mechanism of vision.

Let us refer again to the analogy between the mechanism of vision and the mechanism of the projection of the photographic pictures. It is obvious that when the distance between the projection set and the screen is varied, also the size of the projected picture is varied. Thus, if the image is projected by using the same lens used for taking the picture, and the screen is placed at the same distance of the object when the picture was taken, the projected image has the same size as the object, apart of course from the thickness. Since this argument is rather delicate, we will insist on some details, even if they are elementary.

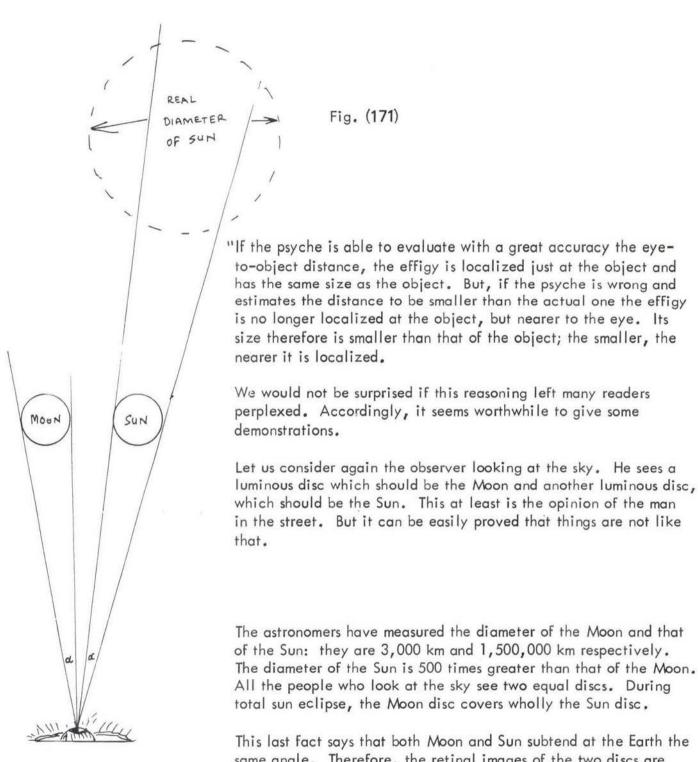
Fig. (170)



The size of the photographic picture (Fig. 170) referred to the focal distance of the lens, determines the angle a formed by the outer rays of the cone subtended at the lens from the image on the screen. Obviously, the farther the screen is, the greater the projected image is: the ratio of a given dimension of the image to the distance x from the lens must be constant, since it gives just the value of the angle a.

HOW DO OBJECTS GET BIGGER IN REALITY WHEN NEARER?

Let us now replace the photographic image by the retinal image and the lens by the optical system of the eye. The image is no longer projected onto a screen, but it can be localized nearer or farther. Its linear dimensions must vary according to the distance at which it is localized.

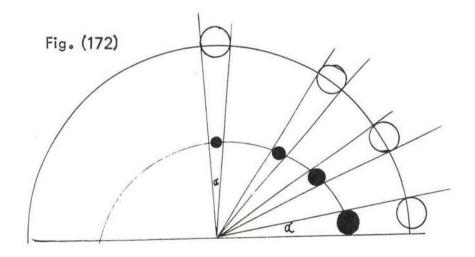


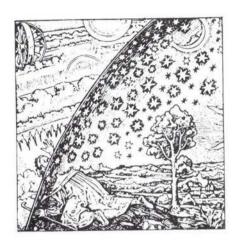
same angle. Therefore, the retinal images of the two discs are equal in each eye. The angle labelled α in Fig.172 is the same for both the celestial bodies. If they were exactly localized, that is if the observer's psyche would measure correctly the distances from two bodies to the eye, the observer would see for the sun a disc 500 times greater and 500 times farther than for the Moon. On the contrary, the two discs are localized at the same distance and therefore they are seen equal to one another.

CHECKING WITH A SEXTANT ANGLE.

"In addition, both solar disc and Moon disc, when they are near the horizon, either just after rise or before set, appear larger (about 2.5 or 3 times) than when they are near the meridian. The attempts to account for this effect on physical grounds have failed. The physical component, if any, gives a very small contribution and of opposite sign of that observed.

On the other hand, if one carries out the measure of the angle a subtended by the two celestial bodies when they are near the horizon, he finds the same value of about 32' as at the meridian. The fact that the two discs are seen larger depends on a localization phenomenon: horizontally, they are estimated farther than vertically, and consequently are seen greater. The phenomenon of the difference in estimating horizontal and vertical distances is well known and proved. It is usually called the flattening of the vault of heaven: the vault of heaven does not appear as a sphere centered at the observer, but rather as a nearly spherical cap, with center much lower than the observer (Fig.172).



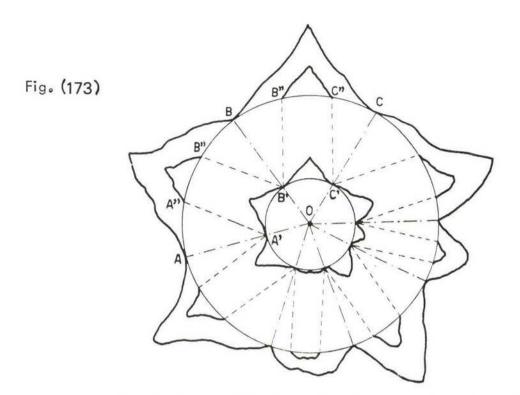


HOW DO OBJECTS GET SMALLER WHEN FARTHER AWAY? "We would like to devote more attention to this point, since it is often matter of discussion amongst people who confide too much in appearances, that is, give exceeding credit to the effigies of the apparent world. However, we prefer to leave the questions concerning the vault of heaven and to examine, even if briefly, what happens within the vault. This vault constitutes the limit of the apparent world, but unavoidably the question arises whether, within the vault, the apparent world coincides with the real world, or not. The answer is obviously negative. The phenomenon of the contraction of the apparent world is a general phenomenon. The contraction is progressive, as may be easily deduced from what was said above about the psychical measurements of distances.

It is usually said that 'far objects are seen small', or also that 'far objects are seen the smaller, the farther they are'.

In this connection, it is interesting to note how we readily get used to meaningless sentences, without feeling that they are wrong. If, when looking at a 2 meter long table, one saw a figure completely similar to the table, this means to create an effigy equal to the table, even as regards size, and to localize it there where the table is, in such a way that, for example, it is possible to put on it some objects or in such a way that if the observer touches it he perceives it with size and position as it is seen.

It is astonishing that this line of thought, which nobody wants to give up when dealing with an object near the observer, causes the table to change radically when the object is far from the observer. In this case, it may be seen smaller or more emphatically it is seen smaller but nevertheless, it is still the same sized object. Clearly at this point there is a compromise, a tacit adaptation having the purpose of conciliating the preconception that the apparent world is the real world, and adopting the fact that the apparent world is smaller than the real world. The latter conclusion may be reached through two different ways independent from one another. One of these starts from the mechanism of vision, as it has been stated in the preceding pages. The other one is completely independent of any theory of vision. Let us start by considering the latter way.



"Let the observer O be located at the center of a wide region, limited by a horizon (Fig. 173) constituted by a mountain range. Clearly, the true horizon is constituted by the true mountains in the sense that its length equals the sum of the lengths of the bases of the mountains. But the observer sees visual images which are smaller than the true mountains. Accordingly, the sum of the bases of these figures cannot close the true horizon. There are only two possible solutions: either the figures are as far from the observer as the true mountains and if this is the case one should see an empty, zone, a gap, between two successive mountain profiles, or the smaller figures can enclose the horizon so that no gap is seen, and therefore the horizon must be smaller than the true one, that is, much nearer to the observer than the true horizon. Since objectively nobody sees any gap between the mountains, the conclusion is that the apparent world is contracted, that is, smaller than the real one.

All this follows necessarily as a consequence of the existence of the vault of heaven. Namely, if a limiting surface exists within which all the apparent world must be enclosed, even if it corresponds to a much greater real world, clearly a progressive contraction must take place, also for the world included within that space limited by the vault of heaven.

REASON & REALITY.



Euclid established principles of geometry more than 2,000 years ago.

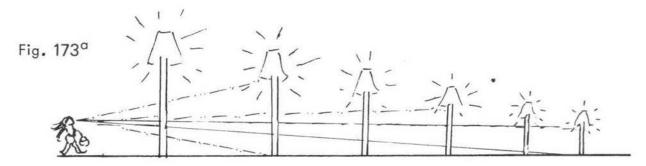
"The preceding reasoning is of a disconcerting simplicity, since it brings us to put the question why it was not done by each one soon after having realized that the seen figures are smaller than the real objects, when the objects are far away. It is interesting to note as already said, how one gets used to not reasoning, up to the point that many people have considered incomprehensible the preceding reasoning. Accordingly, it seems worthwhile to deal with this topic also from another point of view.

As we put in evidence in the case of Fig.170 the size of a projected figure is proportional to the lens-to-screen distance. Now, since the figures we see are the outer projection of the effigies by the psyche, on the basis of the angular size of the retinal images, it follows that they are the smaller, the closer they are projected, and vice versa. Accordingly, the fact that a mountain is seen "small" means simply that the effigy of the mountain has not been projected at the true distance at which the mountain actually is, but at a smaller distance: so many times as it is nearer so is it that number of times proportionally smaller.

Whatever the line of attack may be, the conclusion is always the same. However, it is never the conclusion reached by the man in the street.

COMMON SENSE & UNCOMMON SCIENCE.

If one asks the man in the street: 'why far objects are seen smaller than they are seen when they are near', the answer certainly is that one which has been given for millennia: 'because they are viewed under a smaller angle'. This answer is reported even in the already quoted book"Ottica" by Euclid.



Lamposts in the street grow smaller with the distance away from the eye.





"In other words, it is assumed to be evident that the size of a figure which is seen is proportional to the angle under which it is seen. This fact may be checked by comparing two objects differing in angular size, and seen at the same apparent distance from the observer. So much so that in the common scientific language the two sentences: angular size and apparent size of a given object from a given point of view, are regarded as completely equivalent.

All this reveals the influence of the mathematical procedure upon which the study of perspective was based two thousand years ago. The mathematical scheme prevailed and was transformed into an unquestionable truth. In the following, other examples of this phenomenon will be encountered. Once the mathematical scheme has conquered our mind, even the most obvious observations lose value and efficacy: one stops reasoning.



In fact, the everyday experience proves that the proportionality between the size of the figure which we see and the angle subtended by it at the eye is not necessary. He who looks at a book placed at 50 cm from the eyes, sees it under a certain angle and with a certain size. If the book is brought to a distance of 2 m from the eyes, the angle drops to 1/4 of the preceding value, but the book appears of the same size. If the assumed rule were valid, a four times smaller book ought to be seen: as small as a notebook.

IS THE VISUAL WORLD REAL?

All this ensemble of equivocations and contradictions are soon avoided if a distinction is made between apparent size (namely the linear size of the sides of the figures) and the angular size (that is the angle under which the linear size is seen from the point of view). By making again reference to Fig. (159) the apparent size h

"equals the angular size of multiplied by the distance x at which the localization occurs. Tacitly assuming that the localization distance x is always equal to the distance of the object, brings to its elimination from the computation, but this leads also to a number of absurdities and contradictions. In fact, if the localization occurs at a distance equal to that of the object, wherever it is, the apparent size h is always equal to that of the object, and therefore it is independent of a. On the other hand, if the effigy is localized at a distance x' smaller than x, the apparent size h is smaller than that of the object, but it is proportional to x', not to a.





Let us now recall that when the objects are near the eyes, up to several tens of meters, their distance is well determined, the localization of the corresponding effigies is rather accurate and consequently the apparent size of the effigies is constant and equal to the real size of the objects. When however the objects are at greater distances, the contraction of the apparent world leads us to localizing the effigies nearer than objects and therefore to giving them a smaller apparent size.

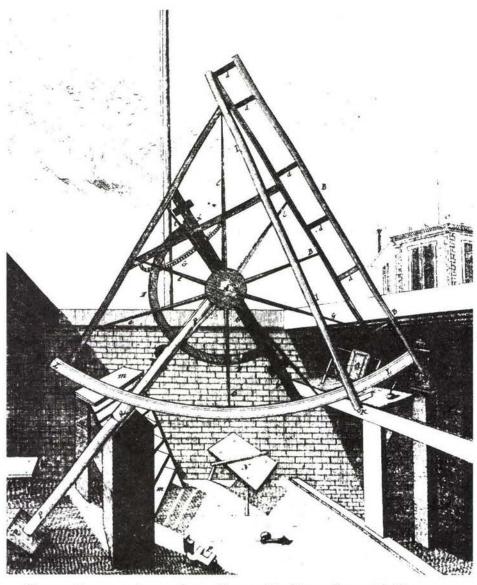
The mathematical rules of the perspective are not confirmed in this procedure. It is well known that the mathematical perspective (which corresponds fairly well to the photographic one) does never correspond to that seen by the eye. This constituted a puzzle for a long time. But the explanation is immediate if one gives up considering the effigies as coincident with the objects and applies rationally the laws of the mechanism of vision.



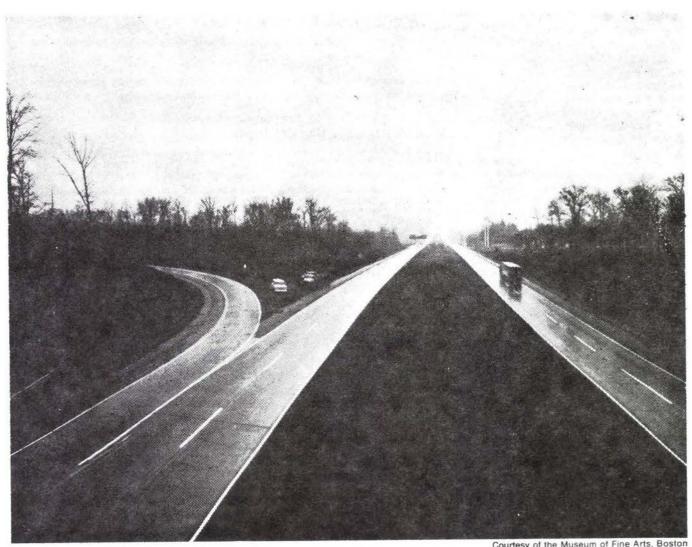




We think that after the preceding considerations and the quoted experimental checks, doubt is no longer allowed on the correspondence between Kepler's theory of the mechanism of vision and everyday experience. By now at least, there is no other theory which allows one to explain visual phenomena so well as Kepler's theory does. Thinking of what we have said above, with the mind free from prejudice or philosophical preconception, one necessarily arrives at the conclusion that it is impossible to account for experimental phenomena in the field of vision without calling into play both the psychical nature of the seen effigies and the wonderful phenomenon of their localization in the apparent space. Building an Optics on basis different from those above discussed is a big error, from both the philosophical and the didactic point of view."

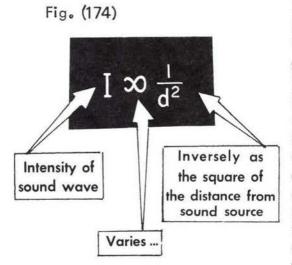


Flamsteed's sextant of seven-foot radius, used by him at Greenwich Observatory for star cataloguing, after an etching by Francis Place.

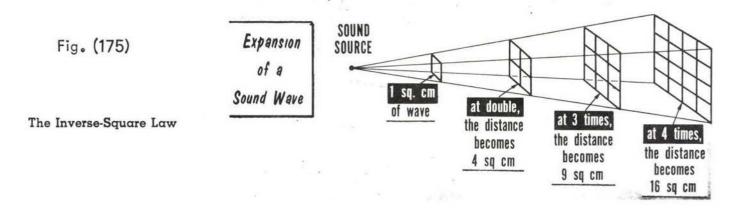


Courtesy of the Museum of Fine Arts, Boston

I have quoted Professor Ronchi extensively because I could not have written or thought it in English any better than he wrote it. It is a difficult realization and almost an insult to our intelligence to think that although we notice mountains apparently shrinking as we walk away, we know that if we take a tape measure they remain the same height. The fact that we base our astronomy and our navigation on the triangle and calculate height as the square of the distance, brings us to Einstein's concept that light actually shrinks. His idea of relativity was born out of the insight gained by looking at a long street full of lamposts shrinking to infinity in the distance through the laws of perspective. We use these laws everyday for calculating the distance of the sun or the distance of a ship from a lighthouse. Einstein maintains that any material object, such as a yardstick, travelling at the velocity of light, would disappear or shrink to a single point. Is there some mysterious connection between the apparent world of the experienced internal light and the outer world of radiation?

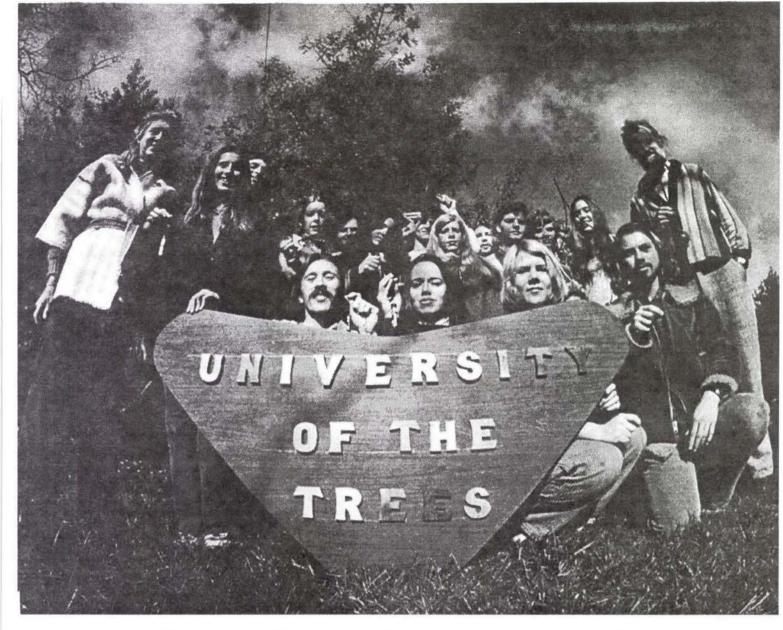


Physical phenomena is said to obey the inverse square law. This is a law of proportion considered inviolable by physicists because it can be applied and proved in so many forms. The force of aravitational attraction between two particles of matter is inversely proportional to the square of the distance between them. Doubling the distance makes the force one-fourth as great, reducing the original distance to one-third increases the force nine times and so on. This law as applied to the movement of electromagnetic waves of light works in the calculation of distances between physical objects on the earth in this localized aravitational flux and the calculations derived from this proportional measurement enable us to go to the moon. Obviously the expansion and contraction of images obey this law since we calculate accurate distances from angles subtended by objects, which get taller or smaller like lighthouses, mountains and other navigational aids. But we know these images are not real and do not correspond with physical reality. Is this law then in conflict with the "seen" images which expand and contract, as consciousness travels to or from, when we know in reality by measurement that the real physical objects remain constant?



Doubling the distance means the area is quadrupled, so the intensity must be divided by four. Multiplying the distance by any number means that the area is increased by the square of that number, which, in turn, means that the intensity must be divided by the square of the number. This fact is known as the *inverse-square law*.

Perhaps in considering these vast implications we can assume that radiation, the <u>external light</u> of the universe, is the same, and has the same properties, as the <u>internal light</u> of the universe - <u>our consciousness</u>. That it works to some proportional laws of which we are unaware. Such is the essence of Supersensonics - the detection of expansion and contraction of fields measured like the circle, proportionally $2\pi R$, or in similar ratios which leads to real knowledge of entities.



A group of the author's students resident at the University of the Trees on a 3-year course in the nature of consciousness. Total commitment does not exclude them from studying any other open systems. At present there are five adjoining houses in the redwood village of Boulder Creek, California. The group is working to acquire a farm in a frost-free climate near the ocean with trees. This nuclear group is forming a new self-governing social system.

A A

This photograph taken with a 16 mm lens demonstrates that perspective seen by a camera is not identical to the visual perspective seen by a human eye. The so-called normal 50 mm lens is mathematically represented as nearest to the normal perception of a receding world. However, in fact, each observer sees the same landscape in his own unique way and there is no such thing as normal perspective or perfect perspective which is a purely rational mental phenomenon without any reality whatsoever. Visual perspective, as measured by photographic reproduction and optical instruments, is a purely subjective, mathematical representation, which depends on the lens of the eye and lens of the camera being absolutely identical in all respects. No two eyes are physically identical in fact, let alone the eyes of two different human beings. Therefore reason can deceive as easily as our sense of vision when it tries to "represent" reality and experience.

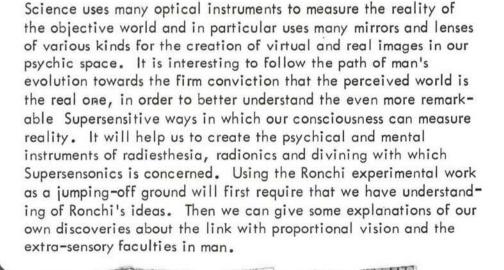
15

PROPORTIONAL VISION.

It is not our intention to duplicate the work of Professor Ronchi in his own great detail or to provide all of the experimental proofs which he has so simply done in his own research papers and publications. However, what he says and proves about the experience of vision applies equally to all the other senses and therefore can be taken much further still in Supersensonics to understand our perception of the whole Universe. Some historical perceptions and perspectives are necessary for us to understand how mankind was so blind as to accept a completely contradictory theory of vision. Our world-view of physical matter has become so deeply entrenched that it offends our idea of Truth as we have learned it, to open ourself to uncomfortable scientific implications about the objective world.

Fig. (176)

Light Spreads Out as It Travels



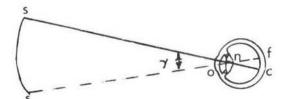
To test how light spreads out, make a small hole in a piece of cardboard. Cut a square one inch on a side in another piece. Cut out a square two inches on a side in a third piece and mark off one-inch squares on a fourth. Place the first board close to a candle and arrange the others as shown. The board with the hole gives a "point source" of light. The light spreads into a beam which is cut to one inch square by the hole in the second board. At the third board, it fills four square inches and on the fourth it covers nine square inches. The area covered is proportional to the square of the distance from the source. Light from any point source, such as a star, spreads out in exactly this same way as it travels through space.

AN ORTHODOX VIEW STATED. BUT DOES LIGHT SPREAD OUT IRRESPECTIVE OF OBSERVER'S DISTANCE?

Because the science of optics has been mathematically deduced from geometrical concepts, it is necessary to show for those interested in doing a few simple experiments with mirrors and lenses that the "scientific methods" used today to settle the fundamental questions of vision are totally inadequate. Those who do not wish to follow the complexity and who accept the arguments so far without personal proof may turn on to the next chapter. However, it is important to try to grasp Ronchi's ideas because they fit with observed reality rather than with the mathematical conventions established by man. These conventions are purely imaginary. To keep reminding ourself that nature does not know feet, centimeters, seconds or wavelengths in microns is essential to the understanding of Supersensonics.

VISION THROUGH
OPTICAL INSTRUMENTS.

After Kepler found the telemetric triangle he began to apply it to the images which appear to be reflected in a plane mirror. Everyone from the early ages had experienced the phenomenon but no one had explanations for it which could be called "scientific". Kepler's was only a first step on the long way towards explaining why one sees behind the polished surface of a mirror, the figures corresponding to the objects placed in front of the mirror surface, reflected with unequal sizes, yet symmetrical images with respect to the objects so reflected. For several centuries people were using mirrors correctly but could not explain the phenomenon. Kepler's reasoning consists of applying the telemetric triangle.



Human eye receiving light rays from a line source.

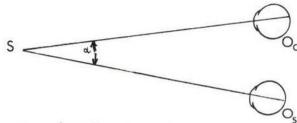


Fig (160) Pair of human eyes receiving light rays from a point of source.

We shall quote Ronchi partly in his own words and partly paraphrasing his translation from the Italian, in order to be as brief as possible and yet enable the reader to check the results. Those who need further convincing should read the original work which is in much greater detail. (See "New Optics" by Vasco Ronchi, published by Leo S. Olschki Editore, Firenze, Italy, obtainable from National Institute of Optics, Arcetri, Florence, Italy). The work is paraphrased here because the scientific reasoning is not only compelling, but allows us a fresh vision on which to reconstruct the human ability to communicate directly with nature, rather than through the sensory network which deceives us.

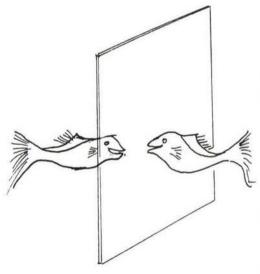
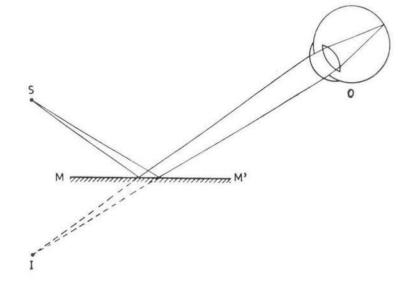


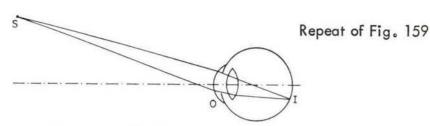
Fig. (177)

Everybody knows how puppies and kittens and even the Siamese fighter tropical fish behave the first time they look into a plane mirror; they see another specimen of their own species and approach to play with it and touch it; but they knock against an impenetrable surface. They try to get round to the back of the obstacle but do not find anything behind it. They come again to the front of the mirror and see again the same image of the "other" animal. They try to go back again behind the mirror but do not find anything. After a few further attempts they give up their research. It is hard to know what they are thinking of in their inner worlds as they go through this exercise which has its analogies in human research. Perhaps they come to the same conclusion as the ancient Greek philosophers that the sight sense cannot be trusted. Today, we say "seeing is believing". Our present attempts to prove physical phenomena, even when generated by psychic means as in the dematerialization of metals at Stanford Research Institute by Uri Geller, are always based on "seeing" and always use photography, as if to create a neutral and independent eye which our human eye can then "see" and validate With Ronchi's research, it is obvious that "vision" of objects, whether seen with optical instruments such as a camera or with telescope lenses, all have the same "hidden assumption" to justify the objective existence of what are definitely only psychic representations.

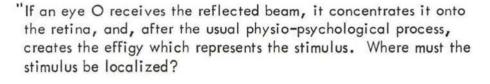




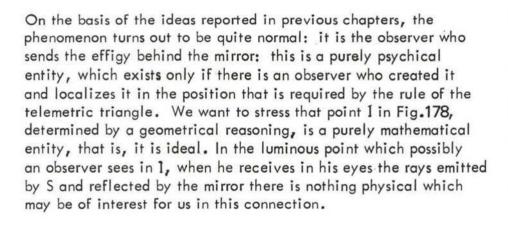
"The rays emitted from an object-point S (Fig.178), after meeting the mirror MM', are reflected according to the well known reflection law and form a cone with the vertex at the point 1, which is symmetric to S with respect to the reflecting surface. The geometrical demonstration of this effect is reported in every, even elementary, textbook of Optics appearing during the past centuries. However, we like to stress that behind the mirror there is physically nothing of what we are concerned with. The rays exclusively are in front of the mirror. The point I and the backward extension of the rays are a purely mathematical representation.



Human eye receiving light rays from a point source.



Kepler's theory and the rule of the telemetric triangle answer the question at once: at the apex of the cone of rays which attain the cornea, that is, at point I. Since the effigy is a luminous point, this point is localized at I. Thus the effigy is localized at a point where the object-point does not exist at all, and this happens not because of a lack of accuracy in the evaluation of the distance, but just because the rays are deviated from their normal path. This phenomenon is analogous to that of the echo, mentioned in Chapter 14.





When an observer sees a figure that is, localizes an effigy, at a place where the corresponding real object is certainly not placed, he does not say that he 'sees the object', but he says that he 'sees an image'.

"It is worth noting right now that the observer proceeds in the identical way both for 'seeing an object' and for 'seeing an image': he localizes in the outer space an effigy created to represent a stimulus received on his retinae. In order to decide whether one is dealing with the object or with the image, other arguments are necessary: that is, it is necessary to ascertain whether the effigy is localized there where the object is, or there where the object is not. To this end, direct tests can be used, for example one can check by touch, or other means.

. . . With this application of the rule of the telemetric triangle to the reflection on a plane mirror, Kepler opened a way which was to lead very far."



In the same year of 1604 when Kepler published his book "Paralipomena ad Vittellionem", some craftsmen in the Netherlands put into circulation some new spectacles which allowed people to "see" objects far away as "enlarged and distinct" and these instruments were eventually called telescopes, "tele" meaning "at a distance" and "scope" to "see". These lenses were discovered about the end of the 13th century but there had been no technical improvements until 1604 when the first model telescope was set up. Apart from a treatise on "magic" by Della Porta in 1589, no one had written anything which explained the operation of the lenses. This treatise only proves the absolute inconsistency between the medieval explanations for optical phenomena and the lenses in question. The new telescope therefore was a breakthrough set up by craftsmen without any theoretical background. It was presented to the scientists in the same way that Edison presented his invention of the gramophone and it was duly refused and condemned. The reason why philosophers and scientists condemned the lenses during the centuries following their discovery was still valid. The pass-word was, "don't look through a telescope, it is a misleading tool".

Nowadays we can look back with hindsight and think how foolish not to use telescopes, microscopes, mirrors and optical instruments which have provided almost all our new knowledge of matter, biology, astronomy, radiation and the spectrum of electromagnetic waves. But in the future a modern physicist may look back and say of our present age, "How foolish to use a misleading optical device which did not even conform to reality nor even to mathematical theory."

Let us retrace the development from the beginning of the 17th century with Professor Ronchi in order to understand how we came to believe that our cameras, our telescopes and instruments were not only mathematically precise, but gave us an objective tool, independent of the consciousness and the operational mechanism of "seeing".

"Kepler discovers the key of the mechanism of vision and puts the basis of a new optics. Now, in 1609 and still more in 1610, the second phase explodes: the protagonist is Galileo Galilei.

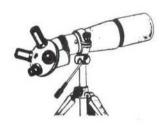
At that time, he was professor of mechanics and astronomy at the Studio in Padova, and he had never been interested in Optics. His attention was mainly attracted by the structure of the universe being guite vivid at that time the controversy between Ptolemaic and Copernican systems. During the spring of 1609 he noticed that beyond the Alps there was an instrument which allowed one to see 'enlarged and distinct the far objects'. At first he did not give importance to the news, but during the first week of July, he had a wonderful intuition: he thought that the telescope could be used for observing what happens in the sky...







GALILEO Father of Modern Physics



"Galileo did not build a telescope purchasing the proper lenses from the spectacle-makers: he made the lenses by himself and thus he realized what the spectacle-makers had not realized, that a given telescope, that is with a given enlargement, could be good or bad, according to the quality of the lenses. And he immediately realized that, while a low-quality telescope is useless, a high-quality telescope was a formidable tool. In fact, by improving the selection of the glass and the preparation of the lenses, he was able to increase gradually the magnification up to 30 times 'and even more than 30'. . .

At this point, Galileo realized he possessed a new power, and nobody had realized it before. In a letter written on August 24th, 1609 to the Signoria of Venice, he explicity declares that the telescope is an instrument of 'invaluable advantage'. This is the first time that a scientist dares make such an assertion, against the general opinion. This meant to change the course of the experimental science. This meant to open again the eyes of the human beings which the philosophy of two thousand years before had closed. The 24th of August, 1609, can be regarded as the date of birth of modern science, that is of the science which does not distrust sight, but uses eyes and optical instruments with full confidence and with great advantages. It is the date of birth of the Galileian 'faith' in the direct and indirect observation, without the control of touch or of the other senses.

. . . It is indeed well known that the more cultured a man is, the deeper he has pondered the arguments he has studied, and once he has accepted them, this means that he is fully convinced of their truth.



"What happened in 1610 is the necessary consequence of this situation. In fact Galileo, after having increased the power of his telescope to a degree enormously higher than that of the instruments built by the spectacle-makers, turned it towards the sky and began to do sensational discoveries on the Moon, on the planets, on the Sun and the fixed stars. The most revolutionary discovery, for that time, was the discovery of the four satellites of Jupiter. In order to wholly understand the importance of this discovery, reference should be made to the ideas of that time, since nowadays nobody would be shocked when hearing that a new satellite has been discovered. But at that time things were completely different, and that discovery brought a true disaster in the fundamental ideas of astronomy and even of medicine. But now we are forced to pass over this argument. We have mentioned it only to justify the violent and malignant reaction of the academic ambient of the epoch, when in March of 1610 "Sidereus Nuncius" was published: that wonderful booklet where Galileo describes the telescope and the discoveries he made in the sky by means of that instrument.

All the academic world, without exceptions, hurled itself against Galileo, charging him with ingenuity in the best case, otherwise with falsity. In fact, the current opinion was that the telescope was a misleading and deceiving instrument, therefore relying upon the observations carried out by means of the telescope meant either to be so ignorant as not to know things known to everybody, or to be in bad faith. A formidable fight followed, engaged to defend the principles of a millenary science and philosophy against the attacks of new, destroying, revolutionary ideas. . Nobody knows that for centuries and centuries thousands of cultured persons indisputably blindly accepted ideas about vision, different from those which nowadays all of us accept indisputably and blindly.

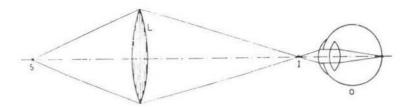


Fig.179

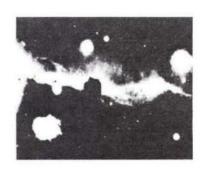
"... The first scientist who was converted to the new belief of Galileo in the direct vision and in vision through the optical instruments, was Kepler. This required almost one year, but once he was converted, immediately the effects followed. In fact as already noted, Galileo was out of doubt a great man, and a wonderful experimenter, or better a wonderful observer, but his optical culture was less than modest. And perhaps this was an advantage. Kepler, instead, was the author of "Paralipomena ad Vitellionem" and, in 1610, he was the only person in the world who had clear the fundamental ideas of the old optics and of the new optics as well, of which he had posed the bases. . .



. . . During August 1610, Kepler made some observations with a telescope built by Galileo, and examined it as carefully and severely as possible. As a conclusion, he officially stated that Galileo was right. . .

In the book "Dioptrice" by Kepler, which appeared during the first months of 1611, the concept is presented for the first time, that all the rays which emerging from an object-point S pass through a lens, then pass through a point I (Fig.179) and then diverge again and form a new cone with the vertex at I. If after that they enter an eye O, this makes them converge again onto its retina, and the well known process of vision takes place: this process <u>must</u> end (by virtue of the rule of the telemetric triangle) with the localization of a luminous point at I.

Since at I, clearly, the object point is not, the luminous point cannot coincide with it. Accordingly, in I there is an image. With this reasoning the definition of the concept of 'optical image' is completed which has constituted the basic concept on which geometrical optics has been built up."



Horsehead Nebula near Zeta Orionis. McDonald 82" reflector. Yerkes Observatory photo.

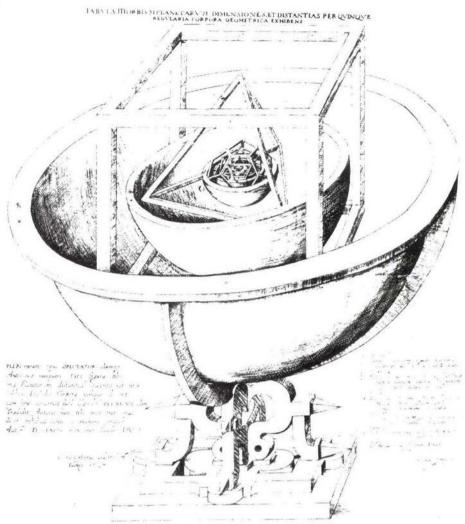
In his book Kepler describes the telescope, now called "astronomical", with a converging eyepiece, which was not actually built until 200 years later. The great revolution which took place in the field of vision leading to our present reliance on optical instruments as research tools was not achieved through the last three centuries without many long forgotten battles with the many varied philosophies which dominated the medieval sciences. The Dark Ages of religious intolerance overspilled into the scientific culture and the achievements of the ancient Chinese methods of acquiring knowledge about nature's forces by divination (built up formally in the I Ching) as well as the ancient Egyptian psychic mathematics through use of "rod of power" and the "key of life" as instruments of divination, were totally unknown to scientific enquiry. They still are today regarded as "occult curiosities" enabling prediction to be linked with probabilities, and are never used as methods for checking the positive or negative nature of nature's fields of energy. In later chapters we will go into this more deeply, but for the moment it is important to understand where western man went wrong. At what point did the methods of science tend to a positivism and materialism which totally ignored the psychic-physiological component of all observations of physical events?

The influence of this materialism on the evolution of the concept of optical image which Kepler presented to mankind can be seen clearly in Ronchi's insights into modern optics:



". . . With reference to Figs. 178 and 179 and to the arguments adduced to arrive at the definition of the concept of image, both in the case of a beam of divergent rays reflected by a plane mirror and in the case of rays that a convergent lens makes converge, we have emphasized that the images are psychical effigies, created by the observer's psyche and localized at the vertices of the cones of the rays that attain the observer's eye. This process is based on a hypothesis which although reasonable, is nonetheless a pure hypothesis: that which has been called the 'rule of the telemetric triangle'. This speech is clear, and based on well specified theoretical and experimental grounds. . .

Closely allied to Kepler's idea of planetary music was his early belief that the distances of the planets from the sun have a simple geometrical significance, as shown here in his Mysterium Cosmographicum. The outer sphere, for Saturn, circumscribes a cube which circumscribes the sphere of Jupiter. Continuing inward are tetrahedron, Mars, dodecahedron, Earth, icosahedron, Venus, and octahedron, Mercury.



Kepler was forgotten, the rule of the telemetric triangle was forgotten, the image was defined per se, without the least mention of its physio-psychological nature. Thus the image became an objective entity, independent of the observer and therefore a physical entity. This led to the formation of a science of images, that is of an optics, that should be independent of the observer, an optics necessarily physical, to be considered as a chapter of physics.

It is well known that nowadays, in most parts of the scientific field all over the world, the optics of images is considered just a chapter of physics. Nobody knows that Kepler built its basis and gave the rule of the telemetric triangle upon which the whole optics is based. "It is really hard to believe that science is built in this way, up to the point to consider, that optics built in this way is one of the most stable pilasters of the whole scientific building.

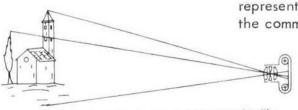


The interesting point is that the basis (now hidden) of the so-called classical optics (that is, of the optics assumed to be independent of the observer), does not correspond to the experience. As we have already emphasized in the preceding chapter, the rule of the telemetric triangle is a wonderful 'working hypothesis', but it is devoid of any physical basis. It really was a 'wonderful' working hypothesis, since it brought order in the confused mass of observations which, before Kepler, brought nothing but confusion and did not allow any order or any conclusion. In fact, they were observations where the psyche of the observer has always a part, and this discouraged those who attempted to attain a conclusion. Kepler's rule was frozen, so to say, and immobilized the psyche of the observer, and forced it to localize the effigies according to a simple law. . .

But there is a long way from this to the assertion that that rule is true. So long a way, that he who prepares himself to cover it arrives just at the opposite conclusion.

Thus, classical optics is still lacking just in its main basis. Since a conclusion of this sort will appear at least strange, even if not absurd, to most part of the readers, we will give a number of examples, especially of experimental character, and invite the sceptical reader to express his opinion only after having accurately checked the tests we are presenting. The discrepancies between the current optical theory and the experience are so rough and striking, that one really wonders why, in spite of so wide and common experiments, people have continued for centuries to profess a completely different science, by considering it as the perfect representation of the reality. However, it is preferable to delay the comments after the tests.

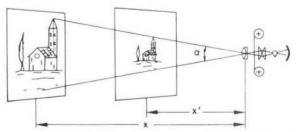
Repeat of Fig. 163



Projection of an image on a photographic film.

"Let us start with the plane mirror. As we have already noted, the geometrical study of the path of rays, by applying the reflection law, brings us to the conclusion that the beam of rays emitted from an object-point S (Fig. 178) is transformed into another beam which has the vertex at a point I, symmetric of S with respect to the surface of the mirror. The point I is called the image of S given by the plane mirror, and is called so, without involving the presence of an observing eye. Such an image must therefore have real existence. However, since it is evident that behind the mirror there is no element connected with this process, one adds that the image is virtual. But the very meaning of the word virtual is not given, and one limits himself to saying that this term is used to indicate the images which are on the back-prolongation of the rays emerging from the rear of an optical system in general, and to distinguish them from the images that are on the actual path of the rays and which are called real. Why? No explanation is given. They are terms fallen from the sky, and as such they are accepted, having only a shadow of meaning, of a purely geometrical nature. However, it is not emphasized that calling an entity 'real' is very dangerous and binding. Since this is a word of common use, but at the same time, much discussed from the philosophical point of view, it should be convenient to state precisely its meaning.

Apart from these philosophical reserves, let us now pass to the actual experience. It is evident that one or more observers are needed, and the only way for knowing whether or not the observation checks the theoretical expectation is to ask each observer about it.



Projection of a photographic negative (at x) and location of a 'ghost' (at x').

Repeat of Fig. 170

"We can say that nowadays teachers do not even present to young pupils this experiment when they begin to study these things, because they are sure that each experiment would check the theory, and that everybody has had the occasion in everyday life to check the theory by himself. If one wants to do the experiment, he must simply take a plane mirror and look at it, to check that actually the images of the objects in front of the mirror are seen behind it, symmetrically displayed with respect to the reflecting surface.

However, he who knows that the image is sent behind the mirror by the observer, according to psychical criteria, that is that the observer localizes the effigy where his psyche thinks that the vertex of the cone of the rays which attain the eye is, knows also how to arrange the things in order that the experience gives either a positive or a negative result. For this, it is enough to recall what we said in the preceding chapter about the localization of the effigies in direct vision. If one wants the experience to give a positive result he must arrange the things in such a way that object, mirror and therefore image are sufficiently close to the observer: within a few meters. If one wants a negative result, he has to place the mirror at a great distance. (Fig. 180). He can then ask every observer who looks at it; for example, from one end of a hall some fifteen meters long, without producing prejudices in the observers, who should not even know that there is a mirror (the mirror frame and border may possibly be masked by curtains), and possibly should not see the objects. The observer should be requested to evaluate the distance of the figures he is seeing. In most cases, the evaluation is less than that required by the theory. This is not a physical experiment, but a psychological test."

Fig. (180)

UNCONSCIOUS DISTORTIONS OF REALITY.

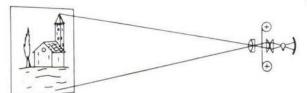
Ronchi is saying in effect that our psyche adjusts to the contraction of the apparent world and will automatically, without our conscious knowledge, take advantage of the characteristics of an object reflected, such as its size. It is well known that our psyche cannot tell the height or dimensions of any objects in a photograph unless there are some known objects in it like a human body. Obviously, a photo of an egg very large might disturb us but we would know that there is no chicken big enough to lay it. Another example of distorted phenomena of the movie screen, which is common, is that we do not notice how huge the human faces and images have become unless we get right up close to the screen or compare them with actual human beings sitting in the front row. Our psyche instantly reorders the light rays entering the eyes to fit our inner world's reality. The only way these light rays would produce tension inside us due to size of the objects on the screen would be to get an artist to take a brush and outline the images, climbing on a ladder all over the 40 foot screen length. Our psyche would compare the size of the artist with the images and be shocked at their size. Even more would this shock be experienced if we shut the projector off and switched the cinema hall lights on to look at the outlines of the optical images created by the light which passed through the projector lenses. They would be huge and disturbing because of their departure from the normal reality experienced while watching. It was this very observation which had puzzled me for several years earlier that caused me to instantly recognize the breakthrough that Ronchi has made in the narrow field of optics.

RELATION OF THE PROPORTIONAL IMAGES TO NUMBERS.



When I received his first paper of a few pages in 1962, I instantly realized its repercussions for the physical sciences since its further investigation by science would justify the proportional results obtained by paraphysics, radionics and the ancient seers who discovered numbers. That numbers are not exact values but psychical proportions, which our consciousness endows with reality, was a discovery which I could not get scientists and mathematicians to explain. They merely said 'it's all in your imagination,' without saying what the imagination was doing.

Pythagoras and his followers held that music and the universe both depended on the properties of numbers. This fanciful portrait of the ancient Greek sage is from H. Schedel's Nuremberg Chronicle of 1493.



Projection of a photographic negative on a screen.

The origin of numbers was a mystery to them - and they gave me ridiculous asnwers like "it all began with 10 fingers when man began to count, then from 10 we developed all other numbers." In Volume IV we shall go into how the great seers saw numbers as a proportional science and how the concept of zero and its discovery had a revolutionary effect on man's evolution of consciousness. These insights all followed thick and fast after reading Ronchi's explanation of the optical images and I immediately realized what was wrong with Einstein's theory of relativity.

CONSCIOUSNESS & LIGHT RAYS.

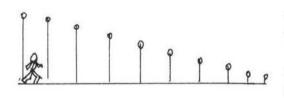


Fig. (181)

Einstein admitted in his later works that the concept of relativity could not be worked mathematically into any concept of the Universal field, but I realized that he did not see that his own insight, which has so revolutionized physics for the last 50 years, was born out of the same illusion caused by light acting in and through the field of the knower. The disappearance of a row of vertical lamp posts in a long street to the point of infinity, like the horizontal railway lines in a photograph perspective, obey a law of proportional vision which is put together psychically inside our consciousness. That all our senses act in the same way, with sound and touch etc. depending on the medium which carries the oscillations, became an insight which Supersensonics attempts to prove by retraining our normal perceptions. By becoming Supersensitive to the movements of events in consciousness, we come to learn what is making sense of the senses. It is a total revolution, as radical as Christ's or Einstein's or Newton's and once we "see" it, our whole life changes at the centre of consciousness within. Our perception of the universe is turned upside down and we "see" what our consciousness has been doing to the "real" world from birth and how brainwashed we are by our cultural heritage.



Fig. (182)

Let us follow Vasco Ronchi's more developed experiments, researched since that early original paper, and master the implications. He gives us the example of putting in front of a mirror on the opposite wall a gigantic figure of a human over a uniform background and that the human perception of this image will be seen to be closer than if the image represented a dwarf. This is perceived even though the actual image in reality is no closer at all. This totally disproves the mathematically expected results which do not account for any psychical element in physical observations of reality.

"In addition, one can play on the fact that the psychical evaluation of distance is performed with various mechanisms, among which the most important is the 'parallax', that is, the variation of the arrangement of the apparent world when it is looked at from different points of view, as happens when one moves either the entire body or also only the head. It turns out that even more abnormal results can be obtained if the observer is made to look at the mirror through a fixed hole. This limits his psychical capacity of determining the depth of the real world.

The fact itself that one can make use of such systems to determine the result of the observation constitutes an unquestionable demonstration that one is dealing with a psychical phenomenon. It is wrong to think that the image is placed in a mathematically defined position behind the mirror, and that the observer has only the task of seeing it where it is and how it is, without any intervention on his part.

the 'production of images' is widely used in the treatises of modern classical optics, since it helps in proving the hidden assumption mentioned many times, also in connection to sense organs other than sight, as a useful means to arrive at justifying the objective existence of what in the contrary are psychical representations. This assumption is that everybody sees the images behind a plane mirror in the same manner and in the same position. From this it is an easy matter, especially if one wants it, to arrive at the conclusion that these images are independent of the observer and therefore have an existence of their own, and therefore are physical phenomena.

"We insist in repeating this pseudo-logical procedure, in order to emphasize how frequently it is adopted. Clearly, the plane mirrors are in general used at short distances, and therefore the above mentioned criterion can be applied even honestly. There is in fact no indication that one should doubt the behavior of a plane mirror when it is far from the observer, even when the extraordinarily clear and simple mathematical theory does not take into account such circumstance.

Fig. (183)

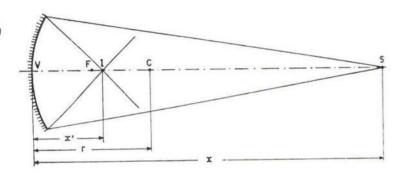
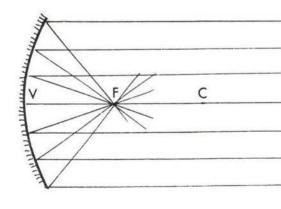


Fig. (184)



More strange is the case of the curved mirrors, mainly of the concave mirrors. The classical theory is well known. It is summarized in a classical formula, whose validity is not doubted by anyone. If x denotes the distance from the object S and the vertex V of the mirror (Fig.183), x' the distance from the image I and the vertex V, and r the radius of curvature of the mirror (equal to the distance CV), one has:

$$\frac{1}{x} = \frac{1}{x'} = \frac{2}{r} = \frac{1}{f} \qquad \qquad f = \frac{r}{2}$$

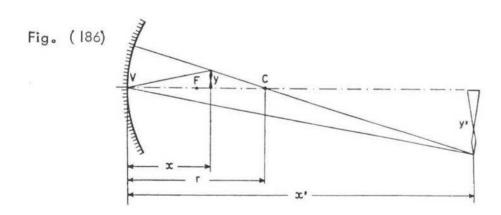
f is termed 'focal length' and is the length of the segment FV. F is called the 'focus', and is the point which the rays impinging on the mirror parallel to its axis converge (Fig.184) and vice versa: if the point source is in F and sends divergent rays towards the mirror, the reflected rays constitute a beam of rays parallel to the axis CFV. It is evident that x and x' can be interchanged, namely, if the image of the object S forms at I, when the object is placed at I the image forms at S. For x>f, the image is real. For x<f, the image is virtual (Fig.185).

Fig. (185)

"If the object is constituted by a segment normal to the axis, of length y, its image is still a segment normal to the axis, of length y', related to y by the relation:

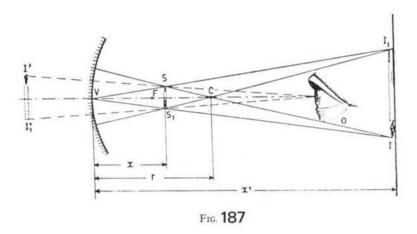
$$v'/y = -x'/x = G$$

This ratio is termed 'magnification' (Fig. 186).



These things are so well known that they are not worth being further recalled. It is also well known that this is a schematic representation, and a first approximation, which can be assumed to hold when the rays are at a not too large angle with respect to the axis, the angular aperture of the mirror is small and the linear objects are very short. A more accurate study leads to slightly more complicated results but for very minor details. The discrepancy between the experimental data and the theoretical expectation does not concern such fine details: substantial effects are involved so that it is preferable to refer to the elementary theory, for the sake of simplicity and clarity.

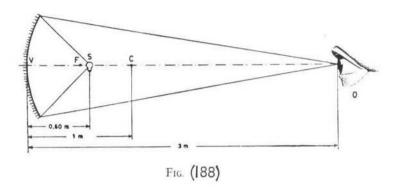
"In order to give at once an idea of the order of magnitude of the discrepancy between theory and experiments, let us carry out the following test: let a concave mirror having a radius of about one meter be placed in such a way that its axis is horizontal (Fig. 187).



The image II_1 , of a candle SS_1 placed at a distance x from the mirror a little larger than the focal length be projected onto a screen which may be a wall of the room. According to the theory, the image which forms is one, real enlarged and reversed. If one measures the distance x, x' and r, the fundamental formula above reported turns out to be checked, with the overall approximation with which the measures are carried out. In addition, one finds that the ratio II_1/SS_1 is numerically just equal to the ratio x'/x. All right.

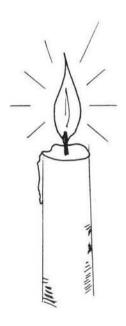
But if one has the bad idea of putting an eye in O and looking towards the mirror, he has the surprise of seeing another image I'I'1, enlarged, upright and virtual, a little behind the mirror. This image is not expected by the theory. From where does it arise? Then the images are two and not a single one.

"If the experimenter had recalled Kepler's recommendation and followed his suggestions, he would have forbidden the observer to put his eye in O, and would have limited him to observe the real image II₁. In this way the prestige of the mathematical theory would have been safe. But now the prestige is shattered, and the question: 'where the image behind the mirror arises from' needs to be urgently answered. The classical theory answers this question only by forbidding looking behind the mirror. . .



Let us now carry out a systematic comparison between observations and theory. Let us use again a spherical mirror with curvature radius r = 1m. Let us place it, as sketched in Fig. 188 with the axis horizontal and let us fix the position of the observer, for example in O at a distance of 3 m from the vertex V. A small incandescent lamp S can be used as object. Let us start placing the lamp very close to the mirror: one will see a slightly enlarged image behind the mirror but very close to it, as required by the theory. Let us slowly displace the lamp towards the focus, and observe the behavior of the image: one will see the image go a little farther from the mirror and become a little larger. Apparently, all this agrees with the theoretical expectation, but if one precises a little the things, for example numerically, by evaluating the distances at which the images should be seen for the various positions of the object, one finds that things are going badly, very badly. It is not necessary to do accurate measurements: the discrepancy between theoretical expectation and observation is enormous. The image goes far from the mirror for a few decimeters and then stops. On the contrary, the formula would require that when the object approaches the focus, the image goes faster and faster towards infinity. This is not verified at all. When the lamp is just at the focus, its image should be behind the mirror at an infinite distance. To be precise, we cannot say that that distance is exactly infinite, since the lamp is not exactly flat, therefore it stays, so to say, around the focus F, which attenuates the rigor of the conclusions. Unfortunately, the image of the lamp is very sluggish: it has traveled half a meter or so behind the mirror and then has stopped.

"According to the theory, when the image forms at an infinite distance even its dimensions are infinitely large. Unfortunately, things are still going badly: when the lamp is at 50 cm from the vertex and therefore coincides with the focus, its image is at about the same distance behind the mirror and is only a little larger than the object.



But now comes the interesting point: let us continue to drive the lamp away from the vertex V: according to the theory, one should observe a sort of discontinuity: the image must no longer be virtual and behind the mirror, but it must reach infinity and disappear, then appear again at infinity, but real, that is behind the shoulders of the observer. Accordingly, the image should not be visible for the observer, who is still on O. This could appear to constitute a simple method for determining the focal length of the mirror or its radius of curvature, which is twice the focal length. However, we must renounce this application: the observer at O does not realize when the lamp passes through the focus F, and even when the lamp is passed beyond the focus, he continues to see the image behind the mirror, at about the same distance and only slightly increasing in magnitude.

Then, the magnification becomes relevant: the image of the lamp fills the whole mirror: one should say that it has become infinitely large. Is the object at the focus F? Not at all: the lamp is now at 60 cm from the vertex V, that is, at 10 cm from the focus F towards the center C. If one puts a screen in the place of the eye at O, one sees the 'pictura' on it. In other words, the maximum magnification of the 'imago rei' does not occur when the object is at the focus F, but when it is in such position that its real image forms on the eye.

The discrepancy between the observations of the 'imagines rerum' and the classical formula could not be larger.

"Let us continue to carry the lamp farther and farther from the mirror: its image appears now reversed, while so far it was upright. The observer initially sees it a little blurred, but then it appears sharp. Where is it seen? The answer is not always the same: somebody sees it behind the mirror, as before, some others see it on the mirror, someone else in front of the mirror. Especially after a training period, a skilled observer, to whom it has been said that the image must be in front of the mirror, may succeed in localizing it in front of the mirror. The image is seen in front of the mirror, if one puts a screen there where the image forms, but the screen must not necessarily be constituted by frosted glass or a translucent sheet of paper (we recall that the eye is at O, and therefore it cannot see an image projected onto an opaque screen): it is sufficient to put any object, like a frame or a support against which the psyche might lean the effigy. Experiments of this type are easy to be carried out: one puts a frame, empty of course, and one sees the reversed image of the lamp framed within it. One takes the frame away, and the image, a little enlarged, is seen on the mirror.

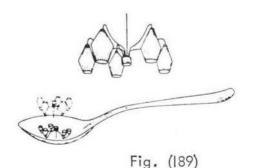
It is sufficient to carry out some of these observations and follow their course as a function of elements which do not appear at all in the formulas, to conclude that they are merely psychical experiments. In other words, one cannot conclude that one sees one image corresponding to a position of the object, constant in size and position, as required by the classical laws: the image can be seen closer or farther, and therefore larger or smaller. . .



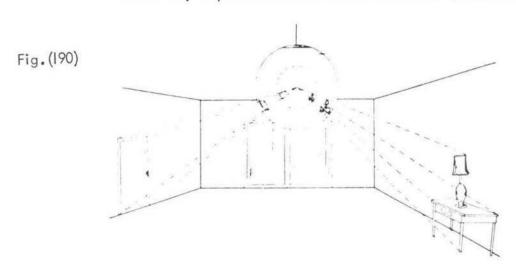
"It seems useless to continue describing observations of such type, however there is one which is worth being recalled. In the same conditions of Fig.188, let us fix the position of the lamp, for example between F and V, but rather close to F. As already said, the observer sees a virtual enlarged and upright image of it behind the mirror. The classical formulae give the magnification G; accordingly the image size should be constant and independent of any other variable. In other words, if the eye of the observer approaches to or goes away from the mirror, the image size should remain the same. If one carries out the experiment, he finds just the contrary; if the eye approaches the mirror, the image is seen smaller. If the eye goes away from the mirror, the image is seen enlarged.

We think that such tests which can be very easily carried out by everyone, if he has at his disposal a concave mirror, are more than sufficient to prove that the classical formulas do not correspond to what is seen at all. In other words, from these tests one must deduce that the localization of the effigies does not occur according to the rule of the telemetric triangle, but according to psychical, subjective criteria, which vary from observer to observer, and depend on the ideas, culture, experience and so on, of the observer.

One can convince himself of the truth of these conclusions even if he has not at his disposal concave mirrors, which can be usually found only in the laboratories or in some specialized ambients; everyone can observe what happens, by means of a polished spoon (Fig.189) or a soup-ladle: even these tools are concave mirrors with small radius of curvature, their focal length being of the order of one or two centimeters. Well the images of all the objects in front of a spoon are real, and according to the classical formulas, they should be in front of the spoon: the spoon should always appear full of a big number of figures. But nobody has ever seen something like that; the surface of a spoon appears sparkling because of the images of the windows, of the alight lamps and of other bright objects which may be in the surrounding ambient, but nothing is seen hanging over the spoon. This means that any observer localizes the figures on the surface and not hanging over it. This is against the classical rules.



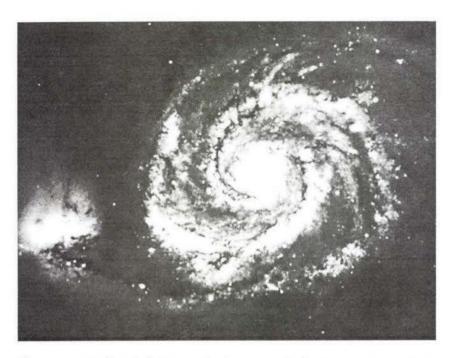
"An analogous observation can be done by looking at those balls of shiny and colored glass (Fig.190) which are often used for decoration, suspended on the curtains or on the Christmas trees.



They are actually convex spherical mirrors, and the classical formulas would require that the images of the objects in front of them formed within them. Due to the smallness of the radius of curvature, the images should form very close to the focus, namely inside the sphere at about 1/4 of the diameter. Then the sphere surface should not be seen, and the ensemble of the images should form something almost spherical with diameter almost one half of the diameter of the reflecting sphere. But nobody ever sees something like that: one sees the sphere, with its own dimensions and with a sparkling surface, due to the shiny effigies which are localized on it. This occurs completely against the classical formulas."

16

This photograph was made with the 200-inch Hale telescope.



LENSES &
CONSCIOUSNESS.

The great tool of photography has enabled science to study the nature of light and its interaction with emulsions. It has also brought us an indispensable tool in astronomy. With the introduction of the electronic lenses of the electron microscope, the great invisible world of biology has been revealed to human sight. All this has been possible through the study of lenses which appear to conform to very exact laws of perspective and accuracy. The perfection of lenses in recent years has allowed us to peer into the heart of matter as it were and to discover the multiplicity of the micro and macro worlds beyond normal human perception. Hence a discussion not only on the effects on our consciousness of mirrors, which are well known to create optical illusions, is not complete without a study of scientific lenses for photography as well as the action of the photographic emulsion and the photoelectric cell. Since the whole process of "vision" is regarded largely as a function of the physical lens of the eye with the retina playing the part of the photographic emulsion, we must deal with the present physical scientific explanations of lenses, since they appear to confirm the present knowledge of classical optics. Ronchi therefore goes on to say:

"As is well known, for lenses the validity of the fundamental formula:

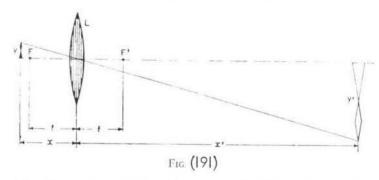
$$\frac{1}{x} + \frac{1}{x'} = \frac{1}{f}$$

is considered as proved, as well as the expression of the magnification:

$$y'/y = -x'/x$$

where the meaning of the symbols is the usual: with reference to Fig.191,

- x denotes the distance from the object to the lens (assumed to be thin),
- x' denotes the distance from the image to the lens,
- f denotes the focal length
- y denotes the length of a linear object, placed normally to the axis,
- y' denotes the length of its image.

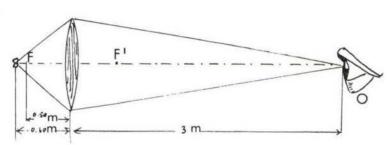


The discussion of the above recalled formulas and the behavior of the images evaluated by means of them is well known, and we think it not necessary to report that here. We only recall that even in the case of lenses, as for spherical mirrors, when x is larger than f, the image is real and can be projected onto a screen, producing a 'pictura'. Instead, if x is smaller than f, the image is virtual and is on the same side of the lens as the object.

ACTUAL TEST OF FOCUS & FORMULA.

"Now we could start with the observations, under conditions similar to those already described for the concave mirrors, with slight obvious variations. Thus we could still use a small lamp as object for a lens with a focal length of about 50 cm, and put the eye on the axis of the lens at about 3 m from the lens (Fig.192). Then one begins by putting the lamp very close to the lens and then one brings it farther and farther, by observing the image, which is initially virtual.





According to the classical formulas, the image, which is initially equal to and coinciding with the lamp, should then become larger and larger and quickly run towards infinity, attaining it when the lamp arrives at F. Then the virtual image should disappear and one should have a real image on the same side as the observer, firstly behind the observer and finally, when the lamp has arrived at 60 cm from the lens L, the image should form on the eye. If one continues carrying the lamp away from the lens, the real image approaches the lens, from the observer's side, becoming smaller and smaller.

The observer, however, does not see anything of this. It is true that initially, when the lamp is very close to the lens, the observer sees an image almost equal to the lamp and very close to the lens, but this image refuses to run towards infinity, and follows more or less the displacements of the lamp, as if it was connected to it, although a little larger than it.

"When the object is at the focus F, the image is decidedly not at infinity and is decidedly not infinitely large, but is very very close to the object, as if it were at 50 cm from the lens, and is only slightly larger. If one continues displacing the lamp away from the lens, the observer continues seeing an image beyond the lens, always very close to the lamp and always larger. However it is always upright. When the lamp is at 60 cm from the lens, the image fills the whole lens, as if it were just on it. Next, the image begins to become smaller and remains always either on the lens, or a little behind it, and becomes reversed.

Even now, we can repeat the other test carried out with the mirror: one fixes the lamp in a x given position, and finds that the dimensions of the seen image change when one changes the position of the eye along the axis of the lens.

There is no need of organizing accurate experiments in a suitable laboratory. A great number of everyday experiments prove that the classical formulas do not describe at all the course of what is observed looking through a lens. What is seen by means of a common magnifying lens proves just this fact, if one compares it with what is expected on the basis of the classical formulas.

A SIMPLE PROOF FOR EVERYBODY. First of all, it is known that the seen image lies always in the same plane where the object is. Often we look at a written paper through a lens of about 20 cm focal length, in order to better see the details. Well, everybody says that 'he sees magnified the paper'. In order to find the best conditions, the lens is brought closer and farther from the paper. The formulas deny that the image forms in the same plane of the object, while when x is smaller than f, it cannot occur that x and x' be equal to one another: in absolute value, x' is always larger than x. The experience proves the contrary: x' is always equal to x.

"Moreover, when the paper coincides with the focal plane of the lens, its image should form at an enormous distance and should become infinitely large. The experience does not ever show anything like that. Nobody, when looking through a magnifying lens at a paper lying on a table, has ever seen the image at the bottom of a very deep hole, pierced in the table and in the ground, up to the antipodes. Moreover, even if one accurately places the paper in the focal plane of the lens, he never does observe an excessive magnification.

If one wanted to put into evidence all the disagreements between the conclusions attained by means of the classical formulas and the experience, his task would be endless. In order to recall some other disagreements, we can note that, according to the classical formulas, every converging lens should give any magnification included between 1 and infinity, simply by changing the distance from the lens to the object. The experience, on the contrary, proves in a doubtless and universally accepted way, that the less the power of the lens, the less it magnifies.

This point will be dealt with further in the following. But now, let us briefly take into account the diverging lenses, since these lenses, too, show quite evidently, that the classical rules must not be considered to have general validity.

As is well known, the classical formulas require that when f is negative, the "images" of the material objects be always virtual, on the same side of the lens as the objects and, moreover, that they be upright and smaller than the objects. They form only between the lens and its virtual focus. In particular, as a rule, the image forms at the focus when the object is at a very large distance.

lenses in front of his eyes, should see the whole apparent world within a sphere centered at the observer's eye, and having a radius equal to the focal length of the lenses. Since the focal length of the lenses worn by the myopes never exceeds 1 m, and may even be as small as 5 cm, a paradoxical conclusion should have to be drawn, which has never been verified, in spite of the fact that there have been and there still are millions of myopes wearing diverging lenses. It is well known that they see the external world at depths more or less like all people who do not wear lenses.

Once again, we must say that even in the case of diverging and converging lenses, the disagreement between classical formulas and experience could not be wider than it is.

THE PROPORTIONAL EXPANSION & CONTRACTION IN LAWS OF MAGNIFICATION

Let us now go back to the problem of the magnifying lenses, because it is very significant. The fans of classical optics usually oppose the preceding criticism with the following consideration: 'Classical optics has given wonderful fruits, allowing the calculation and the design of very good instruments under all points of view'. Hence, they assert, something good must be there.

It is doubtless that there was and there is something good. But one must isolate and correctly use it, in particular, one has not to extend to all cases, rules which hold only in some cases. The first thing to do to determine the limits of validity of a rule or of a law is to pose the problem, not to assert that that rule or law has general validity.



'For this reason it is interesting to examine the problem of magnifying lenses, and to see how many classical laws cease to hold for them, in spite of the fact that that problem attracts generally only little attention, as if it were completely solved, or, at least, not worthy of further consideration.

The problem can be put in the following terms: 'How much does a magnifying lens magnify? What does the magnification of a lens depend on?'

The usual answer to such a question is that a lens magnifies because, when an object is placed between the lens and its focus, the lens forms a virtual and magnified image.

Consequently, as already noted, one should deduce that a lens has not one magnification, but as many magnifications as desired, whatever its focal length may be: it is sufficient to choose the suitable position of the object with respect to the lens. A simple geometrical computation allows one to express x in terms of f and G, by means of the classical formulas. One easily finds:

$$x = f (G - 1)/G$$

There is a difficulty: the experience does not confirm this formula. Accordingly, it is not given in any text of optics. The experience says that larger magnifications are obtained with lenses having larger power than with lenses with smaller power. Thus the preceding reasoning is ignored and another is presented, completely different from that.

"One starts with the assumption (whose inconsistency has already been proved in the preceding chapter) that the apparent magnitude of a figure is proportional to its angular magnitude. Then one assumes that the magnification of a lens can be evaluated by means of the ratio of the angle under which the object is seen through the lens and the angle under which it is seen when it is placed at the distance of the sharp vision, that is at 25 cm from the eye. If the size of the object is denoted by y and the object is placed in the focal plane of the lens, it is seen under an angle equal to y/f. If it is placed at a distance of 25 cm from the eye, it is seen under the angle y/25 (of course, even y is to be measured in cm). The magnification G_C is then given by:

 $G_c = 25/F$

This magnification is clearly different from the preceding one, and is called conventional magnification, because it is referred to a conventional distance, the distance of sharp vision. It is well known that such distance differs from person to person very much, especially in the case of presbyopia. The fact that a different formula was looked for, means that the preceding one could not be applied, inasmuch as it did not describe the experiments. However, even the last new one does not work well. It is true that it says that magnification is larger when the focal length is shorter, but if one uses it for some calculations, the results are unexpected and unacceptable. For example, according to the formula, a lens with focal length equal to 25 cm should have unit magnification, that is, one should see the object through the lens with just the same size as if the object were kept at a distance of 25 cm from the eye. This is definitely not true: a lens having a 25 cm focal length (or a 4 diopter power) lets one see much magnified figures.

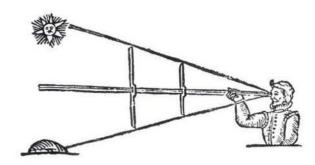
The situation is still worse with lenses having larger focal lengths: for f = 50 cm one should have $G_C = 1/2$, that is, one should see half-size figures. This is not true: one sees enlarged figures.

"Eyeglasses for presbyopes are easily available, with focal length of 1 m (1 diopter), 0.50 or 0.33 m (2 or 3 diopters respectively). It is easily verified that all of them magnify, even when the object is placed in position where, according to the formula it should appear smaller.

It seems therefore natural to conclude that the classical theory is unable to answer the initial questions: it cannot explain why one sees enlarged figures through a magnifying lens; it cannot say how much such a lens magnifies. The classical theory either limits itself to vague reasonings, derived through a purely mathematical procedure from the basic formula, or withdraws to conventions, which cannot solve any problem in agreement with the reality."

CONVENTIONAL MEASUREMENTS.

In previous chapters we have discussed the international acceptance of standards such as the standard second, the meter, and all measurements of length and duration used in scientific work, and the effect which this carefully defined operational method has on limiting the observer's own consciousness. By ignoring these psychic effects on the observation of matter through our sensory equipment, the whole human race has been led to separate the observer's consciousness from what is observed. The limitations of the mind and its mental operations have been placed upon the natural world we are thus observing. Nature has been imbued with the reality of fixed seconds and feet and fixed concepts of what is real.



These conventions and laws have been carried over from physics into the science of classical optics and are used to justify, as long since proved, problems which are not proved at all, except by sticking one's head in the sand like a huge scientific ostrich. In the study of optical instruments the same problems remain as yet unresolved while conventional solutions are presented without any demonstration of their true validity in actual experience. When we take an angle of the sun's diameter or of the arc between the horizon and a navigational star, the same difficulty arises. The apparent size of the object, or the arc used to calculate the position on the earth as a sphere, are both assumed to be proportional to the size of the angle subtended.

However, just as in the physical sciences, with their measurements by touch and yardstick, there is a large degree of error in perception, so there will be also in Supersensonic methods of proportional sensing by radiesthesia and radionics when the operator is untrained. This does not mean that we can discount the results of those who are trained to eliminate subjective errors. It is ridiculous to expect an ordinary person to become a concert pianist on the first day at the piano. In the same way it is ridiculous for science to expect a prima donna performance on picking up a pendulum for the first time. Moreover, it is just not realized how many errors are made in normal perception and particularly in science, since only a few scientists are aware that science is not an exact discipline, nor is it final.

To quote again from "New Optics" . . .

"... Thus, in the case of the telescope, one defines a magnification which is none of the preceding magnifications, and is called angular magnification. It represents the ratio between the angle under which one sees the image given by the telescope and that under which one sees the object without telescope, from the same point of view. Clearly, here too the apparent size of the figures is assumed to be proportional to their angular size. No indication is given about the positions where the object and the image are seen: they are always at infinity. These are, clearly, too much schematically and roughly defined conditions.

Experience proves that this scheme does not work well: the magnification requested for a telescope is the ratio between the apparent (linear) magnitude of the image and that still apparent (and linear) of the object seen with naked eye. Both these quantities, as proved in the preceding chapter, depend on the localization distance. Accordingly, the angular magnification is not sufficient and cannot give elements comparable with the experience. This is confirmed by the fact that the magnification of a telescope is given as a number, but an observer is never requested to verify if that number corresponds to what he is seeing: all is always right, since by no way the observer can compare what he sees with and without the telescope.

However, the following consideration puts under discussion all the reasonings done about the telescope operation. Each instrument is equipped with a device which allows to focus the image, in order to see it as sharp as possible (this device is necessary, since different observers have different visual capacity or different defects of the eyes). Now, if an observer moves the eyepiece back and forth, in order to vary the convergence or the divergence of the emerging rays and to obtain the best focusing of the image for his own eyes, the image computed on the basis of the geometrical optics runs over enormous distances, up to infinity and then passes behind the head of the observer. However, nobody ever sees something like that: when the eyepiece is moved, the image becomes more or less defined, but remains absolutely fixed with respect to the observer.

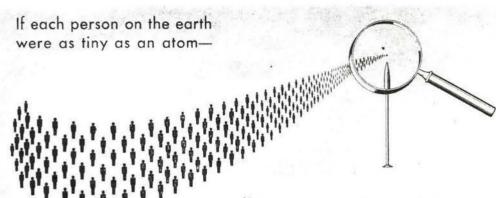
"He who uses a microscope can repeat all these observations: even for the microscope one speaks of magnification, very conventional and altogether impossible to be checked. In order to focus the image one must displace the instrument with respect to the object, until the position is found of the best definition of the image. But the image remains fixed in the plane of the object, even when the rays emerging from the eyepiece form parallel beams, that is when the image, according to the classical optics, should be at the infinity. Nobody did ever see the image at the end of an enormously deep well piercing the table and the Earth, up to the antipodes.

As a conclusion, one realizes that the images seen by means of mirrors or lenses (the 'imagines rerum') do not coincide, as a rule, with those evaluated and expected according to the rules of classical optics.

Consequently, for those images, such rules do not constitute a good representation of the experimental data.

WHY OUR IMAGINATION PLAYS A TRICK.

The reason of the disagreement is now evident, if the evolution of the concept of image is taken into account. The starting point was that the images are seen and therefore must be considered as psychical effigies. Then, the rule of the telemetric triangle came, to arbitrarily connect the positions of the effigies; according to that rule, the effigies coincided with the loci of the vertices of the cones of rays emerging from the optical systems. Finally, a theory of these vertices was elaborated, where the vertices were still called images, but their psychical nature was not taken into account. The result of this process is a purely mathematical theory, inasmuch as it is deduced from an assumption, independently whether the assumption corresponds to the experimental reality or not. Accordingly, one has not to necessarily expect that the conclusion correspond to the experimental reality.



all of them would fit into a space smaller than the point of a pin (the dot seen through a magnifying glass).

"Numerous experiments of the type described in the preceding pages demonstrate that the experimental trend is markedly and substantially different from that derived from mathematical theory. But this only means that the assumption on which the theory is based is not true but completely arbitrary. This assumption is valid only in a very small number of cases.

This course is completely normal. In scientific research the way of proceeding is: 1) to make provisional assumptions, which help one investigate theoretically and experimentally; 2) when the results do not agree, to give up those assumptions and propose other assumptions which work better. It is to be expected that even the new assumptions will be replaced by other ones which will work still better, that is, which will be still more consistent with reality: the new assumptions are generally suggested by the experimental work carried out to check the preceding assumptions, or may be suggested by the intuition of some genius people.

The dangerous behavior, which is scientifically unacceptable, consists in <u>hiding the assumptions</u> and in using tricks to prove as true the theoretical conclusions, by carrying out tests in very particular conditions, accurately chosen in such a way that the <u>hidden assumptions</u> be valid. But, in this case, the study is not a scientific activity, but simply a trick.

HOW WE VERIFY THE SCIENTIFIC ABSURDITIES.

Now, in our case, the trick used to verify the classical formulas is that of the screen. The experiments are carried out by collecting the images over a screen, as if this procedure were of general applicability: nobody emphasizes that the screen is necessary to verify the conclusions of the formulas. Kepler is the only one who emphasized this point, by giving a different name to the figures seen on the screen, the 'picturae'. But Kepler has been forgotten. And the reason is evident: the screen limits the possibilities of localization of psychical effigies.

"The unavoidable consequence is that classical optics is a purely mathematical theory, deduced from the assumption of the telemetric triangle. The theory can be verified in those cases where this assumption is made to be valid. This happens, for example, when the images are observed on a determined plane, which can be a screen, in the case of visual observation, or a photographic plate, or the surface of a photoelectric cell. But this can be done only if one uses images which have been called real. The extension to the virtual images is completely arbitrary and cannot be justified. It may be a mathematical procedure for the study of optical schemes; but, experimentally, the virtual images can be seen only by the visual observation, and, for the visual observation (also of real images) the rule of the telemetric triangle does not hold but exceptionally. Consequently, the classical theory does not represent the experimental course.

In order to study this course, in a realistic and not hypothetical way, it is necessary to go back to the beginning and to give up the rule of the telemetric triangle. All is more difficult, but not impossible. On the other hand, Nature is how it is: the task of the physicist is to investigate Nature, in order to define it. When, on the contrary, one creates an arbitrary structure, even if close to reality, but without taking care of verifying its correspondence to reality, one passes to the field of mathematics. This is of course an important and very useful field (the rule of the telemetric triangle is a very good example), but different from that of the physicist."

Hence the next step is to suggest some other ways to deal with the world <u>as it is actually seen</u> and experienced and these are suggested in the remaining chapters on the detection of color and energy fields by means other than physical or optical. However, they yield the same results, in many cases amplifying them and in others just telling us how nature is and how it manifests itself in several dimensions as yet not known to conventional science. First, however, we must complete in the next chapter, the practical proofs available to the open-minded people who can simply test out the Ronchi experiments for themselves and thereby go beyond the scientific prejudice of our particular culture.

17

THE PSYCHIC NATURE OF LIGHT.

In all Supersensonic measurements with the various rules, pendulums, divining rods, radionic sets, etc. we come up with answers which are not exact but proportional. That is, we can always make them exact by using some arbitrary scale in our consciousness. Let us say we have an example of tuning a radio to an exact frequency by Supersensonic means with the loudspeakers disconnected. All that the divining sense will reveal is when there is a correspondence between the resonance of the electro-magnetic waves (light) and the thought pattern of a particular frequency. Nature does not know frequency because its events, although timebound by our earthly clocks, are not so fixed in reality. Einstein's theory predicts this slowing down and speeding up of earthly clocks in different parts of space if man ever becomes a space traveller. All that nature knows is vibration in a non-human time dimension of the eternal Now. It is we who fix the background of time to our perceptions, our cell life, our psychic life in relation to physical events on earth, experienced in our consciousness.

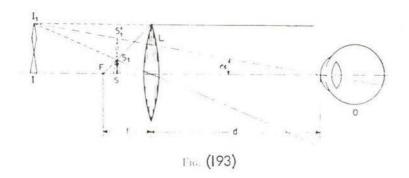
However, in science the basic assumption is that all material beings, elements, etc. experience light and radiation in time-bound events, called "physical" matter, in the same way in each individual consciousness. In exactly the same way it ideally assumes that all human consciousness and its extension, the eyes, sees the same thing when it looks at the color red or views an object in a mirror or uses an optical instrument such as a telescope, microscope or camera. To go on to the Supersensonic measurements before we have well understood the nature of earthly man-made measurements would be to ignore the scientific bridge which Vasco Ronchi's work gives to the new science of Supersensitive man. Therefore, at the risk of leaving behind those not interested in scientific methods, let us devote one more chapter to studying our physical measuring devices by Ronchi's new approach to optics.

We must always bear in mind, from the Supersensonics point of view which we develop later, that all these new conclusions apply equally to all our psychical-biological sensory phenomena dependent on vibration of any kind. Let us quote from Ronchi again to get clarification of this process of <u>vision</u> which occurs by means of light seen as the internal images plus the light of radiation which stimulates those images from external sources.

"Now we will show, by means of several examples, how optics can be treated, without Kepler's rule. Namely, we will not treat the physical images, that is the vertices of the cones of the rays emerging from the optical systems, but we will follow the complete process: we will follow the path of the rays, just up into the eye of the observer, and then we will study his reaction, up to the localization of the final effigy.

We have previously discussed the case of the magnifying lens just because it is very simple and meaningful. We will study it by means of the new criteria and we will easily understand why finding a general rule within the classical optics was quite impossible. The fact is that in the case of the magnifying lens, there are no <u>real images</u>, but only <u>virtual images</u>: it is a typical case that must be treated according to the new ideas.

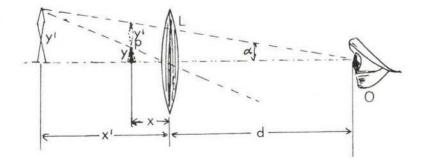
The physiological-psychological basis of our treatment differs from that of Kepler in an essential point. Kepler postulated that the localization of a light point, representative effigy of a point source of rays, occurs in an obligatory way, both in direction and in distance: the direction is psychically deduced from the position of the stimulated point of the retina, the distance is deduced from the rule of the telemetric triangle. We now postulate that the localization occurs in an obligatory way as regards direction, by the same process as before, but the localization in distance occurs with other criteria, independently of the telemetric triangle.



"Let us now consider a convergent lens L and an object SS₁ (Fig.193). According to the classical rules, we can construct the virtual image II₁. This serves to indicate that the rays emerging from the lens travel just as they emerged from the points of the image. Let us now put an eye O on the axis of the lens at a distance d from it: the image II₁ is seen under the angle a which determines the size of the retinal image. The effigy that the psyche localizes outside must therefore be seen under the angle a.

In order to decide where the localization occurs one must introduce new elements. Should the rule of the telemetric triangle be valid, the effigy would be localized in II1, and therefore would coincide with II1. But the psyche usually knows where the object is placed (this happens, for example, when we observe through a magnifying lens a paper which is in our hands or on a table) and therefore tends to localize the effigy in the same plane as the object. Hence, the lens magnifies. We can also evaluate how much it magnifies, because, as is schematically shown in Fig. 194, it is an easy matter to express the ratio between the effigy size y'_p and y as a function of x, f and d. But it is useless here to perform the calculation: we only note that the magnification Gp, which will be called psychological magnification' and is given by the ratio $G_p = y'_p/y$, depends on three elements: the focal length, which is a characteristic of the lens; the distance x, which expresses the position of the object with respect to the lens, and, finally, the distance d from the eye to the lens. For, if the eye approaches the lens, G_p tends to 1. This means that it does not magnify or lessen, but always provides images with the same size as the object.

Fig. (194)



"A proof of this is the fact that eyeglasses are kept very near to the eyes, so that he who uses the glasses sees the objects (or better, localizes the effigies) with the same size as he who looks with naked eye, both if the lenses are positive and negative. If there is some slight difference, particularly when the power of the lens is high, this is due to the fact that the lenses are not at a zero even if little distance from the eyes (of the order of 1 cm).

If the object is placed at the focus of the lens, the formula which expresses the magnification $G_{\rm p}$ is particularly simple:

$$G_p = (f + d)/f$$

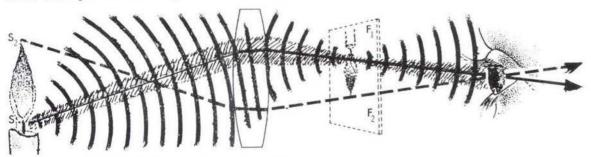
Thus, $G_p=1$ for d=0, as shown in the figure. We have reported here this formula, to emphasize its difference with that of the conventional magnification $G_c=25/f$.

The formula of the conventional magnification claimed to indicate a feature of the lens itself, represented by f, by means of a convention, represented by the 25 cm. The new formula of G_p indicates that one cannot say 'how much a lens magnifies' if one does not know the distance from the eye to the lens, and if one is not sure that the observer will localize the effigy in the plane of the object.

Fig. (195)

THE CONVENTIONAL THEORY OF LENS MAGNIFICATION

How the Eye Sees through a Convex Lens



Here we trace light from the ends of a candle flame. When waves from S₁ bottom of the flame strike the lens, the centers are slowed down. The waves leave the lens in concave form to focus at F₁. We can trace their course by the solid ray. The broken ray shows light from S₂ focusing at F₂. A screen at this location would show an inverted image. Because the image can be shown here, it is called real. If no screen is present at the

focus, waves still radiate from F₁ and F₂ as new sources. When waves from each point enter the pupil of the eye, they are focused on the retina. Thus the eye "sees" the flame as though it were on the screen. (Shadedoreq indicates the light which enters the pupil of the eye from F₁) Actually, the inverted image that we see on the screen is brought event in the eye. The brain corrects the change and we see the image inverted.

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"The localization of the effigy in the plane of the object occurs often but not always. In particular, the observer may observe an unknown object through a lens, without knowing where the object is (for example, in taking away any possible reference around the object). In this case, the results of the observations are strange and unexpected. The localization generally occurs in an arbitrary way on the basis of elements supplied by the fantasy of the observer. One cannot think it possible to express in mathematical terms such an undefined situation.

A simple and easy check of the formula of Gp is obtained for d=f. In this case Gp is always equal to 2, for any value of f. Accordingly, if, as shown in Fig.196, we place an object in the focal plane of a lens and the eye on the opposite side at the same distance from the lens, we always see a figure twice as large as the object, provided that we localize the effigy in the plane of the object.

For d = 2f, $G_p = 3$. In general, for d = kf, $G_p = k + 1$, for any lens.

Fig. (196)

If one asked for a k-times magnifying lens, nobody could answer. But this was a consequence of the claim of considering the images as physical entities, that could be evaluated by means of exact classical formulas. Today we can answer that question, not by indicating a lens by means of which any object should be seen, from any point of view, with a prescribed magnification k, but by indicating some conditions that allow a normal observer to see a figure magnified k times with respect to the object (as normal observer, we intend an observer who localizes the effigy in the plane of the object, as most observers do). The solutions are infinite. One of them consists in taking a lens, the most easily available one, in putting the object in its focal plane, at a distance f from the lens, and in placing the eye at a distance (k - 1)f from the lens.

"We can now easily understand the behavior of those who put a negative lens in front of their eyes, like, for example, the myopes. These people localize the effigy by which they represent the external world, without taking into account the ray paths, or better said, the divergence of the ray beams which emerge from the lens and enter the eye. Such divergence is used only to obtain a sharp image on the retina, and therefore to deduce the angular size of the effigy, which is almost equal to the angular size of the object, because the lens is very close to the eye. This is the task of the lens. For the localization of the effigies, the divergence of the rays is completely disregarded: the localization criteria are the same as those utilized in unaided vision."

THE ADAPTATION OF THE PSYCHE.

It is common knowledge that in psychology a person can wear a transparent green patch as a filter over one eye and a red patch over the other eye and after two weeks or so the eye will get habituated to this new situation after some discomfort. When these filters are removed we see for several days images half green and half red when we look at physical objects. This proves that our sense of color has nothing to do with the physical eye but that color is perceived either by cells in the occipital region of the brain, which adapt themselves to recognition of different signals from the nervous system, or that the recognition goes even further back beyond the brain cells to the psychic awareness which we call "consciousness". Ronchi gives some examples of this:

"The reconstruction of the external world by means of effigies is an important process, too important for the life and activity of the observer. Accordingly, the psyche utilizes not only the information received through the eyes: the psyche does not believe in it, just as the philosophers decided to do in ancient times.

At this proposal it is interesting to report an experiment done many years ago and repeated many times. By putting in front of the eyes two prisms of the type called 'Amici prisms' or 'whistle prisms', it is possible to reverse the retinal images: all the retinal images of the external objects turn out to be reversed with respect to the images which were formed without the prisms. The effigies created by the psyche turn out to be reversed, according to Kepler's theory. The experience checks this effect.

"However, if the prisms are fixed to the eyes in such a way that they are not taken away for some days, the following unexpected fact occurs: after about one week, the effigies are again in the previous positions. The psyche has changed the rule of the correspondence between the retinal image and the apparent world.

If now one takes the prisms away from the eyes, the apparent world appears once again reversed: but after only two or three days it is seen in the correct position. We said that the psyche considered as sure the directional information provided by the position of the retinal stimuli. This is true, as far as all is right. But when the psyche is forced to realize that something is wrong, it suitably modifies the interpretation and the utilization even of that information, in spite of the fact that it is really precise information. It is therefore reasonable to assume that the psyche suitably processes the information about the distance, which is always weak and poor, even in the two eye vision.

Let us now go back to the experiments carried out with spherical mirrors. The localization does not occur so simply as through lenses, because this is impossible: the object is in front of the mirror and the information which arrives to the eye brings too much information about the position of the image. Moreover, there is the daily experience, according to which one is used, in the presence of a plane mirror, to seeing the images behind it, at a distance from it almost equal to that from the mirror to the object. The curvature of the concave mirrors, from a certain distance, is not perceivable. Accordingly, the localization occurs as usually, independent of the rule of the telemetric triangle. However, the position of the eye of the observer affects the size of the localized effigy, according to the same reasoning done for the magnifying lens: this explains the fact that when the observer goes far from the mirror, the apparent size of the effigy increases. . .

We have isolated the hidden assumptions which are at the basis of the classical theory of optics, and have shown the purely mathematical character of this theory, inasmuch as it must be considered an ensemble of deductions from an initial assumption rather than the representation of experimental effects. This has yielded important conclusions. The concept of optical image has been improved in order to better correspond to the requirements of the investigations which are done about it.

THE DETECTION OF IMAGES IN MATTER.

"Now we must speak in terms of various kinds of images, of different nature.

First of all, we consider a physical phenomenon, which, in terms of modern physics, can be described as follows. There is an 'atom cloud', which constitutes the object-body and which emits radiant energy. As such it is not possible to speak of luminosity of the cloud and of its color nor its form, inasmuch as it is constituted by moving and continuously variable elements. The emitted energy propagates in the surrounding space, crosses other atomic clouds with shape and composition different from that of the surrounding medium, is deviated by these clouds and is concentrated in an ordered distribution, which is in some relation to that with which it had been emitted by the atoms of the object. This new orderly distribution is called ethereal image, and is a phenomenon of physical nature.

The problem is now to better know this phenomenon, which up to now has only been sketched. To this end, according to the method indicated in Ch.15, we will introduce representations more and more refined and significant.

Let us begin with a mathematical representation. The body is assumed to be constituted by points. The energy is assumed to be distributed along straight lines, or rays, presenting some strange properties, as that of being 'reflected' or 'refracted', or that of splitting into a beam of straight lines, each of which is refracted, with a different law, and so on. These straight lines, by refraction in the so-called transparent media, limited by curved surfaces, or by reflection on the surface of other bodies, form cones, more or less precise, whose vertices constitute an ensemble which is related to the ensemble of the points of the surface of the body from where the rays started. This is a very schematic representation of the ethereal image, and is called geometrical image.

"Experience puts in evidence substantial defects of this representation, especially as regards the finer details. Thus it was expedient to work out a new representation, according to which the emitted body is considered as constituted by oscillators of atomic size, each of which emits electromagnetic waves (the nature of the waves is of secondary importance for our present purposes). The waves propagate in the medium where the body is imbedded, and encounter media with different structure, which transform them into spherical, or almost spherical, waves with centers at points different from the points from which they had been emitted. The locus of the centers of the waves emerging from the optical system constitutes a more precise representation of the ethereal image, but is still a mathematical image. Both the representation based on the geometrical-ray model and that based on the wave model are called computed images and have a mathematical nature.

In order to pass to the experimental field, it is necessary to detect the ethereal image. There exist various detectors. The most important are

- the human eye,
- the photographic emulsion,
- the photoelectric cell.

The images so obtained are called detected images, however each one of them has a nature different from the others, and, clearly, different from the preceding ones.

Let the detector be the eye. The radiation (or the radiant energy) which forms the ethereal image and then continues to propagate, enters the eye and impinges onto the retina. The radiation distribution across the retina has an order similar to that of the distribution in the ethereal image. The new ordered distribution is called 'retinal image'. There follows a physio-psychological process which results in the localization outside the eye of a luminous and colored effigy, whose angular aperture is equal to that of the ethereal image as seen from the eye. This effigy is the optical image and has a psychical nature.

THE PHOTOGRAPHIC IMAGE.

"If a photosensitized emulsion, spread on a plate or a film, is placed in correspondence to the ethereal image, the radiant energy produces sub-atomic modifications in the salts of the emulsion: after some chemical treatments, opaque grains precipitate in a transparent layer with an orderly distribution similar to that of the energy in the ethereal image. This is the photographic image and has a chemical nature.

Analogously, if one puts a photoelectric cell in correspondence to the ethereal image, electric currents are originated, which can be recorded with various devices. The ensemble of these recordings constitutes the <u>photoelectric image</u> and has an electronic nature.

Since all these images have different nature, their comparison is objectionable. A comparison in general has a meaning only when the compared quantities are homogeneous. Consequently, many ideas must be changed: for example, it cannot be said that one takes a picture of what he is seeing. It is evident that one cannot take a picture of an effigy created by his own psyche and localized by the psyche where the psyche wants to see it.

The ethereal image is hypothetical, like radiation and all the external world, as we already said. The computed images are a product of our reasoning and have no physical existence. The detected images, on the contrary, have an experimental nature. One could think that they represent the ethereal images and therefore check the validity of the computed representations. Unfortunately we cannot arrive at a conclusion of this type except only partially."



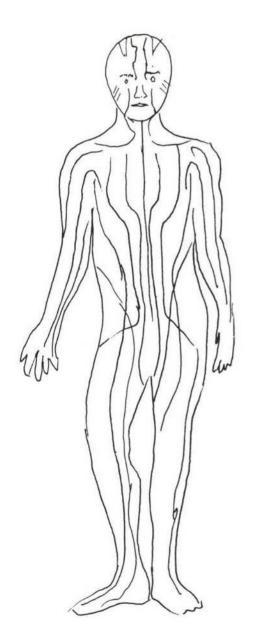
DETECTION OF ETHERIC FORMS. As much as science does not like to talk of <u>ether</u> and the effects of imagination on the observations viewed through the various objective instruments of scientific investigation, we are still confronted every day by the inability of science to explain the nature of anything fundamentally meaningful. Whatever it is, electricity, cosmic dust particles, or the hundreds of theories of creation, or more important man himself, the present scientific approach seems logically doomed to die in its own contradictions. Nature however will go on supremely oblivious to the arrogant definitions which have been placed upon her by minds which, although brilliant in many clever ways, are totally blind to one thing: the role of consciousness in the production of images.

Nature is obviously a great imaginer because there is nothing manifested in the whole of creation which does not have some form, some pattern or some image by which it holds itself together as a cloud or bundle of energetic particles. The etheric patterns of these images are obviously written not only in the DNA structures of cells, which act as a template for physical reproduction, but also in some guiding fields which can change the DNA images under certain conditions of evolutionary growth.

To assume these changes are merely random is to reveal our ignorance of randomicity. Not even the smallest business would succeed if man did not have power to control the production of more favorable events than unfavorable events. Let us face it! Nature is big business and knows how to make favorable decisions on macro and micro levels of existence which will preserve it eternally from human ignorance of the most clever kind. The images through which nature combines and recombines its energy are multiple and infinite and only man's ignorance can limit its ramifications.



Nevertheless there is one thing in nature which manifests itself without form until it is quantized by immediate contact with some object or hits some detector or absorber which turns it into energy. This is what science calls radiation or electromagnetic waves coming from every direction in space from stars like our own sun. These sources of radiation and light send out their oscillating waves of their enormous energy in every direction and part of it eventually reaches us and impinges on the retina either as a luminous source point or by being reflected off atmospheric particles of matter which become illuminated. Yet the light which is passing through all of space is colorless and invisible to our consciousness, has no form, no image, no pattern, no discernible features because of its homogeneous vibrations. The detectors we use to experience the presence of this light, such as the human eye, photographic plates, and photoelectric cells, will only give the frequency characteristic and strength of the light source after it has been absorbed by the detector. We find that light has a pattern, called a spectrum, which is revealed only when passed through a medium of some kind. But this image of light with its seven thresholds, which we see in the rainbow, depends always on some filter such as raindrops in the sky or some instrument which absorbs and disperses the light energy, such as the molecules of a prism. The seven levels emerge as the pattern of light and radiation and apart from this signature light has no form or existence as matter. Light up to this point of contact with our detectors is completely unmanifested and unquantized.



It is the same identically with our own consciousness and has identical characteristics. Like starlight it goes on forever into outer space unless we stop it by directing it to something else in our consciousness. Like "light" our consciousness does not stop until it hits something. It cannot bend around corners in our vision experience and it is totally unmanifested in any objective form, or measurable scientifically in any form, until it interacts with some physical entity called a body. Its form cannot be detected by any instruments known to man today unless this stuff called consciousness passes through the human filters analogous to the seven layers of the rainbow spectrum. The human detector of this inner light called consciousness which shines out of senses such as the eyes and lights up the world, is the most variable medium since there are essentially no two human beings exactly alike. The effects of the quality of the detector, whether we look on it as a physical body, as a soul, as a memory or as a mental entity, will depend entirely on its translucency. Like the lenses of Galileo which changed the course of science, it was the quality of the physical detector which made observations possible, even though lenses had been around for centuries before.

Supersensonics is the science which is now concerned with polishing the lenses and mirrors of the soul so that we can receive and transmit the light of the universe more as it is. Before we can go into a deep study of the science of the soul, however, we must grasp the effects of the various levels of consciousness and their detectors of cosmic radiation. The first level must concern the one we are most familiar with, the level which most people communicate with, and the physical level by which we become aware of the psychic sensation we call "light". Professor Ronchi illustrates this level very concisely and all seven levels of light absorption are dealt with in my book "Nuclear Evolution". Let us quote from "New Optics" some important examples:

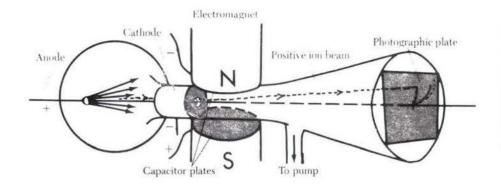


Fig. 196A In Thomson's mass spectrograph, electric and magnetic fields deflect the positive ions in two perpendicular directions. All ions having a given charge-to-mass ratio hit the plate on a given parabolic curve. The mass of the ion can be computed from the measured spread of the curve.

THE EFFECTS OF THE DETECTOR.

"The study of the mechanism of vision and the comparison with the mechanism of photography and projection (which can easily be extended to the photoelectric images) proves that each detected image does not perfectly reproduce the ethereal image, but is deeply affected by the detector - the influence of the detector is more important the finer the details are which one wants to put in evidence.

It is well known that the answer of the detector is not linear, inasmuch as there exists a lower threshold of sensitivity below which the detector does not answer at all, and a saturation limit over which the answer is independent of the agent.

In the case of the photographic plate, everybody knows that, by varying the exposure time, one can obtain underexposed pictures, where one cannot distinguish anything or almost anything, because the emulsion has not been affected by radiation; or overexposed pictures, where one cannot distinguish anything because all is almost uniformly blackened. For intermediate exposures between these limits, one obtains different pictures for different exposures. In some pictures one sees some details, in other pictures other details. Among all the pictures, some are better than others, because they provide the largest quantity of information about the structure of the ethereal image, but cannot certainly give all the information. Moreover, it is evident that the details having smaller size than the grainy structure of the emulsion cannot be put in evidence. Also the details larger than the grains but still very fine, are markedly affected by the exposure and the diffusion of the radiation in the emulsion layer.

Similar considerations can be repeated about the operation of the retina and of the eye in general, as well as about the photoelectric systems.

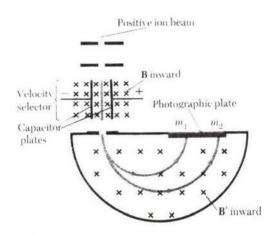


Fig. 196B The Bainbridge mass spectrometer (schematic). All ions of a given charge-to-mass ratio strike the plate at a given place.

"One can conclude that the 'detected images are not only functions of the energy distribution in the ethereal images, but also of the value of the energy, in dependence on the characteristics of sensitivity of the detector.'

This conclusion brought forth completely new directives in the development of optics. The energetical optics was born, which takes into account the available energy for the visual observation as well as for photography or for photoelectricity. The conclusions of the new optics are basilar because they have an experimental character. The useful images are only the detected ones. Knowing the agents which may affect the structure of these images is the purpose of the new optics and related sciences.

As a matter of fact, this has brought to a new organization of the sciences which, before, were included in optics."

The main difference between the new optics and classical optics is that now one takes into account the detector, while before, the analysis was confined to the computed images. Classical optics is a mathematical science, which, starting from a hypothesis, deduces its consequences. The hypothesis, which, as already emphasized, is the rule of the telemetric triangle, should replace the whole psycho-physical process of vision.

This rule has been useful, because, when a process is complicated, a good procedure to study it is to separate the different sectors, by fixing the sectors other than that under investigation in a given value or in a given form. This happened just with the rule of the telemetric triangle. But, once a sector has been deeply investigated, one must turn the attention to the other sectors, giving up the fixed value or form and studying their true behavior.

Accordingly, the <u>computed image</u> must be considered as a provisional representation and not as the final truth. On the contrary, in classical optics, the computed image was considered true, while the detection was considered as a technical detail, in the sense that it had only the task of experimentally verifying what was expected with the help of computation. If the experiments checked the theory, all right. If not, this was imputed to lack of ability of the experimenter, or to bad quality of the material, or to the unsuitable way of proceeding. The experimenter had to find the suitable conditions to check what had been deduced from the theory, that is by computation.

However, the computed image does not take into account the energetical conditions. Its structure depends only on the shape that the optical system gives to it. The detected images depend on other elements, which must be taken into account as far as possible. Consequently, the computed images must be given their actual value, which is that of provisional and schematic representations, while the detected images must be studied by taking into account the detector with its characteristics and limitations.

Summarizing, we have examined three groups of operations:

- a) A body emits radiations. A system of lenses or mirrors distributes them. An eye detects them. Thus one has the optical images. The science which studies these phenomena is optics. It is the science of vision.
- b) A body emits radiations. A system of lenses or mirrors distributes them. A sensitive emulsion detects them. Thus one has the photographic images. The science which studies these phenomena is photography.
- c) A body emits radiations. A system of lenses or mirrors distributes them. A photoelectric cell detects them. The science which studies these phenomena is photoelectricity.

These three sciences have many analogies and many points in common. Each one proceeds along its own way, with its own specialists, even if at the basis there is a common mathematical study.

With this organization and classification, the ideas are much clearer and many ambiguities are eliminated."

18

GRAVITATIONAL FIELDS & CONSCIOUSNESS.

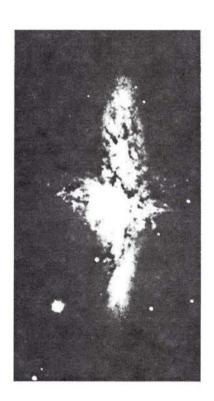
There are certain fundamental concepts of science as it is taught today in universities throughout the world which are subject to the illusion of a separated consciousness which does not attempt to participate directly in the experience of nature and yet this same consciousness derives certain theoretical concepts inductively from experience such as measurements, observations, etc.

Every natural science must make direct contact with the world we live in and this means the skill of observation through our senses of sight and touch and other mental faculties must become an essential part of our understanding. Modern science makes an effort to experiment, which the Greek science avoided by putting a greater emphasis on logical speculation. Einstein makes this clear in a statement which is paid lip service today but very few scientists actually believe in it wholeheartedly:

"Pure logical thinking cannot yield us any knowledge of the empirical world: all knowledge of reality starts from experience and ends in it. Propositions arrived at by purely logical means are completely empty as regards reality."

It was because of this view that he never attributed much reality to the present development of Quantum physics which he saw as brilliant speculations which required more and more bizarre unprovable concepts in order to explain its inconsistencies. In his discussions on the methodology of science he felt nature was far more clever and showed an intelligence that was far superior to all the systematic thinking and acting of human beings. The speculations of quantum mechanics with its concepts of antimatter and principles of indeterminacy were to him an utterly insignificant reflection of this intelligence.

An "exploding" galaxy, such as M 82 shown here, may be a prime source of cosmic rays. (Photograph from the Mount Wilson & Palomar Observatories.)



EFFECT OF
METHODOLOGY UPON
CONSCIOUSNESS.

In all discussions on methodology of science, the terms observation and experiment are frequently used as interchangeable concepts. Observation implies merely the contemplation of phenomena and the most pure observation is considered to be the simplest mathematical one where the observer's own consciousness is completely eliminated in order to get rid of any subjective thoughts. The price we pay for this clarity is that the observer's own ignorance of himself and the nature of consciousness with all its tricks, is completely swept under the carpet and ignored. Hence science today knows no causes but only deals with effects, since the causes often lie hidden in the consciousness of the observer. Quantum physics refers to these causes as "hidden variables".

Observation is the study of what is, whereas <u>experiment</u> presupposes the deliberate arrangement of new situations that can be observed and recorded. The attempt in both cases of observation and experiment is to extract reliable information from nature about its operations. However, this is not simple.

The common factor in all observations is universally taken for granted in all scientific work. An observation made on one occasion may be expected to occur again on any other occasion when the same conditions are identical. Some thinkers regard this statement as a mere article of faith, while others view it as an inherent property of nature. Ernst Mach says, "All our efforts to mirror the world in thought would be futile if we found nothing permanent in the varied changes of things."

LOCALIZATION OF THE OBSERVER DETERMINES REALITY.

The question of whether nature is capricious or dependable and orderly is a creation of human consciousness, just as all experience of phenomena is. What we are concerned with here is not whether scientific methodology is useful, but whether the procedure gives rise to laws which trick the human mind into mistaken observations which, although good rational explanations, are not reality.

Fig. (197) The following diagram tries to visualize the process:

-m_oC² Annihilation +m_oC²

e+

Macerialisation

Even for Einstein the field theory of matter remained unverified. One of the currently attractive speculations concerning the materialization of "particles" from the field-background and the reverse process of the annihilation of particles into energy-states was provided by Dirac in 1931.

A scientific law must ever remain a general statement expressing a correlation between observations. Therefore the nature of the observer who observes, plus the mental conceptual point of view of where he localizes himself, or the localization of the phenomena he is observing, becomes of paramount importance to the formulation of scientific laws. The setting up of these laws is a highly imaginative creative act and therefore our ideas of space, gravitation and light must be considered as merely conceptual experience. The <u>basic assumptions</u> rather than the elegance of the hypothesis are what is important in our experience of reality.

THE REALITY OF GRAVITY.



Historically some familiar observations have shown some understanding on the question of proportionality, particularly in respect to gravitational forces. Galileo, for instance, discovered that all material bodies fall at the same rate in space regardless of the difference in their mass. This means the acceleration of gravity is the same for all free-falling bodies. This indicates that the weight of a body is proportional to its inertial mass and therefore a gravitational mass would be proportional to its weight. Mathematically we are justified in concluding that a single quantity "m" is sufficient for both the inertial mass and the gravitational mass because they are numerically equal.

The center of a bodily mass is found to coincide with its center of gravity which is the point from which a body must be suspended in order to remain in a static equilibrium in the exact position in which it is placed. The theory of motion of a simple pendulum mathematically shows that at any given point in space, the period of swing of a pendulum of a fixed length of string should be proportional to the inertial mass of the bob and inversely proportional to its gravitational mass. However, careful experiments show that the periodic swing of a pendulum is independent of the mass of the pendulum bob and therefore the inertial mass \mathbf{m}^{l} and gravitational mass $M_{\mathbf{q}}$ cancel each other out.

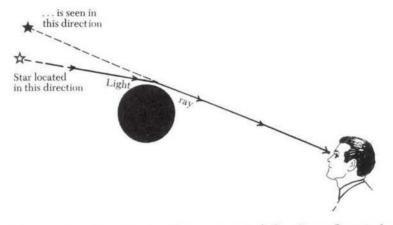
Hundreds of thousands of stars, held together by gravitation, make up this globular cluster in the constellation Hercules. (Photograph from the Mount Wilson and Palomar Observatories.)

The connection between these two attributes of mass remained unexplained for centuries after Galileo but in 1914 the suggestion of Einstein was that there must be a fundamental connection; he reasoned that the effects produced by accelerated motion and by gravitational action upon bodies cannot be distinguished from each other. This principle of equivalence between inertial mass and its inverse proportionality to gravitational mass, was the starting point for the General theory of Relativity. In the Special theory of relativity, Einstein saw that its effects went beyond mechanics of physical bodies and included optical and electrical phenomena as well. In the same way he realized that the principle of equivalence might be valid over other areas of our experience such as the behavior of light.

LIGHT DOES NOT TRAVEL STRAIGHT, SAYS PHYSICS.

Specifically Einstein reasoned that light rays from distant stars in passing close to the sun on their way to an observer on the earth would bend slightly. This was verified by observation of light rays from stars photographed near the edge of the sun's disc at a time of a solar eclipse, which were found to have been bent by the sun's gravitational field. (Note: the results are photographs and the tools are lenses which are supposed to validate the telemetric triangle.)

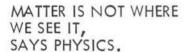
FIGURE (198) Because light rays are bent as they pass close to a massive body such as the sun, the observer does not see the star in its true position but in the direction in which the ray enters his eye. This direction is shown by the dashed line.



The most eminent scientists are not defensive of certain concepts but even go on to point out the flaws in their own work. Einstein himself indicated that $E = Mc^2$ could not be accepted as an absolute since the Special Theory is applicable to non-circulatory motion in space. The theory was only good for a uniform space, therefore the General Theory was necessary because otherwise the curvature of light rays passing through intense gravitational fields could not be explained. The speed of light "c" is calculated for a vacuum, but a ray of light passing through the more dense atmosphere from the vacuum of space would not only create a variation in the speed of light but be bent by the medium it passes through. The refractive index of the solar chromosphere acts in the same way as a prism because the particles are dense and highly interactive.

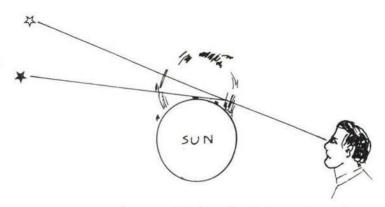






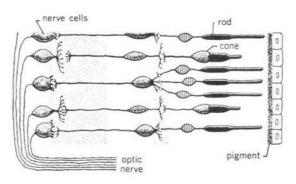


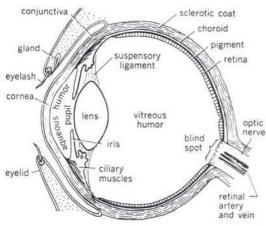
Like a giant fiery bubble, this solar prominence grew to be 250,000 miles high—more than 30 times the diameter of our earth. The start is shown at the bottom, and the final burst at the top.



This same concept, when applied to the interaction of consciousness with light, yields some interesting ideas about the nature of reality. That is, if we consider that in Supersensonics, the principle of equivalence applies to our internal experience of light or radiation and to the light itself, then the action between the two qualities, called consciousness of the observer and the behavior of light, cannot be distinguished from each other. Not only mathematically do they cancel each other out but experientially we cannot see any difference between the invisible stuff we call consciousness and the invisible stuff we call radiation or light. Even when we directly experience the "lux," which is psychic in character, with the inner light of consciousness, we cannot discriminate any difference between the outer light of the stars and the invisible radiation throughout the whole of space. In our experience of the external universe we don't see radiation any more than we see consciousness.

The interesting point about such an application of Einstein's idea of the effect of gravitational waves on light is that it shows we do not see the star in its real position in space, due to the bending of the light waves. However, this bending was only a small amount which was not noticable with the ordinary measurements with the human eye. In fact, Einstein's theory gave nearly the same results as the classical theory evolved from Newtonian physics. There is only a matter of a small variation in the orbit of Mercury which the theory predicts will be turning in space in its own plane at the extremely small rate of one rotation every 3 million years. It is this disagreement with Newtonian mechanics that is considered to be one of the best experimental verifications of the theory of relativity.





The gross distortion of all optical measurements by our <u>psychic</u> <u>representation</u> of waves of light in our consciousness outlined by Ronchi, appears to have very little to do with these minute measurements of the gravitational effects due to inertial mass and gravitational mass. A new explanation is needed which clarifies the functions of the senses of sight, hearing, touch, etc. by which external light is received by an observer. This explanation may not conflict with observed physical phenomena accurately verified, but may show that the proportional warping of our experience can be explained by applying the principle of equivalence to both our direct experience of <u>consciousness</u> and the electromagnetic waves of <u>light</u>. It will also reveal a new law of <u>proportionality</u> which explains the origin of the spectrum.

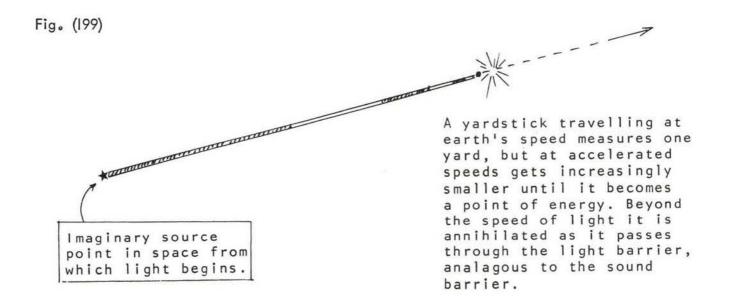
SUPERSENSONICS IS EQUAL TO ANY OTHER SCIENCE BECAUSE "IT WORKS".

Although science has used the spectrum for measurement of all our optical visual experiments on relativity, it still has not the slightest explanation for the existence of the spectrum. The results obtained by Supersensonics are no more outlandish than those obtained by optical systems. Believing in something merely because "it works" without knowing "how" it works would be considered quite unscientific in any other area. It would become the science of "effects" rather than "causes". If we look at all scientific theories today we can see the number of "so and so effects" as against the number of explanations for fundamental causes. We can realize that modern science is an imposter claiming to know reality, when in fact it knows nothing but the effects of external sensory measurements that do not at any time take the observer's consciousness into account. Instead of considering this a grave lack, it is considered a virtue, to keep the observer and the laws of consciousness and the new optics out of any observation. Even the warping of space permitted by the Einstein theory in practice does not require the application of the time-warps to the measuring devices or the observer's consciousness in the presence of gravitational fields such as the Earth's.

Obviously a measuring device or yardstick travelling at or near the speed of light would proportionally disappear from our material world and this would render an actual measurement impossible with any such earthly yardsticks.

COLLAPSIBLE YARDSTICKS FOR MEASUREMENTS OF REALITY.

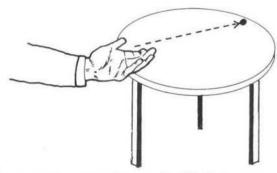
In other words, if the mathematically ideal universe is shrinking or expanding in some great cosmic breathing exercise, all the material objects in it, including the yardsticks, the seconds, the meters and other standard fixed measurements, also are expanding or contracting with it. Because of this fact we say scientifically that there is no absolute knowledge, that all is relative. But relative to what? The answer from the materialists is that everything is relative to each other but not relative to any so-called absolute state. "There are no absolutes," is itself an absolute statement. Consciousness itself is an absolute state which verifies such an absolute statement about our universe. A consciousness validating itself or excluding itself absolutely from its own observations must be a very blind or ignorant consciousness. But we find some of the most brilliant men on the planet and most of what we call the scientific community thinking along these material and atheistic lines. Perhaps we should go deeper into the psychic causes which permit the observer to separate his own consciousness from the universe it lives in and try to see where it went wrong in looking at Einstein's theory as a justification for such absurdity.

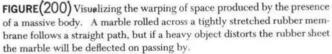


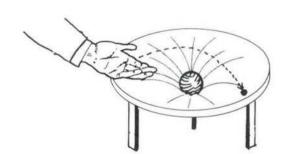
CURVATURE OF SPACE.

The point of view of the relativity theory of gravitation may be summarized as follows:

The <u>classical</u> theory of gravitation originated by Newtonian physics invokes the action of a force exerted between various bodies, while the <u>relativity</u> theory attributes such energetic effects to a change in the properties of space surrounding the material bodies.







According to the relativity theory, the presence of a massive object in space produces a warping of space itself so that its environment is not linear but curved. The natural path of a moving object in space or a light beam travelling through space from all the distant stars is no longer a straight line but is curved.

WHAT EINSTEIN DID NOT SEE ABOUT SEEING. Neither Newton's nor Einstein's formulations offer a reliable explanation of gravitation and Einstein himself was the most aware of this lack and worked for most of his life to provide answers which would include all the contradictions of the present physical measurements. What he did not see was that our psychophysical experience of physical events did not actually obey the inverse square law which underpins both the Newtonian and Einsteinian physics.

This law, which was inherent in his vision of a row of lamp posts disappearing through perspective into infinity, gave him his insight into the relativity theory. Then he applied this same analogy to objects travelling at the speed of light. He saw that if the lamp posts were travelling at the speed of light, they would disappear into a dot or become telescoped into a single point. He reasoned that if they were travelling faster than the speed of light they would disappear entirely as a material entity and become energy.

What he did not see was that although his insight was true, the

disappearing lamp posts which shrank into small points in the distance, were actually obeying a law of vision which was caused by our consciousness travelling at the speed of light or faster. This law of the inverse square of the distance was brought to the experience of material objects in space in such a way as to telescope them either smaller or larger according to their distance away. Whereas in fact this was only an apparent phenomenon, it was taken as the real behavior of light and applied to vast interplanetary distances. We know by taking a tape measure and measuring the physical lamp posts that they do not physically shrink according to the laws of perspective. Yet all our laws of optics are based on this shrinking effect that is still today explained by the telemetric triangle which incidentally does not conform to the reality of physical existence. Perhaps some future physicists in 500 years time will wonder how naive we were not to see the obvious. Blessed with hindsight they will laugh at us as much as we laugh at the primitive explanations of medieval times.



SUPERSENSONICS & THE INVERSE SQUARE LAW.

To conclude the background of our ideas for the new science of Supersensonics, the Newtonian physics offered an explanation based on the assumption that a mysterious force exists between gravitating bodies, whereas Einstein relies on the idea of bending rays of light travelling along the equally mysterious curved lines



SIR ISAAC NEWTON His Genius Gave Modern Science Its Foundations

of warped space. During Newton's era the idea that bodies could act on each other while being completely separated in space was not only mysterious but distasteful to reason. Later, through increasing familiarity in applying these mechanical concepts to electric and magnetic effects, the idea of "action-at-a-distance" became more acceptable. Nowadays no one has any trouble in accepting these ideas and thanks to Einstein we have a theoretical framework even more accurate and beautiful which goes much further than Newton. However, neither of these theories contains any explanation of why gravity exists or what causes light, electricity and magnetism to behave according to the inverse square proportion law.

Experiments have proved that the force of the gravitational attraction between two particles of matter, or two planetary bodies, is inversely proportional to the square of the distance between them. Doubling the distance makes the force one fourth as great; reducing the distance to one third will increase the gravitational pull by nine times etc. This is a fundamental law of all material bodies and incidentally of our faculty of vision and light. Yet if we examine these observations very carefully, they are all mental constructions mathematically posed as problems external to the observer which only prove the apparent world. The actual experience of these events is beyond our sensory awareness. Yet it is the senses which are called upon to validate the observation and not the Self which has been supposedly excluded from the observation by a scientific trick. The nature of this trick played upon the Self by the mind is at the back of all mental operations. The process of mathematical deduction and Self-evident Truths are part of this trick.

TRICKS OUR MIND PLAYS ON SELF.

Einstein's theory of Relativity is in fact a mathematical insight which by measurement appears to be valid in the same way as do our optical observations using the telemetric triangle to construct an ideal but non-existent eye. In exactly the same way that this optical-mathematical model only works for a few very close reflections in mirrors and images in lenses, the theory of relativity only works in very far distant measurements which are purely mathematical constructs of light and radiation. Einstein himself said there are no such validations at close quarters in direct human experience. Nor does the theory of relativity explain any relationships between the laws of the observer's vision and the inverse square law. It is purely a geometric representation based on certain prior assumptions about light; this in turn is validated by the tool of mathematics acting as a sort of formulized logic. Although such validation must eventually be confirmed by predicted experimental results, the same difficulty as with the optical laws, giving us the expected logical answers, conflicts vastly with our actual experience of light waves.

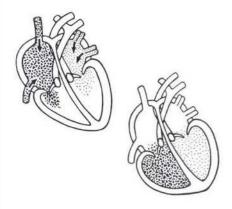
The way we use light scientifically to establish proportional measurements of velocity, gravitational mass and distances, as well as the way we use mental relations between the mathematical models which we build, are all concerned with consciousness and its operations. The process of personal identification with these models is never set out and therefore at best they can only allow the observer an intuitional insight into the abstract phenomena they portray. Throughout the operational view of science which is concerned with measurement, this identification causes us to make false assumptions which, although mathematically sound, have no reality whatever because the position of the single observer and his consciousness have not been taken into account in the setting out of the problem.

Fig. (200a)

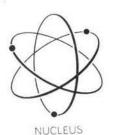
GRAVITATION IN "WARPED SPACE"

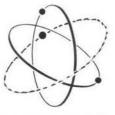
For a partial illustration of Einstein's explanation of gravitation, imagine two pieces of rubber stretched tightly on frames. On one (left) a small ball (small mass) warps the rubber slightly. On the other (right) a large ball (large mass) produces greater warp. Now, if marbles are rolled across the warped portions, they will alter their motion as shown. If the marble in the left-hand picture represented light from a star passing the sun, the star would appear in the position marked by the broken line; that is, there will appear to be a stellar shift. Einstein's explanation assumes a similar working of the continuum.

RESONANCE & COSMIC PULSE BEAT.



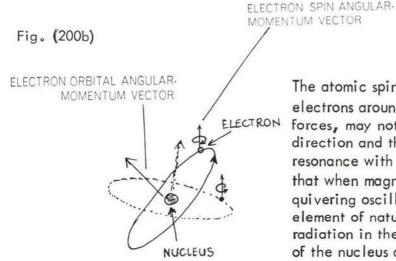
Throughout the whole of nature we are confronted by an array of vibrating systems from atoms to entire galaxies which guiver at certain frequencies. Even the human organism is controlled by a pulse beat to which the cells in the pacemaker muscle are tuned, causing the heart to contract. This phenomena of guivering matter appears also to be present in radiation or light which also vibrates to certain frequencies. The quivering of atoms goes on at several thresholds which have been related to their spin. The binding energy which holds the atoms together as molecules and cells appears to be related to the electromagnetic fields comprised of electrons. The spin of the electrons causes an atom to become a miniature magnet that attracts one atom to another depending on its nuclear configurations. The binding energy which holds the inner parts of the nucleus of the atoms together, appears to be about 100 times stronger than the electromagnetic field which attracts the atoms to one another. The strongest force in nature also vibrates and spins like a top around the configurations of protons and neutrons in the nuclear core of an atom and also generates its own quivering magnetic lines of force.

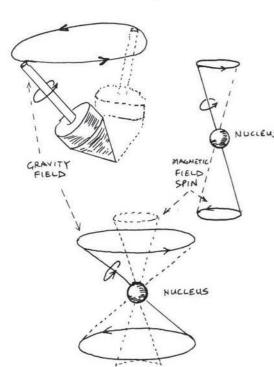




EXCITED NUCLEUS

The nuclear spin makes the atom one of the smallest but strongest magnets in the universe and we know this rotating force is called nuclear energy. It is possible to tune in to the radio frequencies in the hearts of atoms and discover the periodic pulse beat of the inner core. These pulse beats are now used as atomic clocks because the earth's passage around the sun shows a variable speed in its orbit. These nuclear energies broadcast a characteristic frequency in microwaves which make it possible to check the Einstein postulate that the intensity of the gravitational field produces an effect not only on the electromagnetic fields of the electrons surrounding the core but also on the atomic radiation from the nuclear forces within the atom's core. These atomic clocks are now the international standard of measurement agreed by convention to be correct time. However, the measurement of time's periodic occurence by the nuclear spins of an atom is only relative to the atom's position on planet earth. If these atomic clocks vibrating at the heart of atoms were to be travelling in the outer arms of our spiralling galaxy or even in accelerated motion around the earth in a satellite, they would slow down their pulse beats and therefore these exact clocks would run slow and be no good for measuring material events.



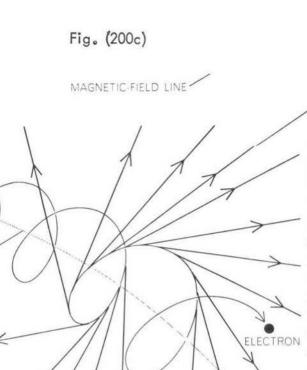


OSCILLATING MAGNETIC FIELD

The atomic spin in the nuclear center and the atomic spin of the electrons around the nucleus, which both generate magnetic forces, may not have their magnetic poles orientated in the same direction and the quivering of the nucleus may not be in resonance with the outer shells' frequencies. We may speculate that when magnetic resonance occurs and the frequencies of the quivering oscillations line up in harmony then we have a stable element of nature which can soak up large amounts of cosmic radiation in the form of cosmic rays. When the spinning patterns of the nucleus are not in resonance with the electron shells around it the element becomes unstable and begins to disintegrate through weakly radiating its energy and the result is its decay. By subjecting the nuclear particles to magnetic forces and radio beams it is possible to disturb them and sort out the atoms according to their spinning patterns. However, this operation merely establishes what these particles do under attack or at best describe their orbital preferences and tolerances rather than their actual roles in the undisturbed natural resonance with their environment. By interfering in their natural spins and magnetic movements we can calculate the difference in magnitude which corresponds to the energy in a selected pair of orbits.

Research shows that the nuclear orbits soak up energy and change their spectral lines proportionally to the frequency of the quivering oscillation and are therefore inversely proportional to the quanta of nuclear energy shared by all the particles as a nuclear group. However, instead of looking upon these forces as patterns of energy presenting themselves in our consciousness as vibrations which disturb our mind-stuff, physicists began to regard them as objective bits of matter with real existence outside of the human consciousness in which they arise. By creating instruments which record the quivering vibrations of matter in frequencies of man-made earth time an exact order was imposed upon natural events by using mathematical conventions and constants such as volts, electron volts, Angstrom units, Oersteds, Rontgens, etc. all named after the men who invented them.

The cause of spin and the rotation of material bodies in motion around their wave axis, with the outer parts of the galaxy rotating at linear velocities increasing with the distance from the center, was not explained by any of these observations or theories of matter. It was a consequence of this situation which led one of physics' greatest mathematicians, Erwin Schrodinger, to say that,



"The old idea about ultimate particles was that their individuality was based on the identity of matter in them. . . The new idea is that what is permanent in these ultimate particles or small aggregates is their shape and organization. The habit of everyday language deceives us and seems to require . . . that a material substratum is necessary to take on shape. But when you come to the ultimate particles constituting matter, there seems to be no point in thinking of them as constituted of some material. They are, as it were, pure shape, nothing but shape; what turns up again and again in successive observations is this shape, not an individual speck of material . . . the identity of the material, if there is any, plays a subordinate role."

This of course does not say anything more except that it is the <u>form</u> or <u>pattern</u> of energy which makes certain shapes we call matter. This matter which resonates and vibrates in the same spectrum as our physical senses enables us to experience events in consciousness which we call "light", "radiation", "energy", "motion", etc. yet these events are only subjective disturbances in the consciousness of the observer.

The pulse of the atomic heartbeat and radioactive clocks which we now use to measure the exact spin and rotation of everything in man's world are really only subjective vibrations which man himself has fixed as an ideal mathematical representation of "time", when in fact there is no such ideal person who experiences such ideal time in the universe. In fact man had to invent such an "ideal" clock simply because the "real clock" of nature, the earth's orbit around the sun, was slowing down. However, if our scientific truths are valid even the "exact" atomic clocks are slowing down because the earth happens to be travelling through the outer regions of a spiral arm of an expanding galaxy and is therefore accelerating its velocity in respect to those stars near to the center of the gravitating system.

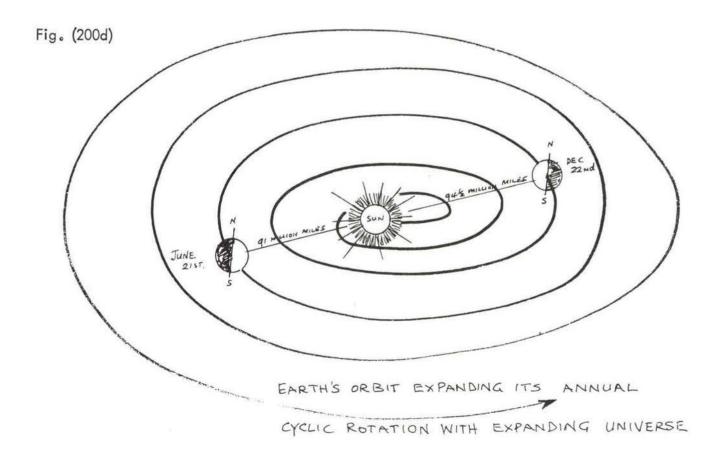


X RAY



In fact the earth clock itself is slowing down for the same reason, since the periodicity of the spin around the sun is getting larger and larger. The spin of all vibrating objects in cyclic rotation which are initially small will get continually larger as the universe expands. The only problem is that in the micro universe the quivering vibrations of cyclic oscillations are so small that they appear to be constant, while in larger systems like our earth/sun and sun/galaxy system the slowing down is more noticeable to our crude senses. The fact is that all our sensors, even when they measure mechanical radiations which man cannot perceive, are merely extensions of his sensory consciousness, whereas the real "sense" is made of the senses by means of the faculty of non-sensory consciousness. In this sense the "real" is "non-sense".

The <u>non-sensory universe</u> can only be perceived by our consciousness when the Self understands the difference between relative knowledge and absolute knowledge. The purpose of Supersensonics is to determine this difference between what nature is telling us and the representations we place upon nature with the mind.



HOW SELF-CONSCIOUSNESS LEADS TO ERRONEOUS NOTIONS. Einstein himself gives an account of this subjective-objective trap in his later writings ("Out of My Later Years" published by Philosophical Library, N.Y.C.) where he describes the present course of scientific thought as headed into mental traps which can only bring science to its own downfall as a method of arriving at "Truth".

In his discussion on the validation of sense experience he comments on its time-like order. This orderly time-bound processing of material events leads to mental conceptions of a subjective time-flow. This subjective time is then conceptualized by our personal identification with ourself as a bodily object in space. This mental concept of the bodily object and space creates the concept of objectivity, which leads to the notion that there is something called "objective time". The introduction of this something called "objective time" involves two independent operations in the mind which are separate from each other.

- 1) By identifying a time-like order with "objective time" we try to connect the sequence of temporal experiences and material events with a "clock" as an indicator of a non-human universe, i.e. as a closed system of periodic events.
- 2) The introduction of the <u>mental notion</u> of an "objective time" for the happenings throughout the whole of space, based on the velocity of light per seconds of earth time, enlarges the idea of <u>local earth time</u> to the mathematical idea of "time" in physics.

Einstein says:

"Such a use of notions independent of the empirical basis to which they owe their existence does not necessarily damage science. One may however easily be led into the error of believing that these notions, whose origin is forgotten, are necessary and unalterable accompaniments to our thinking, and this error may constitute a serious danger to the progress of science."

"We now realise with special clarity, how much in error are those theorists who believe that theory comes inductively from experience."

It is easy to see that all deductive processes and the experience of our senses which validate them only give us comparative knowledge and offer us no direct perception of the universe as it really is. The careful distinction between <u>Self-knowledge</u> and <u>comparative knowledge</u>, which is relative, is summed up in the following quote from my book "Nuclear Evolution":

THE SINGLE REALITY

Logical thinking is necessarily deductive; it is based on axioms (postulates) and hypothesis, which is a statement of a set of rules, since without these rules the knowledge would be impossible to acquire. The rules themselves are arbitrary and it is their very rigidity which makes the game of science possible. The fixing of these rules can never be final and they can only have validity in a special narrow field of activity. Senseexperience and measurement can only be interpreted intuitively by the self and cannot be adapted to logical fixation in mental concepts. All measuring devices are extensions of our senses and all science is a refinement of everyday thinking processes. We have forgotten what Einstein said about his own laws of space and time; that there are no laws in nature, also no absolutes in science outside of the observer and his laws. Yet within the intuitive observer there are ways of making absolute statements which cannot be made by science, such as "I AM" or "I will die" depending on whether the observer identifies himself with pure awareness or his biological time-bound body.

Minutes, metres, seconds, light years, are all man-made absolutes and we keep an arbitrary foot in the British Museum as a standard just to make sure there is such a reality to measure with.

The necessity for this is because our notion of "object" and "time", induces ideas about objects in space. The notion of space (void) arises inductively in consciousness by virtue of our notion of objects. In everyday thinking the word "space" is accepted as representing something real without properly defining it. How the "I" defines it in science leads to relative thinking of assumed material points in space. These lead to dualisms which are not challenged by the "self"-"I", who joins and separates "space" from "objects" at will, as if it were truly possible to do so in empirical experience. "Space" [or the absolute void] must be defined as an all pervasive "I" which unites all objects together in the mind as ONE UNIVERSE.

TIME, SPACE AND COLOURS

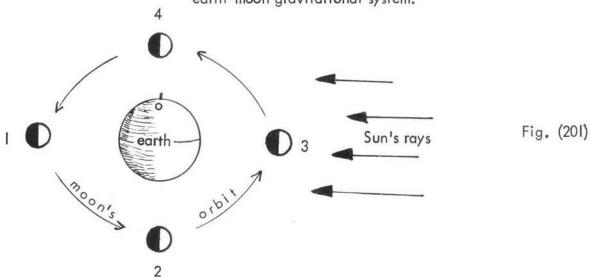
Neither "time" nor "space" as we experience it can be the absolute measure of objects in motion, simply because there is no absolute material point "at rest" from which to measure. The whole concept of an absolute velocity for light is therefore an illusion. The only Absolute is the "I" point of self consciousness of the observer, who can experience one cycle, or two cycles or beats, without any awareness of a fixed clock-time in which they occur. In the same way colour can be experienced in so many cycles, without the limitation of an Earth-time measure (seconds) which the consciousness fixes it with.

CONSCIOUSNESS & EXPERIENCE OF SPACE.

As an illustration of the mental trick the scientific method plays upon itself, let us examine a common sense statement which is mathematically and logically correct and often quoted in science:

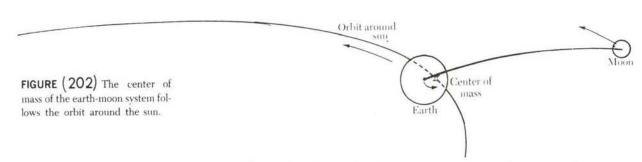
"The moon revolves once a month on its own axis in order to keep the same face pointing towards earth."

Let us illustrate this with a mental model of the operation of the earth-moon gravitational system:



0 = the observer, who sees full moon at 1, half-moon waning at 2, new moon at 3, and waxing half-moon at 4. In order to keep the same face directed towards planet earth, the moon must rotate once on its axis throughout each lunation. While this statement is logically correct from a consciousness observing the earth-moon system from a plane surface of a piece of paper, while at the same time visualizing the system as from an observer in outerspace, the actual fact is that the observer is not in outer space and is actually on the earth.

The observer having tricked himself into thinking that he is in both places at the same time, while speaking only for the observer on Earth, then states that it is an illusion that the moon's face remains fixed without rotation.



The actual gap in the correspondence between the geometrical and logical representation of space, the earth and moon in it, is not seen and is forgotten then by the separated consciousness of the observer, so that in fact he actually projects his own identification with the model onto the earth observer. It is obvious that as observed from the earth, if one were to physically experience this connection and not merely rely on mathematical geometrical abstractions, by establishing a simple physical connection of earth to moon with a long stick, then just like putting a stick into an orange and rotating it around ourselves at the center we could see clearly that as long as the observer remains at the center of a system and is not mathematically situated external to it, then the orange or moon does not turn on its axis at all.

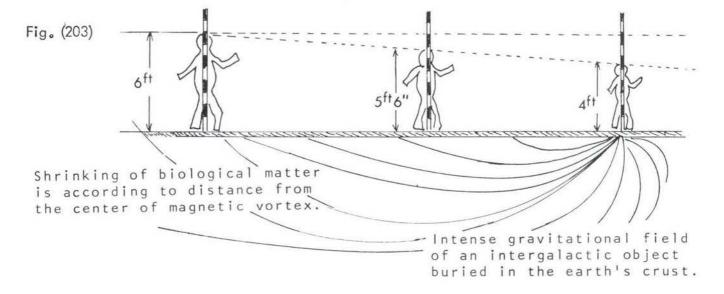
To measure any system without first referring the measurement to its own center, is to guarantee relative results rather than absolute results. Because the true center of any system is absolute, to try to measure by the mental erection of spatial coordinates and mathematical models of reality, is to ego-centrically invite a dualistic division in the consciousness of the observer. This same analogy can be applied to any observation and I call it "Hills' law of the multi-directional observer" who can observe in all directions at once, rather than creating a false point in space from which to measure our physical reality in linear directions. To change the actual point from which the observer sees (or thinks) is to radically change the nature of space and the ever present environmental reality surrounding the observer.



CONCLUSION.

To experiment with gravitational fields between material bodies over which we have no control and where the measurements depend on optical instruments is not an effective way to discover the illusion which light and radiation create in our consciousness. There are two points on the earth's surface, particularly in Humboldt County and Santa Cruz County in California, where certain meteors or heavy-matter rocks have embedded themselves a few feet under the earth's surface. At present they are tourist resorts where the credulous can satisfy their curiosity by seeing water run uphill, where a six foot high person shrinks to 5 ft. 6 in. by stepping only a few feet away from the field of a vortex of gravity. These forces acting both on the muscles and the psyche have never been investigated with scientific instruments, yet we have sent sophisticated equipment to the moon to study the same phenomena.

The photograph of a 6 ft. man can be seen standing by a yardstick about 6 inches shorter than his normal height while the force acting on the trees around and the physical weight on the feet is a definitely unique experience. A pendulum weight near the center of the field strength of this vortex of gravity waves will be inclined from the vertical by about 20 degrees. It has been explained away by physicists as an optical illusion, but no one has ever tested these places in great detail. The promoters of these attractions, having found a strange force acting on matter, have admittedly tried to enhance the psychological effect by tilting the buildings so that one can actually stand on the wall at an angle of 45 degrees. But this deception does not explain away the fact that water runs uphill when flowing in a pipe which has been levelled by a spirit level. No explanation exists scientifically yet.



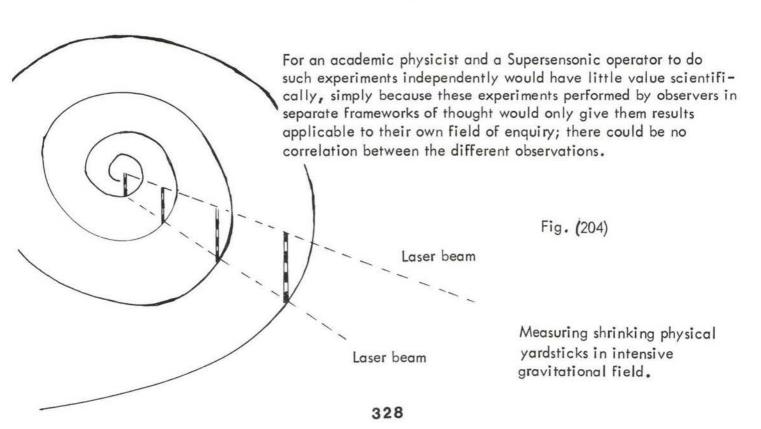
AN EXPERIMENT TO PROVE GRAVITY AFFECTS VISION & CONSCIOUSNESS.

If this was an intense piece of extra-galaxial material which hit the earth and did not entirely burn up in its journey through the earth's atmosphere, it would be much cheaper to study it upon the earth than to spend millions investigating similar phenomena on the moon and only the romance of space flight would be missing. Yet our modern science has ignored such unusual phenomena concerning gravity. If gravity has such effects on our perception and vision, we should be able to test them by setting up an experiment. Such an experiment would have to be designed along with all the doubters, because any results would have to incorporate counter checks against experimental bias along with certain proofs which could not be rationalized away.

By passing beams of light of different characteristics, such as lasers, and other energetic sources, over the center of such a vortex of the gravitational waves and testing the shrinkage and expansion of various conventional measuring sticks inside and outside the field edges, the warping of space could be calculated.

The only valid way in which a comparison could be made between the methods of physics and those of Supersensonics would be to test the magnetic field of this "heavy matter" and to map its nodal points by the two methods at the same time. In this way a comparison could be established between the perspective of ordinary vision and the mental mapping of field edges.

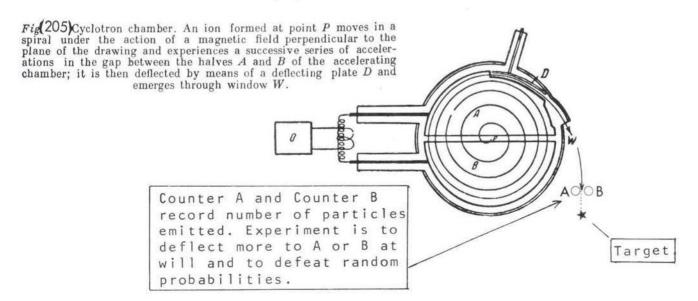
AN IDEAL EXPERIMENT.



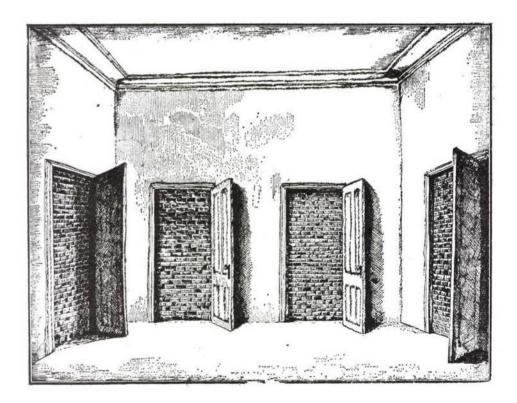
The two modes of knowing could be validated by external evidence simply by taking Supersensonic measurements as predictions about the nature of matter and the unknown aspects of light and energy and then testing them experimentally. Already in 1956 the I Ching inspired two physicists, Lee and Yang, to formulate experiments which overturned the entrenched concept of symmetry. However, this was only demonstrated in the disintegration of weak interactions of particles from the nucleus of an unstable atom. The experimenters demonstrated that electrons ejected did not orientate themselves symmetrically towards opposite poles. Detectors were placed on each side of the sample tested, one in the direction of an applied magnetic field and the other detector in the opposite direction. It was found that many more electrons were received by one counter than by the other and this proved that parity was not conserved in the resulting disintegration of the nucleus.

"SAMYAMA" THE INTERACTION OF
CONSCIOUSNESS.

An experiment of this sort was suggested by the author to a group of physicists in 1966 who were lecturing on the existence of a predicted particle at a physics conference in London. They were excited by a test they were going to run with an accelerater to aim a fast stream of particles at a target and count the number of particles emitted. It was suggested they put separate counters on either side of the target and I would meditate and "will" more events to be recorded by 'thought power' to the left or right as they directed. It would not interfere with their own experiment in the least if it did not suceed. An alternative would be to split the beam of particles in two and "will" the accelerating particles to jump from one counter to the other and record the results.



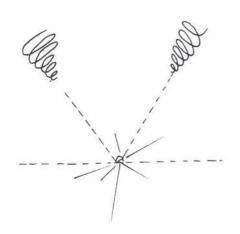
After their lecture the group invited me to discuss the proposal at the bar. The questions brought up were so unfamiliar to their reasoning powers that although they said they had to agree with my logic, it would mean that the whole of physics would be overturned if we succeeded. That unthinkable thought was so horrifying to them that they drank more and more beer. Although they promised in the spirit of an open mind to get in touch when they were about to start their experiment, I could see by their disturbed faces that this kind of Truth would not be acceptable to them.



19

FUNDAMENTAL RAYS & LIGHT.

All of the measurements in Supersensonics are mentally created by the construction of certain rules, tapes, radionic dials and discs which do not need to correspond to exact human conventions such as meters or feet, etc. It therefore came as a surprise to the early pioneers that material elements could produce a tuned response which could be dowsed at a particular angle and find common angular agreement between several radiesthesic methods.



De La Warrin conducting research with Radionic thought photography found that placing crystals of various elements in the magnetic focussing apparatus of his camera produced specific angular rays. He did not connect this with the early radiesthesia work on fundamental rays until the author had him build an emotional tuning device using Turenne's disc as a dial. The De La Warr camera did not work with everyone and experiments were not therefore repeatable by hard-nosed scientists. Even De La Warr himself could not operate the camera. In the presence of his assistant, who was trained in physics, the camera would work. Just as Ted Serios and Uri Geller could transfer mental photographs by thought to an emulsion, so could De La Warr's assistant Corte, create a photographic image of the fundamental rays. Since then several people have been able to get pictures with the camera and with the encouragement of George De La Warr, the author's center in London conducted regular tests among a group of people to determine what percentage of persons had this ability.

Out of a group of 20 people, four showed positive results that were repeatable at will, enabling them to transfer the leaf pattern of a tree to a photographic plate. The point here is not whether it is possible or not but was it that the early radiesthetists, who had been measuring the properties of matter by their fundamental rays for 50 years, had already stumbled upon another way of perceiving nature? Moreover this method did not have the

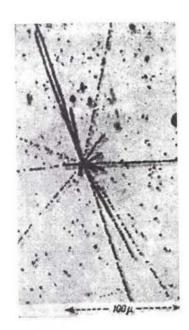
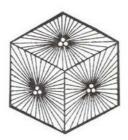


Fig. (206) An explosive disintegration of a nucleus (probably silver) by a cosmic-ray particle. The energy of the particle that initiated the fission was of the order of 100 million electronvolts. It is possible to distinguish the tracks of seven protons, five alpha particles and a certain number of heavier nuclear fragments. The bulk of the particles enter the glass from the emulsion and emerge from the plate; for this reason it was not possible to give an exact determination of their range, and hence, their energy.

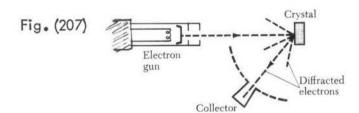
scientific drawback of studying the atomic interactions by violent attack with high energy beams which disturbed the natural state. Direct observation of nature's ways had become possible without the scientific experimenter projecting his own bigs into the observations by the use of artificial stimulants such as neutron beams. Scientifically it is true that particles under such attack by man-made forces only revealed the energetic relationships between particles of matter under duress and gave little information as to their natural life without artificially-induced tensions. However, the study of such methods was considered inexact and non-scientific because it relied on extraordinary senses; although on deeper study it was well known that the ordinary senses were just as unreliable. Hence our modern science avoided deliberately an uncomfortable area of investigation. The so-called exact sciences ignored completely the direct Supersensonic methods of checking their mathematical ideas.

In 1924 the theoretical physicist, Louis de Broghie, proposed the idea that matter as well as radiation or light could have both particle and wave behavior. He reasoned that if Einstein's notion of packets of energy called photons were guided by or accompanied by light waves then perhaps material particles are also guided by some kind of wave. By stepping aside from the contemporary controversies between the wave-corpuscle dualism for radiation or light, he explored the possibility that matter itself could have a similar dualism.

Many experiments were performed to determine what characteristics these "matter waves" might have. Among these was an experiment which suggested the detection of matter waves by diffraction through a crystal. The method used suggests great similarities to the tuned crystals of matter investigated by the radiesthetists and the De La Warr thought camera.



Two American physicists, Davisson and Germer, found that electrons striking a crystal were reflected from it only in certain directions. In the illustration Fig. (207) electrons shot from an electron gun strike a crystal of nickel and the reflected electrons are detected by a chamber which in turn is connected to a measuring meter. The whole experiment was performed in a vacuum and the collector could be swung in different directions.



It is found that the number of electrons increases considerably at certain angles. The calculation of the length of the waves that was diffracted at these angles yielded a value that corresponded with de Broghie's theoretical formula. Later additional evidence of matter-waves was produced by Thomson in England who produced diffraction patterns by shooting electrons through very thin metal foils. Other experimenters were also able to produce diffraction effects using high energy neutron beams and even whole atoms, which showed that all matter expressed its presence with matter-waves.

This confirmation established without doubt that both matter and radiation have wave-like and particle-like properties and this was such a breakthrough that it became the dominant theory of the micro-physicists and remains so up to this day. Yet, no one took up the question of the fundamental angles at which these matter-waves were reflected from the different crystal elements. Hence some comments on these results are needed in order to understand Supersensonics.

THE ATOMIC NATURE OF FIELDS.

The concept of a uniform field in which the atom with its electrons moving about in a sphere around the nucleus of uniform positive electrification was Thomson's idea. He imagined that light was emitted when the electrons occupying certain equilibrium positions were disturbed. Rutherford proposed a different model as a result of some experiments by Geiger and Marsden, which suggested that the positive charge was tightly bound into a very small region in the nucleus with the electrons moving around it at relatively areat distances away from it. The comparison of the scale by which we could judge the space inside an atom would be that if we enlarged the size of a nucleus to the size of a football, the electrons would be as far away as the sun and the size of an orange. The concept of such a space-filled atom in proportion to the material particles in it would allow much denser cosmic particles of matter to pass through our earthly bodies without interacting with anything. Just as there are many planets and objects in orbital space around the sun, so there could be fields within fields within fields, etc.

This concept was born out of the scattering experiments done with alpha particles. The scattered particles were deflected at very large angles and an occasional one almost doubled back from the same direction it came. Using a platinum foil the experimenters found that 1 in every 8,000 particles was deflected up to 90 degrees angle or more.



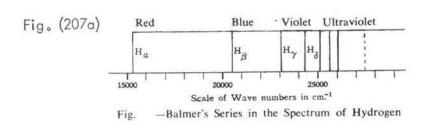
Rutherford decided the large scattering angle was important because if a thin sheet of metal could turn back a projectile as massive as an alpha particle moving at enormous speed, it would be the equivalent of firing a 15 inch shell at a piece of tissue paper and expecting it to bounce back and hit you.



However, even though these results led to the modern concept of an atom with a nuclear center with a massive positive charge equal to the total negative charge on the electrons in a natural atom, the idea of the angle being fundamental to the composition of the element of matter did not occur. The resultant knowledge that the diameter of the nucleus is only one ten-thousandth of the diameter of a whole atom, led to the structural concepts of the atom today. The idea was born that electrons are distributed within a globular sphere and occupy a part of space from which any similar configuration of particles or atoms would be excluded. This atom was conceived as a very open structure so that a highly energetic particle could pass through many thousands of atoms without ever colliding or being deflected unless it passed very close to a nucleus.

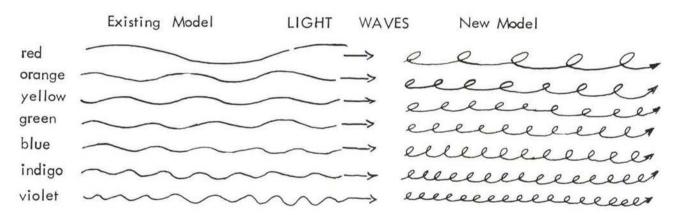
THE LINEAR NATURE OF SPIRAL FIELDS OF MATTER.

The scattering experiments showed that the great positive charge on the nucleus increases with its atomic weight. This nuclear charae was found to be proportional to the atomic number of the chemical element in question. The atomic number is the number that gives the position of each element in the periodic table. The angle of scattering was related to the nuclear size of the charge and all observations showed that deflection occured according to the relative numbers of the particles. This led to the idea of a continuous spectrum of matter arranged according to their chemical properties. This was further linked with the spectral lines of various incandescent solid and liquid sources. From these facts the notion of a discontinuous spectrum formed by dispersing the emitted light through a prism or diffraction grating came to be accepted. Since each position in the spectrum of radiation and light corresponds to a given wavelength of light, this led to the belief that all atomic sources emitting light radiate a limited number of different wavelengths rather than an infinite set of wavelengths. Each chemical element when stimulated with enough heat or energy to give off light, produces a spectrum consisting of definite pattern of bright lines. This distinctive pattern for each element of nature is different for each element and can be used to identify its presence in the light source.



No one thought of these lines as angles of a spiral spectrum which repeated itself in octaves or energy thresholds to infinity. No one thought of emitted light as being a spiral rather than a straight ray. Yet wavelength and particle in nature could easily behave in 3 dimensional ways and not be obvious to a person with 2 dimensional consciousness. Hence the spectrum was straight, light apart from Einstein's minute curvature of space over immense distances travelling in straight lines and to the 2 dimensional consciousness was seen as sine waves:

Fig. (207b)

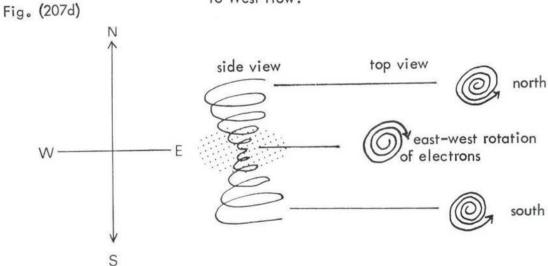


It was not seen that the spectrum lines might be the angle at which the material particles were manifesting as energy on being passed through a medium such as a prism or grating, that in the new model they would show as sine waves, but actually that was merely the path along the waveguide, and that light actually exhibited wavelength characteristics along with frequency because it was a spiral wave like all matter waves which met at resonant nodal points.

Fig. (207c)

✓ Wavelength →

Male-Female, Yin/Yang particle spins in same direction but has opposite polarity The idea that all matter was one continuous energy but manifested with different nodal points of energy at different angles in a spiral spectrum would explain the 3 dimensional nature of matter and give science four poles instead of only two. Not only was there a positive and negative horizontal and vertical aspect to each particle but also a positive and negative characteristic of its spiral rotation through space. That some matter has left-handed spin and some right-handed is explained by bringing in the concept of East to West flow.



Finally bringing in the concept of the scattering of particles of energy according to their number of protons would suggest that any material element is stabilized at a fundamental angle of manifestation from the universal field of which it is a part. In other words, each particle is undergoing creation and annihilation continuously so fast that we do not perceive it.

Like the sequential action of light photons on the eye such as a camera projector, we do not see the interval between events. The reality of matter is decided by its fundamental angle of manifestation and at any other angle the same universal energy is manifesting as something else in the periodic table of elements. Each element has its own resonant frequency with the fundamental frequency of the universal field which forms itself into patterns which we call material structures of atoms.

None of this conceptualizing of matter as a continuous spiralling of cosmic energy through the various filters of our consciousness such as senses of sight and touch, etc. or the emotions, or mental operations or the imagination of man, conflicts with the observations of physics which gives rise to a notion of a concrete world of material particles. In fact, the angle at which certain elements exist determines whether that element is stable at our human grosser vibrations of perception or whether it will be deflected or bounced back as reflected light or as an aura of bio-psychic radiation at subtle levels of manifestation.

In future chapters where we delve into the structure of more subtle matters than those referred to so far, the obvious connection, between the psychic centers or chakras and the absorption and reflection of light energies from radiating bodies, will be seen to be clear. The methods of measuring these fields of subtle matter do not contradict the two dimensional appearance which has been so well established by the physical sciences but it will require a whole new spiritual science to penetrate the gross consciousness which places its own limitations of sensory phenomena onto the apparent world of matter. It is here we can leave the world of ordinary physics and enter the spiritual dimensions of divination which open up the new science of Supersensonics.

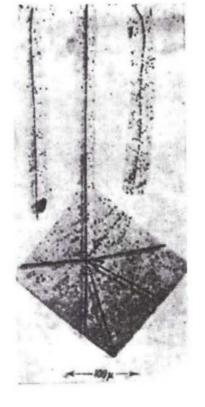
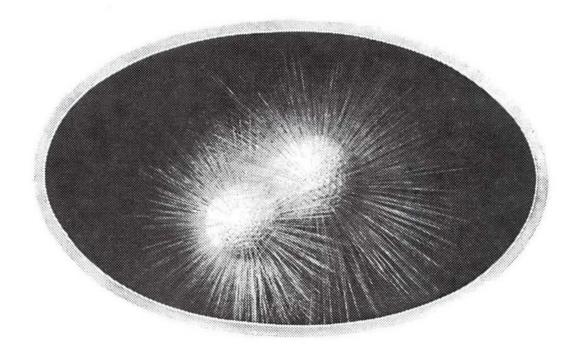


Fig. (208) The disintegration of a heavy nucleus by cosmic rays and the tracks of a meson (upper right) and a triton (a nucleus of superheavy hydrogen, H*) (upper left). The long track going upward from the star is that of an alpha particle.

SUPERSENSONICS AND SOUND

In this volume Supersensonics is shown as a way of mapping the patterns of energy relating to light, vision and color which are the most recent development of the human brain organization in the evolution of man. The fact that our sense of vision and light requires a proportion of the brain computer 100 times as massive as that part which handles sound, does not mean that sound has less influence on the human organism. The fact is that through Supersensonics we have the tools for discovering that sound is a more primordial sense. Sound is more primitive and thereby evolved as an earlier method of communication with man's environment. The fact that sound patterns and interval have much more profound effects on man's responses than vision and color is also shown in people's taste for music. Though the sound area of the brain is 100 times smaller than the visual cortex, its effectiveness is one hundred times more potent in stimulating the emotional centers of man. The pattern and frequencies of sound are not only airborne but vibrate in the subtle ethers. These effects we can detect with our Supersensonics instruments. For instance, the frequency of a vibrating wine glass can be detected long after its audible frequencies of sound have died down. Beyond the sensitivity of the human ear the glass is still vibrating. This subtle sound applies not only to wine glasses but to buildings, bells and other solid bodies. Long after some audible energy has stimulated a fundamental tone the harmonics go on reverberating. This subtle connection between psychological energies and sound and color is mentioned in "Nuclear Evolution" page 77, but a more comprehensive research into sonic effects will be given in Volumes IV and V, since Supersensonics is originally involved in the cosmic use of sound. Proficiency with Supersensonic aids to detection of light and color enables us to research the nature of sound vibration so that we can modulate the transmission of consciousness into sound. Those interested can write for catalog of cassette tapes on chanting 73-CH-1 to 3 and sound current of consciousness 73-RCL-1 to 5 from the publishers which give actual instructions on breath and voice control for the effective transmission of consciousness in sound.

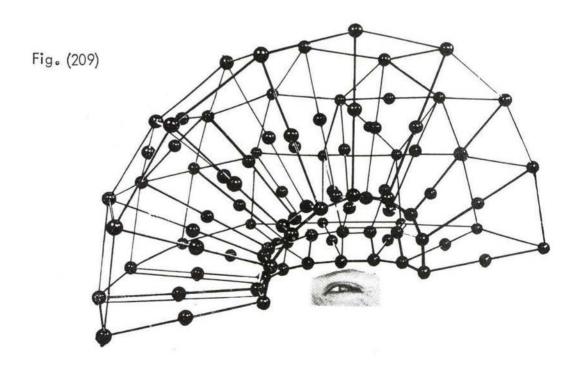


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CURVED SPACE & CONSCIOUSNESS.

In studying the nature of light we will eventually come to the question of how this invisible radiation courses through the empty space of the universe which is so sparsely populated with stars that none of them are gravitationally attracted into collision with each other.

The light generated by all the stars is sent out into empty space in every direction so that in effect it is criss-crossing itself in all directions possible to human imagination. Therefore it can be said to go in no particular direction at all and is a homogeneous vibration of energy. Yet an observer experiencing the radiation of the stars as light "sees" the representation of nerve impulse sent by the eye's vision to the brain as having a direction in relation to his position as observer.



Spherical segment of observer's experience of multi-directional light energies inside consciousness.

Light is therefore everywhere throughout the whole of space vibrating, pulsating, and sending its invisible rays to the physical objects such as planets and stars floating through boundless space. This radiation acts towards and upon all creatures and physical objects in creation universally the same but it is not received or absorbed by all objects the same. Each star, person or object has a different gravitational mass or a different color absorption rate which will determine how much of the homogeneous radiation of the cosmos it will take in and how much it can reflect or reradiate from within. Every star is not only radiating its light everywhere in straight lines but it is also absorbing heavier cosmic particles than its own matter. These heavy photons or cosmic rays carry enormous amounts of energy which are released into the total entity of the star like a drop of water is absorbed into the ocean. Without this continuous radiation - absorption - re-radiation cosmic cycle, each star would eventually run down. This cosmic food energy which each star is eating up from the surrounding environment represents an enormous appetite to keep the homogeneous light shining forever in space. For as some stars die and release all their energy into space, other stars just incarnating will absorb it from space and increase their brightness.

In astronomy today very little attention is paid to the physical appetites of stars and all the attention of physicists is directed to the re-radiation factor. The internal generation of light and energy of a star is regarded as an independent and quite separate operation from the environmental condition surrounding the star. This oversight is perhaps brought about by our concept of human beings whose mental and psychic observations in science are completely divorced from the surrounding electromagnetic, gravitational and levitational fields which must affect perception.

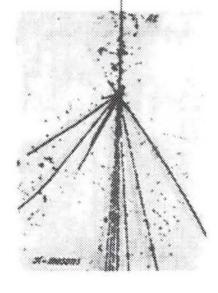


Fig. (210) A primary cosmic particle (aluminium nucleus) has collided with a nucleus in the emulsion. The tracks of individual particles ejected from the nucleus may be seen. Among them are those of mesons.

How we human beings absorb the homogeneous cosmic vibrations we call radiation or light and how we feed off light's continuous bombardment of the nucleus of the atoms of our body, nerves and brain, is the most neglected question in science today. Although science has done a great deal of research into the effects of light absorption and its reflection from bits of matter, very few researchers have dealt with the effects on humans, and the author's book "Nuclear Evolution", which deals with the effects of light and color on consciousness, is one of the few reference books available. The emitting power of any surface, whether human biological cells or any other material element, is directly proportional to its absorbing power. Any body which absorbs all the light and radiation falling upon it appears to the human eyes as perfectly black. A body, the surface of which would radiate more strongly at any given temperature, than any other surface, is called an "ideal black body".

In the case of human beings, however, it is possible to absorb radiation and to be inhibited by thoughts and emotions from re-radiating it. Black emanations from the re-radiating of light energy is considered by most spiritual clairvoyants to be negative self-hatred or frustration. Anger is expressed as either red if it is passionate or black if it is resentful and full of spite and is nearly always associated with self-obsession. Those who radiate a transfiguring bioenergetic light seem to extract more radiation from the cosmos and so reflect it back into life. The psychic centers which control this intake and output of radiant energy and activate the level of consciousness which corresponds with the different colors have already been described in Volumes I and II.

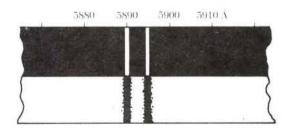
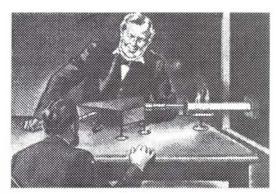


FIGURE (211) The yellow-line pair of sodium (Fraunhofer *D* lines). Above: Bright lines from a sodium-vapor lamp. Below: The same lines in absorption.

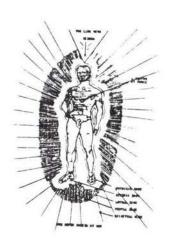


The telescope was invented in Kepler's time and it began a new era in astronomy. But about 1860, Kirchhoff and Bunsen used the new spectroscope to learn the chemical composition of the sun by analyzing sunlight. This opened a way to study the nature of matter in the sun and stars as well as on the earth.

How this absorption and re-radiation of the cosmic rays of energy is processed within each human being and how it helps the consciousness to perceive the external universe is completely unknown except to those with clairvoyance and X-ray vision. Those who can actually "see" the psychic electrical currents of life swirling within the bio-energetic system of man may get some picture of this process. But, like any ordinary vision of a whirlpool or the pattern of iron filings showing the lines of force around a magnet, or the myriad movements of minute molecules and cells in a powerful microscope, the psychic vision of these currents of life does not tell us what is actually happening. It extends our ordinary consciousness just as television and telescope does, but it gives no more understanding of psychic or physical phenomena than the natural intelligence or insights that the observer's consciousness will allow. However great the powers of vision, whether microscopic, macroscopic, telepathic or whatever, there can be no greater knowing than the knower's capacity for understanding.

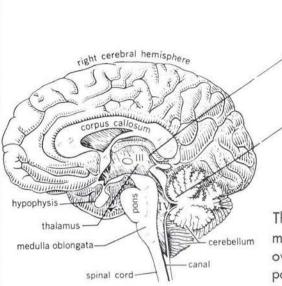
This situation has great significance when we look at the trend towards greater "seeing" in both physical and psychic domains of perception. Man acts, thinks and perceives according to his true nature and no amount of acquired expertise or training can change this true nature. All changes are also accomplished according to man's true nature and he will accept or reject Truth or love or science according to this nature. If he is ruthless with the Truths of others without being first ruthless with himself, there will be no compassion. If he is compassionate with others without being compassionate to himself, there will be not enough ruthlessness for the Truth to survive within him. A person's true nature may be decided by their relationship to the absorption and re-expression of the cosmic radiation. The properties of this radiation and light will only be significant if they can be understood by our contemplation of this light which sustains the universe. Partial vision, whether direct or indirect, will only give experience of a limited universe. Full vision of the complete whole is impossible without understanding and understanding cannot be acquired secondhand if it is contrary to the true nature of a person's consciousness. Hence the study of consciousness is the study of our Self and its cosmic relations.

The appetite of man on the grand scale of the cosmic scene is very little different from that of stars. By the standards of some great fat stars, others would appear to have a meagre diet of cosmic forces. Both a person and a star go through the same universal process of ingestion, digestion, assimilation and excretion. It is with the stars' excretion, after they have digested the enormous amounts of energy from outer space, that we are concerned in the study of light. Similarly, it is the excretions of man's thought energy after he has absorbed and digested the cosmic radiations of life that will provide the content of his bioenergetic re-radiation that we call the human aura.



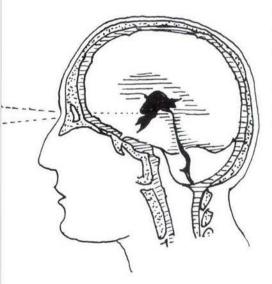
This aura in turn will filter and absorb the subtle and heavy cosmic particles of light. A person's true nature is manifested by the field force expression of this absorbent antenna of the cosmic program. To learn something about the universe and the way its entities, such as stars, atoms, cells, people, etc., absorb, will depend on the nature of consciousness and attitudes adopted by the student. If the student thinks he knows it all, any good teacher will tell nothing. If the attitude to the teacher is not right nothing can be understood correctly. The same applies to the vast universe which is our cosmic teacher. There is nothing true about the cosmic process in a star that does not have its exact counterpart in a human being. There is nothing True about God or the ONE or the Cosmic Intelligence, whatever we call it, that does not have its exact counterpart in human relationships.

This is what Christ came to teach. The parables and allegories of the great prophets and sages depict our cosmic relationship to the ONE and have their exact counterparts in human nature. The divinity of man is the divinity of his maker and the cosmos is the body of God. This embodiment, as scintillating and awesome as it is, extending into the vast reaches of interstellar and intergalactic space, still does not give any clue to the mind and soul of God, and deeper still, the consciousness of God.



The diagram shows "The Cave of Bramha" at III referred to in the Sanskrit texts as the seat of resonance with the ONE ocean of cosmic vibrations. It manufactures the cerebro-spinal fluid in IV which floats the whole brain and spinal nerves. The chemical Ph of the fluid determines the resonance.

This consciousness and primordial intelligence, which is both manifest in creation and unmanifest at the same time, like our own awareness of Self - I, is both the creator of words on this page and the reader of the words on this page. If it should re-cognize itself in the vibrations behind the words then the transmission of this true nature of the universe and man can be experienced and envisioned as the unrestricted light of consciousness.

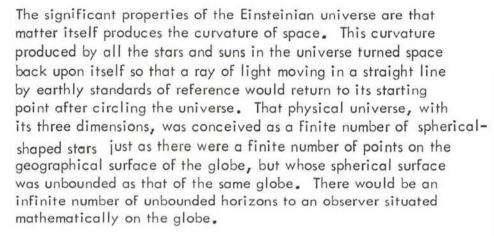


In order to understand the complexity of man's attempts to unravel the secret of light, we must apply all the brilliant theories, speculations and phosphorescence of thought about the experiences of our external world to the internal world of man's inner consciousness which validates and interprets them. When we can see simply that the external world is a mirror reflecting the level and intensity of our own consciousness, we can get some glimmer of our own ignorance, some awareness of the inner light which shines out into the far infinite reaches of a clear sky. It is as simple as looking at your own eyebeams. Men have spent their entire lives looking for THAT which was already looking out over their own noses.

Whether this inner light curves eventually back on itself or spirals into points of resonant stillness in the cosmic cycles of the external light is immaterial to the consciousness immersed in its contemplation. Let us follow those great physical seekers in their curved path to the ONE who is beyond all paths by understanding their significance in our own consciousness.



HOW EINSTEIN CREATED AN IDEAL OBSERVER WITHOUT A SELF.





These stars in the "Einstein world" were distributed equally throughout space, just as if the names of all the points on earth were spread out over the surface of a globe. Einstein believed that the laws of nature must be the same for everyone who observes it from the same point at the same time. There could be no favored location in the universe, no center, no boundaries, and all observers must "see" the universe alike.

MATHEMATICAL MODEL AND REALITY.

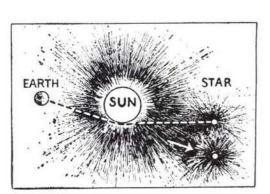
In order to ensure this hypothetical situation the observer must postulate ideally that there is a universal space with properties with the same values everywhere. When this space is measured along axes in all directions, with the measured velocity of light transmission as a constant yardstick, we can see that this Einsteinian universe is bounded by the constant velocity of light as a finite fixed property. It is in fact limiting the universe to say that all human observers actually "see" the same. The fact is that this mathematical representation is not reality, since all human "seeing" is always limited by the consciousness of the observer and that light velocity is only fixed in relation to our

physical senses by postulating some starting point in space, on which fixed point the whole concept of velocity depends. This ideal representation of Einstein's brilliant mind not only required every human observer to "see" the universe alike in the same way, but also required spatial homogeneity, that is to say, the universe must be pretty much alike everywhere and in all directions. There would be local irregularities of curvature dependent on the proximity of large masses, just like there are tall mountains on the globe, but there would be an overall curvature like the spherical curvature of the earth itself.

The Theory of Relativity led to calculation of a finite number of stars and a total mass of the particles making up our own universe. By mathematical juggling we can create a repulsive force between these stars opposite to gravitational attraction which increases proportionally with the distance between the objects. This levity force is so far hypothetical and at present is not observed in our actual knowledge of gravitation as we measure it.

This centrifugal force, postulated in Einstein's original theory, is presently explained away by the well known expansion of the universe which is known as the recession of the galaxies. Hubble, at Mount Wilson observatory, made the sensational discovery that the galaxies were receding at a speed proportional to their distance away - receding not only from the Milky Way galaxy in which man the observer exists, but also receding away from each other. According to this measurement, which was found by observing the Doppler effect of light shifting its red spectrum towards the longer wavelengths, the entire universe was expanding at a rate which doubled its dimensions every 1300 million years.





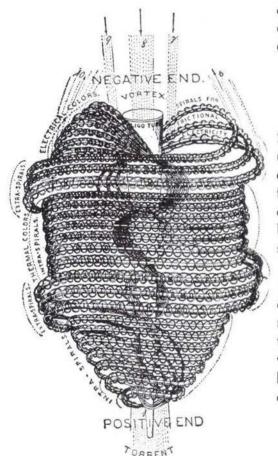
Einstein's theory says that light-rays will be bent, due to gravitation, in passing a large body like the sun. In the above diagram, the arrow points to the place from which it seems that the star's light is coming. Experiments seem to prove the theory correct.

Obviously Einstein had made an error in calculating that the universe was finite and was an ideally stable place, in which all observers would "see" the same universe from all points of observation. It could not be stable because the universe was an unstable, exploding entity with stars expanding within it and moving outwards from some postulated central "cosmic egg" at speeds which were nearly approaching the speed of light. Thus it is argued now that there is no need for a cosmological constant which postulates the existence of a force contrary to gravity and repulsing the objects and stars in the universe from each other. Consequently Einstein in 1930 abandoned the idea of a closed spherical universe in favor of an expanding and contracting one with cosmic cycles.

However, he retained the suggestion of a finite curved spherical, but unbounded, space contracting and expanding like some balloon or great heartbeat, because it mathematically solved the mysterious problem of why the system of stars, which made up our galaxy, did not disperse and thin out, which it would do if space were infinitely expanding. A man who can explain how the universe of matter is finite and is spatially boundless has stretched the human imagination to unthinkable lengths. Yet the unthinkable thought was avoided by Einstein and contemporary science. This thought is that our universe is all ONE Self in the form of Pure Consciousness, viewing itself through all its mirrors and its many filters of material existence.

NEW THOUGHTS.

At this time of writing the prevailing thoughts about the matter-filled universe seem to have been proved over and over again. Yet there are still fundamental problems on which there is little light. Taking each point in these ideas of Einstein let us now stretch out some other viewpoints which will not only justify Einstein's view on the level of a universal observer, but will show how the individual observer, including Einstein, in reality is trapped in his own view of consciousness. So that in Truth, no one actually "sees" the same universe and never will until they reach a state of Pure Consciousness.



These new thoughts will show that everything is "True" from the viewpoint in consciousness from which it is observed. Only when our consciousness is Pure and void of such concepts of subject and object can we "see" that all events ARE the observer, that our consciousness creates space and interval and that nothing exists excepting boundless unlimited Self.

Since most of the human race is not enlightened and is totally unaware of other levels of consciousness which transcend the ordinary common-sense level of scientific enquiry, we will not find many who will "see" that our notions about objects in space arise solely out of our notion about Self. If we think ourself a body then we create other bodies as other selves occupying space.

Hence in Supersensonics the universal field is thought of as a cosmic all-pervading observer who has multi-pointed existence in reality. Rather than thinking of this field as an ideal mathematical representation of an expanding or contracting sphere in which the observer "sees" finite events called stars or experiences himself as bodily aggregate particles of matter, let us view the creation for the sake of analogy as we do our own brain.

If we think of the planets and stars as floating endlessly in a finite but unbounded fluid spherical space inside our brain in consciousness then we can "see" all the cells and neurons which occupy this ONE finite space in the same way as we look out at night and see the billions of stars making up the ONE universe.

A THOUGHT EXPERIMENT. Playing the same mental trick on ourselves which mathematicians do, i.e. assuming an objective consciousness and postulating an ideal external universe existing quite separate from the internal events in that consciousness which experiences it, let us now, in the same way, create an inner world which, however, pays no mind to external events. For the sake of developing some answers to these unsolved problems of the subject/object consciousness, the problem of validating the observer and what is observed separately from the observer, let us now use exactly the same method of science and say to physicists, "There is no external universe separate from the consciousness which observes it. In the same logical way that you say dogmatically there is no observer in your experimental results, we say to you by the same logic, that there is in reality no external observer which you can create by a geometrical or mathematical representation." Whether this is true or not is of no concern here, what we are doing is merely to play the same games with our consciousness in order to arrive at something called reality or Truth and more so to reveal an unseen but common trick of the mind which will affect the results.

MAN AS THE MODEL.

Now assuming that all the cells of our brain have become analogous to the ten billion stars of our universe, we can roam through our material brain which is just as empty relatively speaking as empty space. These atoms which make up the cells of our brains are just as evenly distributed through our cells as the stars of the universe are throughout space. And if there is any validity to our physical expanding universe (which we do not sense) our brains are also actually expanding with it. Presumably when the universe contracts again our brains and the cells in them will also contract, leaving us little head space in our braincentered universe.

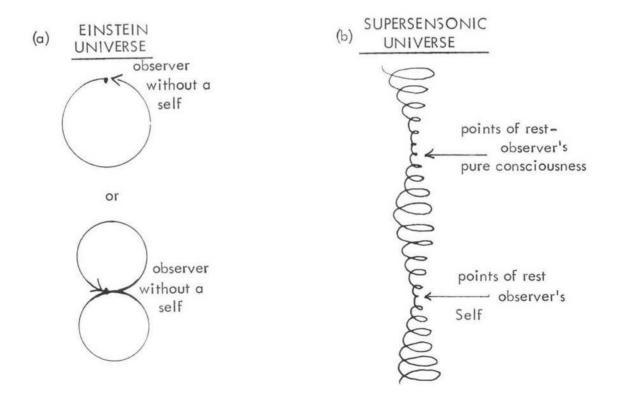
Each circle

Shapley's model of the Milky Way. Each circle represents a globular cluster. The hub and disc contain most of the stars in the Milky Way. The sun, which is two thirds of the way out from the center, is marked by a cross.

According to Einstein's concept, if a ray of light or consciousness goes out through all these cells it must eventually fold back on itself after circling our internal universe. From any one point in this universe of brain cells masquerading as stars, the inner-world will look the same to our consciousness. No change or evolution would take place but we will only suffer from a swelled head, which will eventually be contracted to a small-brained creature. We could never grow more brain cells because the number of stars is finite. There are scientists who make statements that once our brain is fully grown that no new cells are born. But this statement is dogmatic and has never been proved and it only requires one exception like you and me to prove it's all hogwash. Any time the brain scientists want it I will grow some brain cells for them by stimulating certain areas with consciousness and causing the observed process of neurobiotaxis to occur. This process in ordinary language means growing of new nerve dendrites which arow towards areas of areatest stimulation just like shoots of seeds grow towards a source of light in etiolation.

The explanation that all energy or light Fig. (a) comes circling back to its starting point can be expressed another way by postulating a spiral rather than a curved sphere with a constant motion of light, without disturbing Einstein's equations:

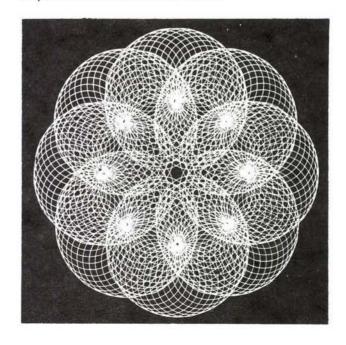
Fig. (212)



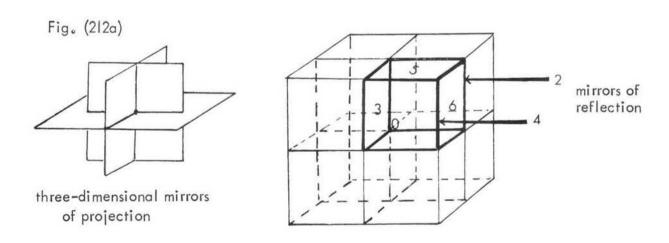
SUPERSENSONIC SPACE. Consciousness extends its light radially from zero points of an all-present stillness to other zero points of stillness as in diagram (b).

> The illusion that light is produced as energy in motion is the effect of radial extension from one point of rest to another. All points of rest are "in resonance" with each other universally through nature. Because of these interactions between the resonant stillness at points of rest, the sensation of vibration occurs in consciousness depending on the stillness of that consciousness. Because all energy must return to equilibrium and be re-expressed as radiation, it manifests as opposed electromagnetic pressures of gravitation and radiation. The force which Einstein first postulated as a repulsive counter-force to gravity and later renounced due to Hubble's proven expansion of the universe, is none other than radiation pressure which opposes gravitation.

> The whole manifestation of radiation in suns and stars is the result of radiation pressure, otherwise known as levity and light. However, this invisible light cannot be seen by any observer who is not experiencing that stillness which creates light radially from the zero point of Pure Consciousness. The light which can be "seen" is not real light but only secondary reflected light, experienced within the mind.



Points of rest throughout the observed universe of matter are extended to other points of rest to form three primary energetic vibrating planes of still magnetic light which are at right-angles to each other. These are referred to by the great Rishis as the three Gunas or primary forces of nature. From the center of these three mirror planes of zero curvature, this light of magnetic consciousness is projected to three opposed mirrors for reflection back to the source. The whole purpose of expression of the vibrating inner light pressure is to reflect the source of the light back to itself by gravitational pressure. This is referred to in the Bible by the ancient seers, who used Supersensonics, as Adam (Sanskrit) meaning the first or primary ONE, the monad, and Eve (Sanskrit Eva) meaning Truth reflected.



Now if we put our Self at the Center with all this inward and outward radiation pressure, we can see that our analogy of the brain as a mirror image of the universe becomes real. The Self consciousness becomes the <u>fulcrum</u> for projecting its unfolding action as an outward explosion from a center point of absolute rest. This giving out of light radiating from the center is simultaneously re-radiated back from every point in creation to complete the refolding action of gravitation.

THE SEVEN LEVELS OF OBSERVER

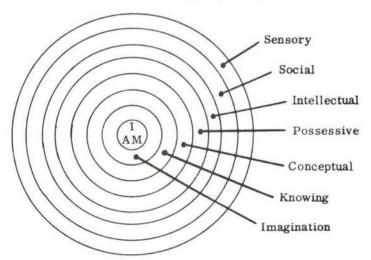
Even in the unfolding of a simple flower this radiation from the center can be seen but its reflection and refolding is in the seed. The galaxy and the human evolution are unfolding through the action of seven interlocking levels of psychical consciousness called "centers" or "chakras". The light of consciousness which we call radiation is forever annihilating itself in the six mirrors of its own image while the seventh domain pulls the radiation back into the center point. This center within is at rest without any image of itself. The "whole" is the eighth domain of the octave so that the complete cycle from center point to whole and back takes eight harmonics of the original vibration from the center.

The direct consequence of this for human consciousness vibrating its inner light as a witness or onlooker of gravitating bodies in space, is to experience an illusion of expansion and contraction of radiation fields. The action of light manifesting unfolds the formless radiation into form and its mirrored reaction refolds the form into the formlessness of a gravitational center. Action is the basis of radiation and light, reactions are the basis of gravitational attraction.

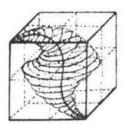
Einstein's first concept revealed that there is no center of the universe and therefore every action anywhere would be repeated everywhere throughout the universe. In the idea that space had no boundaries and that all observers see the universe alike, we have the Indian concept of the Selfless Brahman. For any human being having Pure Consciousness at the center, no center would exist as all would be ONE. But for a human being trapped in the dualism of expression and re-expression of energy and radiation of light from external objects separate from the observer, there is an illusion of motion of light passing between them through space.



The globular cluster Messier 92 (NGC 6341; 120-inch reflector).



In fact, the light passes only in our consciousness as spirals of radiation unwind into cold space. That incandescent light we see projected by electro-negative centrifugal radiation pressure is in turn being created by an equal interchange of electro-positive centripetal spirals of gravitation which winds the radiation into incandescent spheres.

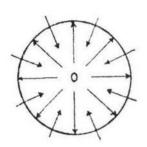




The six cosmic mirror planes, which give rise to our perception of a three-dimensional universe, reflect gravitating energy and radiation to the center of all systems centripetally inward through the two poles north and south. The centrifugal action of radiation unwinds the light of the spheres into the cold black absorption of empty space and flows east-west. They begin their cycles at centers of rest in spheres and expand them outwards through the mirror wave-fields of space. The centripetal north-south action of gravitating fields of inward flow of radiation and light begin their cosmic cycles at the boundary planes of wave-fields and end them at the centers of spheres. See "Nuclear Evolution" diagram (b) on page (82)*.

The psychic screen of consciousness which looks out into space and experiences "vision" simulates the appearance of motion and velocity because the two-way projection and reflection of oppositely flowing radiations of levity and gravity annihilate each other to create the psychic illusion of the Supreme Center - the Self. This Self then becomes conscious of its illusion of motion, impermanence, duration and the sequence of interval we call time. This recognition of the self-sense and its illusions brings the Self to the silence.

^{*} Published by Centre Community Publications. Available from University of the Trees Press.



Then that light which we experience internally as consciousness is found in the multi-faceted reflections coming from gravitating masses which we call incandescent matter. But in fact this same internal light which is invisible, is also the levitating radiation pressure flying outwards which must exceed the gravitational forces in order to escape into space. Where these two inward-flowing and outward-flowing radiations meet, there is an absolute zero point of consciousness distributed throughout all harmonic centers towards all other harmonic centers of stillness and rest. The consciousness of velocity and motion disappear in the homogeneous vibration of the center point or the seed.

The ancient Sanskrit seers who arrived at this knowledge of the universe by mathematics and by meditation on the value of zero did what Einstein did when he divided one of his algebraic equations by an equivalent of zero. However, they used it as an insight into the homogeneous vibration of the universe at the center point of all harmonic systems and found it in every seed. To Einstein and mathematicians generally it was a mistake!

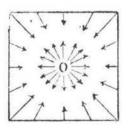
Professor Friedmann discovered a mistake in Einstein's proof that the universe was stable and unchanging in time. George Gamow describes this as follows:

"It is well known to students of high school algebra that it is permissible to divide both sides of an equation by any quantity, provided that this quantity is not zero. However, in the course of his proof, Einstein had divided both sides of one of his intermediate equations by a complicated expression which, in certain circumstances, could become zero.

In the case, however, when this expression becomes equal to zero, Einstein's proof does not hold, and Friedmann realized that this opened an entire new world of time-dependent universes: expanding, collapsing, and pulsating ones. Thus Einstein's original gravity equation was correct, and changing it was a mistake. Much later, when I was discussing cosmological problems with Einstein, he remarked that the introduction of the cosmological term was the biggest blunder he ever made in his life. But the "blunder", rejected by Einstein, and the cosmological constant, denoted by the Greek letter λ , rears its ugly head again and again and again."

Perhaps the new science of Supersensonics with its future discoverers and users of God's sensorium will originate a cosmology based on the understanding of zero.

Just as the pattern of the peacock's feathers with all its brilliant hues and the development of all its organs and faculties is written in the DNA of the homogeneous yolk of the egg, so, the seers reasoned, was the pattern of the universes and all the worlds written homogeneously in the seed syllable of the Self - AUM, vibrating as a cosmic egg Supersensonically throughout the whole, in all centers of harmonic radiation, in resonance with the absolute seed.



Zero was born as an absolute. Zero consciousness of self was the essence of the universal Self who was present in all seeds of personal selves. The law of its being was that all radiating matter which we experience as light, seeks continuously to annihilate itself in the lower pressure zones of gravitational centers. The light of creation was always seeking holes. The creative force which activates the creation always ends in the empty womb of space to be continually born again and again as the Self - the ONE who is transcendent and immanent, all-present in every wave of light and vibration of sound. The cosmic song of Self is simultaneously born in every desire or attraction and dies in its fulfillment of the orgasm of self-annihilation. For some, the path to this knowledge of Self is curved in direction but spiral in motion; for those avatars who know this Truth directly, it is straight penetration into the void because in them there is no direction and no motion. There is only the ONE who sees all through them.

The ONE does not come by any curved path through space but is born again and again direct like the flash of sunlight rising in the East.

21

QUANTUM PHYSICS & CONSCIOUSNESS.

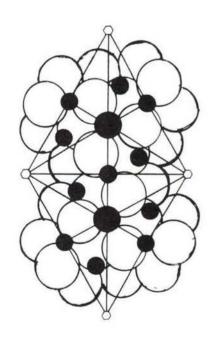
What will the measuring devices in the future be like? This is a question that we may tackle, before describing the more complex instruments of Supersensonics.

As we have shown in previous chapters the power of consciousness can be molded into theories, mathematical representations of reality that can yield results in the physical world of matter and light. Generally scientific measuring devices are structured by the mind to prove the results predicted by thought experiments. Nature has always provided a theater show of infinite variety in which the observer has so far been in the audience, according to conventional science.

With the introduction of quantum mechanics science now takes a turn away from objectivity towards events in consciousness which are almost set up without any need to conform to a fixed space-time determinism or reality in nature. The measurements have been entirely produced by mathematical relations which have no need of any visualization of nature's workings.

The concepts of de Broglie and Schrodinger of light as the combination of particle and wave was being matched by purely mathematical explanations of the atom which used the spectral lines as a starting point and totally abandoned the fixed pictorial representation of nature for a discreet set of numbers. The formula has become such a reality in consciousness that quantum physics became, as de Broglie himself put it:

"governed by statistical laws and not by any causal mechanisms, hidden or otherwise. The "wave" of wave mechanics ceased to be a physical reality and became a solution of partial differential equations of the classical type, and thus the means of representing the probability of certain phenomena taking place. The corpuscle, too, was turned into a mere phantom - we can no longer say 'at such an instant a corpuscle will be found in such a place with such



an energy or momentum,' but only 'at such an instant there will be such a probability that a corpuscle will be found at such and such a place.' In other words, while a given experiment can either localize a corpuscle or ascertain its momentum, it cannot do both."

The laws of chance and probability took the throne of Reality which made it impossible to think of matter or the universe in an ordered deterministic way. The laws of nature were taken to be bascially statistical and indeterministic, governed by the purest chance and sporadic random events.

At this point the universe begins to look like a vast insurance company whose actuaries could predict accurately how many people would die over a number of years but could not predict when any one individual would die, resting their whole business on individual uncertainty.

This was the direct opposite of classical physics which looked for certainty and objective proofs in nature herself. Einstein and those physicists who had started the whole movement towards speculative thought had taught us not to put too much weight on theories and scientific measurement but to penetrate nature. Einstein's view was that we were all tremendously ignorant of nature's real causes but he was confident that with the right tools and the right mathematics the real world could eventually be discovered. Statistical laws were considered only second-best attempts to explain and they could not be accepted as the fundamental laws of reality. These mathematical laws could not determine the events themselves. Only a reality which conformed to experience would determine events and not their inherent probabilities which were purely statistical. Einstein himself had helped to destroy the teachings of thousands of years that there existed an objective physical world which unfolds itself according to immutable laws quite independent of us.



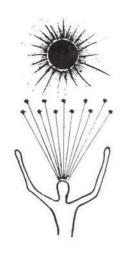
Science itself had taught us to keep the observer out of the play of life as if we were watching the working of nature like an audience watching a play - the cosmic circus. Einstein believed to his death that this obective attitude should be the correct relationship between the observer and his subject. But the subject and the object could not become ONE as long as objectivity was maintained.

Quantum physics began to interpret the experience gained from nature's atoms in a totally different way. In this the scientific observer of a physical event was not comparable with the image of of a passive member of the audience of a play on a theater stage but with that of a group of dancers through which the observer himself is passing and, in turn, through avoiding collisions with participants doing their thing, he has an impact on the performance and on the rhythms of the dance and also on what is seen. A better simile was provided by Max Born, who likened the new play to life itself, where audience and actors were the same persons. He said:

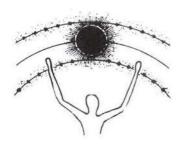
"It is the action of the experimentalist who designs the apparatus which determines essential features of the observations. Hence there is no objectively existing situation as was supposed to exist in classical physics."

He is saying that life itself, the new play or cosmic circus is not an objective situation. Another example of the quantum approach was given by Born:

"We can compare the observer of a physical phenomenon, not with the audience of a theatrical performance, but with that of a football game where the act of watching, accompanied by applauding or hissing, has a marked influence on the speed and concentration of the players and thus on what is watched."



Einstein would say that it is not proven how much the shouts do affect the play, and in actual fact, when players are transferred from one team to another for colossal sums of money, it is highly unlikely that the shouts of the crowd affect them at all; they merely provide a familiar background to the game. Pursuing the analogy back into physics, Einstein, the determinist, would say that on the whole the atoms in real life are not disturbed statistically by man's poking at a few, which could only yield an indeterminate result. Therefore the principle of indeterminacy, the basic plank in quantum physics, is only an apparent situation due to human ignorance and more enlightened men at a later date will one day be able to predict exact events.



It is important to see that what Einstein started he only regarded as a temporary step in man's ideas about nature. He never thought that others would take these theories more seriously than he did. It was as if he opened Pandora's box and all the different ideas in the universe flew out to create chaos and confusion in man's thoughts. It was the Tower of Babel story in Genesis II all over again. Man once again had become too clever and so "God did there confuse the language of the whole earth."

Einstein's response to this development was that he could "still realize that the Good Lord may have created the universe in which there are no natural laws. In short, a chaos. But that there should be statistical laws with definite solutions, i.e. laws which compel the Good Lord to throw the dice in each individual case, I find highly disagreeable" and again in a letter to Max Born: "Quantum mechanics is certainly imposing. But an inner voice tells me that it is not yet the real thing. The theory says a lot, but does not bring us any closer to the secret of the Old One. I at any rate am convinced that He does not play dice."

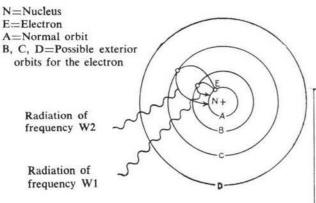
There was much feeling about the fact that quantum mechanics did not cover or explain empirical facts and assumed the statistical character of nature to be a fact. Today it has entirely taken over the subject of atomic physics and in order to explain its results has resorted to a number of subjective speculations such as antigravity, anti-matter and anti-particles which have never been observed or proved. Its concepts can be explained in other ways, but as long as man is excited and puffed up with temporary success in chasing material particles, while ignoring the observer's or the seeker's own consciousness, then no physicist is going to listen to pleas for research into the validity of the measurements used.

Einstein in a conversation in 1932 with Frank said something like this:

"A new fashion has now arisen in physics. By means of ingeniously formulated theoretical experiments it is proved that certain physical magnitudes cannot be measured, or, to put it more precisely, that according to accepted natural laws the investigated bodies behave in such a way as to baffle all attempts at measurement. From this the conclusion is drawn that it is completely meaningless to retain these magnitudes in the language of physics. To speak about them is pure metaphysics."

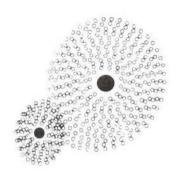
Neils Bohr outlined the epistemology presented by these developments in physics and agreed that certainty had been removed from the world of light and matter and there was now "the impossibility of any sharp separation between the behavior of atomic objects and the interaction with the measuring instruments which serve to define the conditions under which the phenomena appear."

Fig. (213) BOHR THEORY OF ATOM

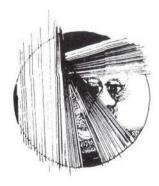


This diagram shows the various energy states of a hydrogen atom as explained by Bohr in 1913. The atom consists of a *nucleus*, N, containing one proton and an exterior electron, E. The electron revolves in any one of a number of circular orbits around the nucleus. The possible paths, A, B, C, D, are such that the angular momentum of the electron in path A is one times $\frac{\mathbf{n}}{2\pi}$ in orbit B is two times $\frac{\mathbf{n}}{2\pi}$ in path C is three times $\frac{\mathbf{n}}{2\pi}$ and

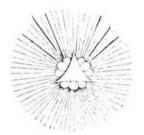
so on



This meant that all concepts were determined by the type of experiment. But even when the observer decided to study waves or particles, the Heisenberg uncertainty principle still created a veil over the exact picture of what nature was like. Bohr maintained against Einstein's deterministic view, that indeterminacy was not a matter of discovering the right measuring devices but was part of nature herself. Born, Bohr, Heisenberg, Pauli and Dirac all fitted their statistical theories in with the uncertainty principle and the development since then has been fantastically successful. What this means in terms of ordinary life is that we have denied the existence of an objective world and made the entrance of the subject, with all his ignorance of Self, the Supreme artist. While using measurements to arrive at statistical results we have decried the validity of these measurements as having no objective or provable reality. They are very proportional mathematical representations, only having value relative to each other. In other words, "anything goes", we can now be as bizarre as we like in the cosmic circus and we are only limited in performance by our ability to spread our predictions of random events over long enough time spans for them to happen. What makes them happen? We are told by quantum physics that it is the "hidden variables" which make uncertain things happen. In other words we come full circle to say along with the ghost of Einstein, that God is a hidden factor whose mysterious ways we do not know.



Einstein in a letter to Born in 1944 put down the most lucid formulation of the conflict between those who believed in certainty and those whose faith lay in the concepts of uncertainty: "You believe in the God who plays dice, and I in complete law and order in a world which objectively exists, and which I, in a wildly speculative way, am trying to capture. I firmly believe, but I hope that someone will discover a more realistic way, or rather a more tangible basis than it has been my lot to do. Even the great initial success of the quantum theory does not make me believe in the fundamental dice game, although I am well aware that our younger colleagues interpret this as a consequence of senility."



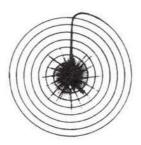
Modern physics did not listen to the creed of Einstein or share his faith and continued to accumulate a mass of empirical measurements called "facts". It then went on to interpret them in a statistical way which Einstein disliked. For Einstein an electrical potential or a field force has real natural objectivity which changed its form by definite divine laws of causality. It was only man in his ignornace who did not or could not know; whereas the religious faith of the quantum physics of today does not claim complete objectivity but only operational validity of those results that work. A thing is true because it works, they say, and if we follow that Truth, it will lead us to an ever unfolding Truth that is always temporary and changing, never absolute.

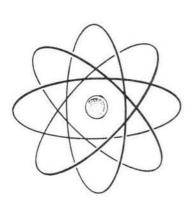
The question comes now, which of these physical faiths is likely to adopt the validity of Supersensonic measurements which are not exact but proportional? In other words they can give exact results if we set the proportions in exact meters or feet or seconds but this exactness is merely a function of the subjective nature of the observer's consciousness. Yet the results are not unpredictable or uncertain because the measurements in Supersensonics are not empirical or dependent on sense experience, nor do the observations interfere with the natural state of what is being observed.



It would therefore appear from the Supersensonics viewpoint that the measurements obtained by our trained consciousness depend on the type of Supersensonic wave-guide used, but whatever results were obtained they would be proportionally exact, corresponding with any other observer using a different scale, or wave-guide. Such a wave-field could be a real determined pattern, an objective part of nature's patterns yet possess a subjective reality in consciousness which could be always confirmed by another subjective consciousness using a different wave-guide or proportionate measurement.

This means that any result from Supersensonic measurements obtained by divining techniques tells us as it is, and this can be then checked for both its objectivity in any exact terms chosen by our consciousness, or by a statistical experiment for confirming its empirical validity in life experience. The gap between the Einstein universe and the quantum physicists could be closed by a joint experiment which could prove that God, acting as consciousness in all things, could be whatever reality we make it; both deterministic if we believed in an exact order of events or uncertain within certain bounds if we believed in an unpredictable but statistical order of random events. Such an experiment between the two schools is not highly likely at this time of writing but to a practitioner of Supersensonics such an experiment would only reveal that all along we should have been looking elsewhere in nature's book of wisdom. Science should look for more knowledge of the effect of the observer's own limitations upon the reality of his observations, rather than trying, as Einstein did, to banish the subjective completely, or as quantum mechanics did, to enthrone the subject in the seat of power without any checks and balances from the objective universe itself.





The Supersensonic Truth lies in the real established fact of everyday experience that the subjective and objective are ONE. There is no real barrier between them except in theory erected in the mind. The universe is neither external to the observer nor internal but both. It all depends where the observer stops the outer limits of his consciousness as to whether those events are external or internal. If we stop our consciousness at our skin or body, then obviously when we open our eyes there will be an external universe which goes on independent of our own limited consciousness. If we stop our consciousness in empirical events and statistical limitations and project those into our own awareness of nature then the subject will be limited to his own ignorance and remain forever stuck on one level of consciousness.

Modern physics operates with wave functions which are similar in their mathematical behavior to classical potential fields but do not represent real objects. They only serve for determination of the probability of finding real objects whether these are particles, wave-fields, or other physical quanta.

The whole question of using mathematics for any determination of reality and its laws of nature is not faced squarely. The whole question of a set of numbers representing reality avoids the nature of numbers themselves and how they arose in consciousness from the proportional reality of nature and consciousness. In the making of mental images such as numbers, we must realize the role of the mind in the erection of a conceptual model.

A conceptual model is not a mock-up or a real image and in fact may not be concrete or visualizable in real terms. However, the image or patterns of information in a computer or the intangible set of mathematical relationships in the mind, is a product of our imagination and as such is a determinant of our reality, whether that reality is considered virtual or actual.



Any image, even concrete and physical, is only an "idealized approximation" which our consciousness localizes in space. The arguments for this set out by Ronchi in Chapters 14 to 17, have been included extensively because our whole Supersensonic justification for looking at nature's images, rather than supplanting them with man's, leads to a completely different reality and image of Self and the nature of its consciousness.

The role of mathematics in science has become deceptive, hence you will find no exact formulas in this volume although you will find exact numbers as values of proportions and interval to which the student of Supersensonics can apply any formula or measurement in his or her own consciousness. Mathematics has now become not only a tool as Einstein saw it but a mode of expression. The frameworks in the mind are erected for nature's laws with mathematics acting as a sort of formalized logic. This logic, however, cannot deal with paradoxes of which nature is full. Yet science does not see the need for a transcendental loaic which unites both subject and object in its operations. Today there is a fashion, once a theory is erected, to describe it by using mathematical symbols. The usefulness of this is not denied by Supersensonics but when using symbols of any kind to stand in the place of direct perception there is the question of whether it leads to reality or merely gives answers within its own logical system.

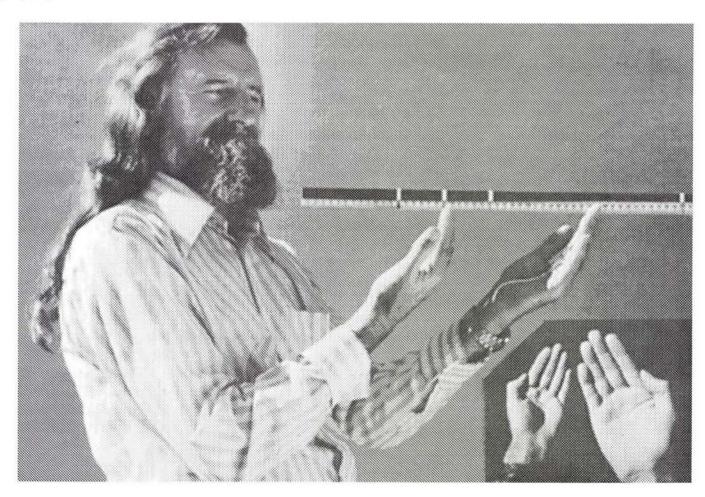
There are some instances in theoretical physics where a theory fails completely to give any pictorial image and therefore a mathematical image is substituted for it. Sometimes, with the telemetric triangle used in optics, both pictorial and mathematical images were used to deceive even the very eyesight of the elect.



The example used by Ronchi, which has been only a few centimeters from our own nose all our life, is a classic example. According to the accepted mathematical theory over the last 20 centuries perspective has been explained by relating the dimensions of the object viewed to the angle it subtends at the observer's eye. This explanation today is still considered to be most obvious and beyond all doubt, while in actual experience of perspective, it is definitely not valid. Although proved over and over again mathematically in all our observations of height and distance, from the diameter of stars such as our sun to the art of navigation, it is still not valid.

This explanation can easily be refuted by looking at one's own hands, one being held 40 cms away and the other 20 cms before the eyes. Mathematically the angle subtended by the nearest hand is about twice as large as the angle subtended by the furthest one. The ratio 2/1 is then the ratio of the linear dimension in the corresponding retinal images of the two hands, or in a photograph of the hands. See Fig. (214) below:

Fig. (214)

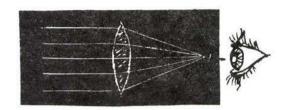


But anyone empirically testing this timeworn formula and looking at his own hands in these positions of perspective will judge both hands to have almost equal dimensions, for all practical purposes the same. But following the generally accepted mathematical formula the image of the more distant hand should appear to be 1/2 the size of the other one like the tiny hand of a small child alongside that of a man: the fact that not only are the fundamental laws of perspective by which we view the material universe all wrong but the mathematical representation of them has deceived mankind for 2,000 years.

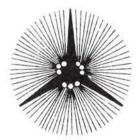


When this simple example is extended into the sophisticated measurements of Einstein's prediction of bending rays of light or projected into the optical phenomena of quantum physics or even into the chemical transfer of images on photographs, we are faced with an area of ignorance in man's most valued physical sense by which we erect the very conceptual model of an observer. Whether we do this mathematically, logically, or it is illogical phenomena, is beside the point. From a Supersensonic point of view it is. None are so blind as those that don't want to see that the simplest feedback machine – their own body – is a living proof of this deception. Nature has provided the simplest feedback device when we look at a plane mirror and see our own body. Mathematically the image is all wrong, but the adjustment you make in your consciousness makes you feel alright.

This confusion about mathematical representation is happening in both Einstein's view and the quantum physics view of matter, simply because they have done what Genesis II warns man about. The tower to heaven symbolizes man's mathematical representations which are an abomination to the Lord, as the Bible puts it. Man's imagination has run away with itself, says the text, so what will man do next?



It is argued that in certain cases mathematical formulation actually promotes intuition and understanding. The mathematical relations between electric currents of a particular circuit are identical in form with those which represent say a swinging pendulum suspended in oil. Examples abound where it has been found that the correspondence between certain formulas for the strength of magnetic fields matches the equations for the flow of liquids and so forth. In each case a phenomenon which is easy to conceptualize in a visual sense is linked to another which is much more abstract. The correspondence is recognized by mathematicians as not to be between the phenomena as such but between the imaginative conceptual models that are found by science to be most plausible and expedient. Expediency and workability and the apparent world are bolstered and praised as the only real world, when we can say with all our heart, that the laws of an abstract phenomenon can be expressed in the same form as those of a concrete objective phenomena, and that by doing this mentally we get a better understanding of the abstract world.



Another example of self-deception is that mathematics is far more rigorous and its concepts much more precise than language, though mathematical symbols, like words, still only stand in place of reality. In some cases a mathematical formulation is neither possible nor needed and ordinary language must play the roles of being both a tool and a medium of expression. But though the mathematical image is no more real than a verbal one and as we see may become even more deceptive over the next 2,000 years, we continue to parrot like a computer the dictum that any science which is able to make extensive use of mathematical symbolism is justly to be called an "exact" science.



Professor Einstein, whose kindly face you see above, is very modest, in spite of the fact that he is the greatest scientist of our day. What he says he is really proud of is his ability to play fairly well upon the violin; for he is very fond of music and in it finds rest and relaxation from his problems.

The methodology of science is far from complete and it was this that gave rise to Einstein's misgivings about quantum physics. Einstein believed that the universe had been so designed that its inscrutable workings could be eventually comprehensible to an enlightened consciousness. Therefore he reasoned that these processes of nature must work according to discoverable laws. Whether these laws were laws of consciousness or material behavior, there was a Supreme Intelligence behind them that did not perform like a clown at a circus unless the clown found there was no other way to communicate. Although he did not rule out the role of the joker and even thought that his own work was a joke to be repeated not too often, he did feel deeply that the cosmic intelligence left nothing to chance. In Einstein's world there was no room for chance and indeterminacy - God did not play such games with himself or even want to play the cosmic game that way. There was always a net of compassion under the trapeze artist in the cosmic circus for Einstein. He could not believe that God or the Supreme Intelligence would take a chance that by some human error the performer would fall unprotected to the ground. At this level he expressed his beliefs in the supremacy of consciousness to uncover the destiny of man's physical incarnation on this planet in the following words. The author is sure he gave much more importance and thought to these words than he did to mathematical representations:

"I claim credit for nothing" he said at someone's mention of his modesty. "Everything is already determined, the beginning as well as the end, by forces over which we have no control. It is determined for the insect as well as for the star. Human beings, vegetables, or cosmic dust, we all dance to a mysterious tune, intoned in the distance by an invisible piper."

The words of another great Jew come to mind as we close this chapter:

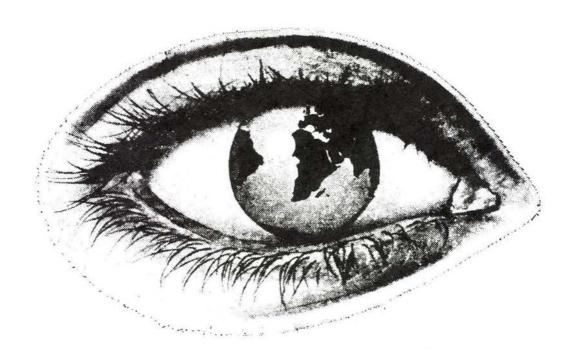
"Not even a sparrow falls to the ground without thy Heavenly Father knows it."

We go back to our opening statement and the question: "What will the measuring devices of the future be like?" Those meditators who have measured the cosmos on the back of an old envelope while sitting in their garden and not going outside their own door, may have some sympathy for those who strive to measure it with bits of string called light years.

May those who have to use 200 inch telescopes or vast vibrating antennas of radio sources or the symbols of language and mathematics be blessed with direct perception of God's own signature.



That signature is to be found in the contemplation of light and the way it communicates consciousness to man. It is the main thrust of Supersensonics. It is not a <u>belief</u> but an awareness that man can only see into the heart of matter when he has already looked into the eye of God.

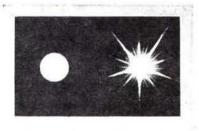




This Supersensonic kundalini device detects a person's aura color and determines which of 44 natural elements is predominant in the physical body. Inside the unit there is a whole octave oscillator tunable from 200 cps to 400 cps as a physical exciting stimulus while the harmonics of the radio-magnetic field of the horizontal wave-field of the emotional body are tuned by a magnetic dial at the center of a Turenne disc. The thought fields of the vertical wave-field are patterned by an array of prefixed De La Warr permanently tuned dials set at the rate for higher creative intelligence in the east—west wave-field. The set was designed by the author and custom made to his specifications by George De La Warr of Oxford, England in 1960.

22

LIGHT AS CARRIER WAVES FOR CONSCIOUSNESS.



At the left is a planet, a clear round steady light that does not twinkle. At the right is a star. It always twinkles, for its rays come so far that no matter how big the star may be, it looks like the merest speck of light, and its rays are easily swerved from side to side as they travel through our atmosphere. That wavering is what makes the star twinkle.

THE ACADEMIC EXPLANATION FOR A TWINKLING LIGHT

Fig. (215)

To understand the nature of consciousness and its ability to travel vast distances through space and even penetrate between the stars of endless galaxies we must first understand our earthly ideas about light and the way it is propagated. It is not our intention here to rewrite what can be read in any textbook on physics but to discuss simply the question of an ether and the electromagnetic radiation which we call light. We have said that the light we see is not radiation because light is invisible, colorless and indistinguishable from our own consciousness which is doing the seeing. We have said that the light we do see is psychic light, activated by the absorption of energy by our senses and interpreted by the brain. To create psychic light one may merely press the eyeballs to send mechanical impulses to the brain. Whereas to create real light that exists as interstellar energy one must have a radiating oscillating source of wavelike stimulations capable of activating the material particles of matter which get in its rays.

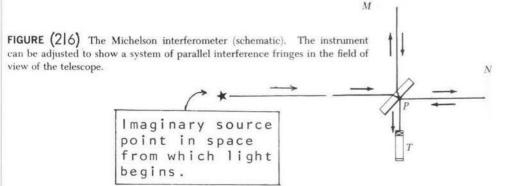
The idea that these waves needed an ether was a concept given prominence by Newton and Huygens. At this time there is no scientific proof that an all-pervading ether acts as a medium which can transmit light and heat across a vacuum. Maxwell originated a theory that light travelled in waves but its motion did not mechanically vibrate the ether but rather undulated its electrical potentials.

Then Max Plank postulated that the transmission of light was due to the motions of actual particles. He reasoned that radiation and absorption of radiation particles or photons could only take place in definite quantities called quanta. This provided no evidence of ether since these particles according to these ideas could travel like planets or objects by reason of their mass and velocity.

Einstein gave a brilliant explanation of this quanta theory of photoelectricity. He saw that the wave properties of light were not able to account for observed phenomena and assumed that a beam of light or radiation must be thought of as a continuous stream of discrete packets of energy. Plank did not go this far; although he did believe that the oscillating energy of radiation was quantized, the radiation emitted by an incandescent body travelled through space in the form of electromagnetic waves only. Einstein postulated that the discrete packets travelled as a bundle rather than in the form of spreading waves which would eventually disperse their energy.

A confusing situation has since existed between two schools, one leaning towards the wave theory of light of Maxwell and Huygens, and the other towards the corpuscular theory of Plank and Einstein. The matter was stated by Einstein himself to be a matter of taste, rather than having two theories for the same phenomena. He explained, however, that the corpuscular theory does not allow light to bend and demands the existence of sharp shadows because it travels in exact straight lines. Whereas the wave theory will show that a small object or thin wire will cast no shadow, or annihilate some of its waves through a grating. Young and Fresnel performed experiments which supported the wave theory which implied the acceptance of a medium in which the waves of electromagnetic energy could oscillate.

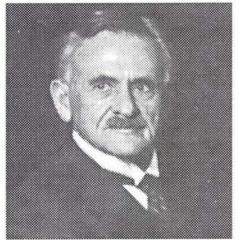
The question arose as to the friction which would be caused by bodies moving through space in the ether at great speeds. The Michelson Morley experiments have proved that there is no friction effect between the earth and the ether as it moves through space or around the sun.



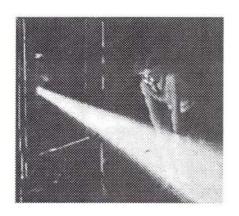
The ground surface of the earth is in relative motion to the sun because of the earth's rotation. Relative to a fixed frame of reference at the center of the earth the eastward speed of the rotation of the earth's surface amounts to about 700 m.p.h. at the middle latitudes of 45 degrees. All scientific laboratories on earth and all the instruments in them possess this relative motion although mankind is not physically aware of it. Even less obvious to the human faculties is the earth's motion around the sun whose orbital speed is an average of 67,000 m.p.h. In addition, relative to the galaxy itself the solar system with all its planets is moving towards the constellation Hercules at about 43,000 m.p.h.

If such a medium existed as ether which was stationary throughout space then presumably it could be used as an absolute frame of reference. Scientists thought that the earth would have to show motion in respect to the invisible undetectable ether and that the motion of the earth would have some effect on the propagation of light. The experimenters used an optical device called an interferometer. The object was to see if there was any drift in the ether by aiming one beam of light in the same direction of the earth's travel with another aimed crosswise at 90 degrees to it. Such a drift would show up as a difference in transit times. The conclusion of this null experiment proved for many scientists that an observable universal frame of reference does not exist. Einstein saw that this required a complete reformulation of our ideas about space and time and the principle of relativity emerged. However, this did not change the measurements of time because it was based on the constancy of the speed of light in a vacuum. This constant is independent of the motion of the source of the light relative to the observer who experiences it. These are however purely mathematical and theoretical representations because no fixed point in space can be determined in reality from which we can accurately measure the velocity of light.

ALBERT A. MICHELSON



One of America's Greatest Physicists



If you find it hard to believe that the air is full of dust, just darken the room and look at the ray of light coming in through the keyhole. It will be full of tiny dancing particles.

CONSCIOUSNESS AS A CARRIER WAVE FOR LIGHT.

Experimentally there is evidence now that there are particles of energy coming from distant stars which do exceed the constant velocity of light on which our present ideas of radiation and matter rest. However, the speed of light described in a purely mechanical situation has nothing to do with our experience of light as a phenomenon of consciousness. Whether we observe or record these events through optical instruments makes no difference if our concept of transmitting signals from one place to another in space is limited by an artificial time-bound constant velocity. Our consciousness does not take a million light years to travel through space to some far off nebulae. The scientist would say the radiation has been travelling for a million lightyears before it hits the receptors in the eye; that cosmically speaking we are living in the past history of all the stars. It is suggested that some of the brightest stars we are now seeing died long ago and that we are merely seeing their death pangs. Such statements are hinged entirely on the constant velocity of radiation and light and all our physics is firmly anchored on this being an unshakable truth.

We began this chapter from the mental observation point of physics which looks on phenomena as an external affair. But if we reverse the concept and look at light as a function of consciousness rather than seeing consciousness as originating from light, then we can understand certain insights.

The idea that the subtle ether possesses no mass in which solid bodies could move without friction was never scientifically investigated. The particles of energy called photons were believed to possess no mass and therefore the ether does not provide any resistance to the passage of material particles through it. Einstein reasoned that we would have to decide as far as optics is concerned that the wave theory was more valid than the corpuscular theory because of the spreading of the light. Einstein asks, "What is the medium through which light spreads and what are its mechanical properties? There is no hope of reducing optical phenomena to mechanical properties until this question can be answered."

Einstein concluded that the difficulties were so great in solving this problem that science has to give it up and give up the mechanical view of light and the medium as well. He concludes that the neglected clue connected with the fundamental concepts of mechanics is that of "mass".

The question we ask in Supersensonics is: "Does light really travel or is it our consciousness which travels?" This cannot be disproved or proved by physics but there is much evidence that consciousness can not only travel across great distances, but also enter completely different time domains from those fixed by conventional scientific clocks.

Actual patterns in the ether can be determined by a number of radiesthesic and radionic instruments irrespective of distance or time. A photograph of a person many thousands of miles away can yield instantaneous information to a dowser-about their physical actions or the health of the physical body. These patterns in the etheric subtle matter have been detected and independently verified with a number of different detection devices, which we described in Volume I of this series. The actual detection of these patterns around trees and organs and even material elements reveals that consciousness travels to the objective situation in all observations and can bring back information about far-distant stars as easily as measuring a magnet's properties on a test table in front of one's eyes.

WHO LIMITS WHAT?

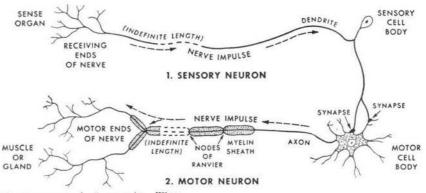
The only limitation of consciousness is that our human physical senses of sight, hearing, touch, etc. appear to have a maximum boundary of perception, limited to the velocity of light and cannot so travel in space except through the spectrum of vibrations for which they are designed as follows:

The visual receptors respond to wavelengths of color and light vibrating in units of 10,000 million kcs per second as follows:

Color	Black	Red	Orange	Yellow	Green	Blue	Indigo	Violet	White
Supersensonic measurement	260	380	440	520	580	640	700	770	890
Orthodox measure- ment of thresholds		380 .8 mic	ron	520	580	690	770 •4 micron		ron
Angstrom, units of	1538	7890	6909	5750	5170	4680	4280	3900	

At more than 890 the wave-field detected is <u>ultra white</u> and not ultra violet which ceases at white's 890. At less than 260 the wave-field is detected as infra black.

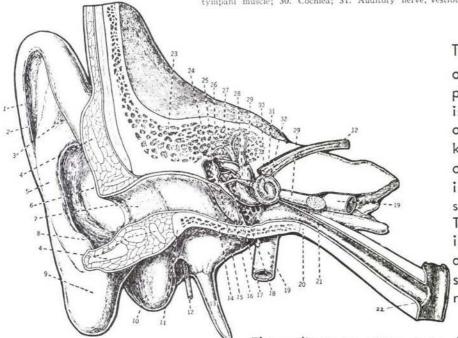
It is obvious that the evolution of science has provided us with a whole host of sensitive devices which can respond to a much wider spectrum of oscillating electromagnetic waves than the narrow slits of the senses through which we peer at the universe.



Sensory neurons are ready to report conditions such as pressure, heat, or pain. When the receiving ends (left) of the dendrite fiber are stimulated, a nerve impulse goes to the cell, then over a junction (synapse) to a fiber from another cell. Here the second cell is a motor neuron. It sends an impulse through its axon fiber, which stimulates a muscle or gland to deal with the reported condition. The entire nervous system is organized to pass from receiving to acting as shown. Of course, the organization is more complex than appears here.

The Ear and Associated Structures

1. Helix; 2. Scapha; 3. Fossa triangularis; 4. Cartilaginous portion; 5. Antihelix; 6. Concha; 7. Ceruminous glands; 8. Antitragus; 9. Lobule; 10. Mastoid process; 11. External auditory meatus, bony part; 12. Facial nerve; 13. Styloid process; 14. Anvil; 15. Hammer; 16. Tympanic membrane; 17. Stirrup; 18. Tympanic cells; 19. Carotid artery; 20. Eustachian tube, cartilaginous part; 21. Eustachian tube, membranous part; 22. Orifice of Eustachian tube in nasal pharynx; 23. Mastoid cells; 24. Lateral ligament of hammer; 25. Superior ligament of hammer; 26. Semicircular canal; 27. Tympanic antrum; 28. Vestibulum; 29. Tensor tympani muscle; 30. Cochlea; 31. Auditory nerve, vestibular branch; 32. Auditory nerve, cochlear branch.



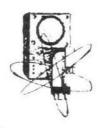
There is no general acceptance of the lower limits of sensory perception but adrenalin deficiency is known to increase the perception of normal adults. It is also well known that mental control in states of deep yogic trance and hypnosis induces remarkable increases in the sensitivity of all the receptors. The psychic area of the brain which is dormant in normal adults can be awakened to extend the range of the senses beyond time and distance, but normal thresholds are as follows:

The auditory receptors respond to sound waves between 38 c.p.s. and 15,000 in 22 year old adults.

- (2) The taste receptors respond to molecular vibrations in water from a lowest threshold of 0.1 m moles per litre of sodium chloride and median 12 m moles for normal adults. For sucrose about the same 12 m moles is the average.
- (3) The olfactory sensors can detect aromatic molecular compounds in concentrations as low as 150 m moles per litre sodium chloride.



Recognition thresholds for No. (1) and (2) and (3) were obtained from Robert I. Henkin who states that perception of sensory signals through taste, olfaction, audition, and inner stimulations, is increased by removal of adrenal hormone activity. The factors of detection are increased by 100 for taste; by 1,000 for smell; for audition of signals by 13 db between 1,000 and 4,000 c.p.s. These studies demonstrate a complex feedback system, controls the endocrine interactions with the nervous system and hence our perceptual levels of sensory detection.



CONSCIOUSNESS AS A CARRIER WAVE FOR SENSATIONS.

However, to view these measuring devices as anything more than an extension of our existing senses is an error of perception. Einstein says all scientific measurements begin and end with sense experience. Supersensonics is directly concerned with understanding the perception of physical sense experiences and not ignoring the fact that it is always consciousness which must ultimately make sense of these senses. It also emphasizes that it is always consciousness which must limit or enhance nonsensory perception. Any other view is non-sense. However, science insists that the senses act as carrier wave-trains of consciousness and not consciousness as carrier wave-trains for the senses.



How can consciousness act as a carrier for experiencing the senses? Obviously no human being could experience with their senses the internal temperature of the sun at 16 million degrees. Nor could they visualize such light since it would be millions of degrees beyond even the visual spectrum. It would merely be black invisible light and we could not know of its existence by the perception of our senses. We could in consciousness be sitting right now in the middle of cosmic energies as great as the sun's center and not even know its temperature or its frequency. We could have physically adapted to the existence of this cosmic radiation just as our bodies are adapted to the pressure of 14.7 pounds of air on each square inch of skin. We are not physically aware of this enormous atmospheric pressure which holds us together as blood and cells, but mentally we can represent what would happen to collapse our body if we went down to the areater pressure of two or three more atmospheres in the depths of the ocean.

Having no sensory knowledge of this intense cosmic radiation and being only tuned physically to a few certain frequencies of sunlight and heat, how can we say that there is no ether to carry these enormous rays of energy? How do these rays go on coursing through millions of light years if they don't hit us and shoot past the tiny planet we live on?

The fact is we don't even experience when these cosmic rays do hit us. Consequently atomic integration and disintegration goes on at an enormous rate inside us quite unknown to our ordinary feeling or awareness.

Does it seem strange that most of what we know about the physical world can only be experienced mentally? No one has ever experienced atomic structures, no one has experienced even a single cell of their own bodies. These are all intellectual representations that we learn from looking through microscopes which amplify our existing sense of sight. If we try to feel the existence of atoms or cells or molecules or even separate organs within our own body, we are only confronted with a generalized feeling of wholeness, of being one lump of flesh. Yet the consciousness which operates in this body is capable of extending its awareness on many macroscopic levels of experience quite independent of these microscopic aggregrates of separate entities. What is the carrier wave which makes communication between all these multiple wavelengths and frequencies of electromagnetic energy possible? How can we connect two separate objects in space in the consciousness of the one who experiences them?

RADIESTHESIC MASS.

The study of light <u>radiation effects</u> on all kinds of material samples has given rise to concepts of <u>mass</u> in the subtle world of Supersensonic energies.

Engineers and physicists such as Brard and Gorceix accepted the divined influences as waves of some sort and regarded their measuring instruments as wave-guides which recorded what they called "Radiesthesic mass". This concept was born out of the general ideas of atomic mass and gravitational mass. Gravitational mass, being due to the pulling of objects towards the earth's center, inspired the early students of this Supersensonic phenomena to devise balance rules which found the Neutral Point situated between two samples A and B in exactly the same way as we weigh the objects on a scale.

Fig. (217) microphotograph of the tracks of radium radiation in the light-sensitive layer of a photographic plate.

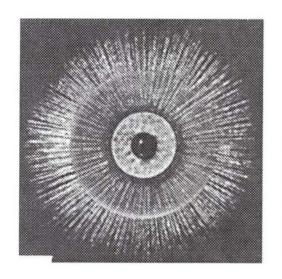
It is interesting to note the development of man's thought about mass and apply this mental <u>concept of weight</u> to our study of light radiation effects on all kinds of matter and gravitational fields:



Neutral Point

One of the first measurements mankind learned was to compare weights of two objects by holding one in each hand and comparing the heaviness. This is called comparative knowledge and only yields a relative result. In course of time this became more sophisticated and scales were invented where the two objects were suspended by a bar held at the middle. The development of this thought was to find at what neutral point the bar could be suspended to balance the bar, even though the two objects A and B compared, had two different weights or masses. It is this latter principle of the Neutral Point (N.P.) which was applied to diviners' balance rules but in the new case of Supersensonic measurements the qualities divined and compared are not "mass" but the other physical properties of a wave nature. Hence the use of the term "radiesthesic mass" by the early experimenters who used a diviner's balance must be explained before we describe the instruments themselves and even more important outline the properties of the wave phenomena being measured. The following features are detected by the rules and balances used in Supersensonics:

- 1. The shape and form of the wave nature corresponding to the surface area of the samples compared.
- 2. Wave and polarity effects on the atmosphere surrounding an object such as ionization and odor, causing local oscillations of molecules in the air which revealed external Supersensonic signs of its internal chemical properties.



- 3. Energy consisting of an internal pressure likened to that of voltage, such as the potential energy of an electric cell or battery.
- 4. Energy detectable as the energy of a wave-field such as radiation, comparable to those waves emitted by radioactive bodies.
- 5. Energy of a wave-field due to an object's being situated in a saturated static electrical environment providing it with atmospheric influences due to an electrical charge escaping into the air.
- 6. The annihilation of energy at the null point zero mass.

GENERAL AGREEMENT.

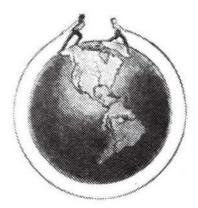
Although thousands of radiesthesia innovators and experimenters used different terminology and devised a bizarre total of instruments for measuring everything from the yeast activity in bread to the radiation of vibrations from herbs and plants, there was nothing systematic except that in all cases the diviner skilled in Supersensonic techniques interprets the meaning of the position found for the Neutral Point (N.P.) between two samples A and B. At this point of N.P. the pendulum or diviner's rod shows that an energy due to some influence emitted by A at one end of the balance rule is equal to the mass/energy simultaneously provided by sample B.

The students of Turenne found all the above forms of influences are recognizable as those same types of radiation and polarity found over and around a magnetic compass. The next chapter will take some of the comments of previous chapters and apply them to the instruments used for measuring the bombardment of objects with radiation and light. The bending of light is in reality not due to gravitation but to levitation which annihilates it.

Einstein dealt with the relationships between the mass of a gravitating body and the gravitational field which that mass, by its very existence, created in space. By laying out the laws of motion which could be used to describe the paths taken by moving bodies in gravitational fields, mankind was further plunged into the knowledge of comparison and relativity. Yet Einstein himself saw with some clarity that the mathematical and geometrical space he had created was only proving that the straight line-of-sight optics in physics was not reconcilable with the curvature of the gravitational field created by the mass of matter involved.

The idea that we could have a universal field that folded back into itself, so that gravity eventually became its opposite – levity, was not feasible in Einstein's day. He could speculate on it but the means to prove it mathematically and physically were not available to him. Now with Quasars and Black holes in space being discovered by scientific observers, we can accept more readily the concepts of void and zero vibration from which our human consciousness can measure.

The N.P. or null point then is the essence of the new physics and the basis of an <u>absolutism that is directly experiencable</u> as the annihilation of space. This begins with cessation of the <u>notion of space</u> when the ego dies and consciousness becomes a limitless field.



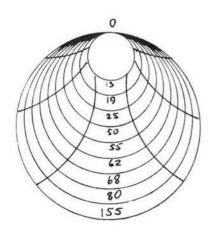
23

SUPERSENSONICS & PHYSICS OVERLAP.

We now take up again the polarization of wave-fields which we briefly mentioned in Chapters 6 and 7 and relate the phenomena of Supersensonics to modern methods of wave propagation. The characteristic property of light which enables it to pass through a medium such as a prism or diffraction grating and reveal some of its characteristics is used in Supersensonic wave-guides and rules. Diffraction in science is achieved by passing rays of light through narrow slits or opaque bodies. The rays appear to be deflected and produce fringes of parallel light and dark-colored bands. The same phenomenon appears in sound and electromagnetic waves of all kinds.

However in the rules and wave-guides of Supersensonics there are no slits and the dark shadows and edges of light are invisible, and therefore detectable only with the selective pendulum, diviner's rod or radionic implements. The same interference patterns emerge, but instead of being deflected according to the density of the medium or the width of the slits in the usual interferometer, the light waves take up a proportional natural wave-field with edges at 13, 19, 25, 50,55,62,68,80 and 155 measured from the zero on the rule irrespective of the length of the rule.

Fig. (219)

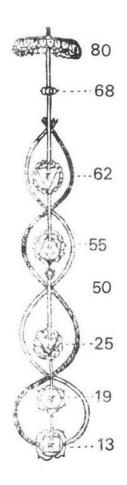


Just as when we cut a bar magnet in half the two ends immediately become new magnets with north and south polarities, so does the rule become a new rule when cut in half with the same proportional field edges at 13, 19, 25, 50, 55, 62, 68, 80, 155. Likewise when the rule is doubled the same phenomenon is observed by our field of consciousness and the diviner's reaction.

What is exactly the significance of these proportions in unbounded nature, unrestricted by any medium through which light propagates, is not clear to radiesthetist or radionic operators. It is about as clear as the origin of the spectrum is to modern science. All we know is that the light spectrum provides lines for each element and the Supersensonic spectrum provides consistent L-fields and H-fields.

White light is made up of many frequencies which science calls "colors", which are separated into fringes or bands when diffracted through slits in a grating or refracted through a medium such as a prism. A separate chapter is devoted to color from the Supersensonics viewpoint because it would appear that color is a psychological phenomenon of our consciousness. Somehow consciousness automatically discriminates the wavelengths entering our eyes and the nerve signals that go to the brain. It has been proved that the cells in the occipital region that receive those signals do not discriminate separately. That is, there are no blue receptive cells or yellow cells in the brain which recognize the wave trains of neural spikes sent by the eye. If there are such cells they can be adapted to other colors by wearing transparent colored filters over each eye.

Fig. (220)



Supersensonics then gives us a more sensitive spectral tool for studying waves of light in their natural environment without disturbing them with scientific instruments or artificial mediums. The fact that Supersensonics reveals similar patterns of dispersion may be accounted for if we think of the human being as we do of a prism. If we look at our consciousness as a dispersive medium for the radiant electromagnetic energies of the universe, we can get a better idea of Supersensonics and its seven levels of consciousness.

Our consciousness in other words is the ground in which all vibratory phenomena are experienced, whether this comes through instruments designed by man or is directly perceived through our senses and the senses merely act as filters, like a prism, to separate the different frequencies. It is as if each human being is looking through seven narrow slits at the sensory universe, each one tuned to receive different wavelengths. The proportions revealed by our consciousness itself in Supersensonic ratios of 13, 19, etc represent the width of the frequency bands on which the seven bio-electrical centers function.



Polarized light is responsible for this effect, exhibited by Iceland spar and other substances. The crystalline structure polarizes the light, then refracts each plane of polarized light differently, giving the double image shown.

In exactly the same way as the glass prism separates the different frequencies of electromagnetic light radiation, so does the acoustic prism in our consciousness of wave-fields separate the different components of a sound wave of several tones. However, the separation is not achieved by our physical filter of the ear but by our consciousness which makes sense of the signals.

This is found to be specially true if electromagnetic waves of radiation such as light or microwaves have the same wavelength as sound waves; they are both deflected the same amount. The refractive index of our consciouness is the same amount when the wavelengths are the same for the two types of waves, namely light and sound.

This is proved by the rules and wave-field guides used in Supersensonics. The polarization of the wave-fields may also be a function of consciousness rather than the medium used to polarize them. It is thought for instance in science that polarization of waves depends on the mode of propagation and the orientation of the antenna, but in Supersensonics every wave-field has its own characteristic positive or negative polarization depending on the excited element which is causing the oscillations.

If we look again at human consciousness as a prism with the seven psychic centers acting as focussing lenses then we can see why some human beings are unaware of the main functions of consciousness, simply because their lenses are not polarized or focussed and therefore their light is diffused and deflected downward instead of upwards to the higher wavelengths of consciousness. Such a concentration of wave energy is called focussing or dharana in Sanskrit. The region of energy concentration of the life-force we call radiation or light is called the mind-stuff because it is concentrated in one direction only - the vertical plane.

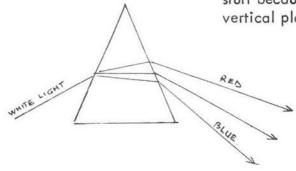


Fig. (221)

The wave velocity of Red light entering the glass prism is not reduced as much as the wave velocity of Blue light.

Focussing in both horizontal and vertical planes is accomplished by the senses and the mind-stuff acting together. Supersensonic detection shows that the refracting structure of the chakras or bio-energetic psychic centers very much resembles spiralling spheres in outline. They can be tuned by the mind-stuff to resonate with any vibrating field of electromagnetic energy such as light waves or sound. Because consciousness is the medium or prism which refracts and concentrates radiation energy at the focal points of the chakras, the properties and characteristics of that consciousness which acts as a wave-guide are also found to be in each chakra. The same laws of vibration, resonance, refraction, polarization which we find in the physical phenomenon we call "light" are also found by Supersensonic methods to be present in our thoughts and in our consciousness.

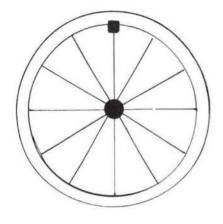
In the field of electromagnetic waves we have a large number of categories established by science beginning with the longest such as radio waves, passing through infra-red of heat waves, visible light, ultraviolet X-rays, gamma rays, all merging together in a continuous spectrum. Yet it would appear that all matter and particularly human consciousness participates in all these different wavelengths in an integral way. Though some organisms, atoms, or species may select only a few resonant frequencies from the total spectrum, all are constantly subject to and interpenetrated by the cosmic rays of the entire spectrum. Depending upon the ability of each organ, cell, atom, etc. to establish resonance with the whole entire, its consciousness of light radiations covering the spectrum will reveal limitation according to its L-fields. The human consciousness therefore acts as the medium or prism while the nervous system and the psychic centers act as a wave-guide and focussing lenses.

The polarization of these psychic lenses and the power of focussing them is the means by which we explore the nature of consciousness. By techniques of meditation and concentration we can become accurate wave-guides for the light of consciousness of the Supreme ONE. For those who do not embark on a disciplined program towards enlightenment the methods of Supersensonics become a bridge of understanding. The study of wave-guides in Supersensonics will give that understanding.



Photographic traces of a subatomic collision. A proton coming from the left hits a proton originally at rest. For all such encounters except head-on impact, the two particles move off at right angles, in conformity with conservation of momentum and of mechanical energy. (Courtesy Powell and Occhialini, "Nuclear Physics in Photographs," Clarendon Press.)

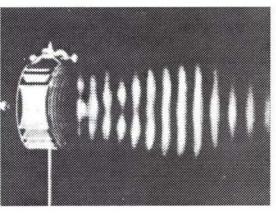
WAVE-GUIDES.



Supersensonics utilizes thought waves impinging upon an object by using a selective detector or a pendulum to measure their effects on the electrical and magnetic fields surrounding the objects. There are various ways of portraying the information gained and interpreting it in scientific language. The most important Supersensonic tools are the wave-guides invented by early pioneers of radiesthesia who were physicists. They took a different path from those who evolved from classical physics into the present day world of quantum physics.

However, it is important to see the connection between the phenomena investigated by the Supersensonic detectors and the results produced by all vibrating systems in acoustics, optics and atomic physics. The term wave-guide has been used for the investigating of field-edges and interference patterns in Supersensonics for over 50 years. Some familiar relationships exist in modern research on microwaves in the electromagnetic spectrum.

For photo credits in Chapter 23 see page (399).



Today it is possible to focus electromagnetic radio waves through lenses in the same way we do with the glass lenses of optics and light. The same applies to sound. Lenses have been designed that can focus sound waves and electromagnetic waves through one lens at the same time. For the lens to act identically for sound and electromagnetic waves, however, there must be direct resonance, that is, the wavelengths of the two waves must be identical. This principle of resonance, between the wavelengths of two different types of energy, such as sound on one hand and electromagnetic waves which have the same character as radiation and light on the other, is important to the understanding of how thought energy, emanating from the mind-stuff, can be focussed with light energy along a Supersensonic wave-guide.

Is there a region in the two spectra of oscillating wave-fields where this resonant condition exists when we dowse for radiations from a sample and hold in our hands a witness of the same wave-lenath?

Fig. (222) The wave guide at the far left is placed at the focal point of the microwave lens, and the wave fronts of the directed energy appear in the center of the picture.

SCIENTIFIC BACKGROUND TODAY.

Before dealing with the subject of measuring light and sound waves in the subtle ether, it is necessary to review some conventional methods of polarization, refraction, and diffraction. All this will be familiar to those trained in electronics and optics but a review of these methods at this point will ensure that Supersensonic methods are approached against a well informed background.

The wave-guides developed as rules and discs by the early radiesthesia pioneers do not compare to the more sophisticated instruments which have been developed recently by combining some of their features with radionic devices. However, our description of these early wave-guides will help us to understand not only the later Supersensonic devices but also the nature of the wave-fields themselves which these thought waves set up around various objects.

Firstly we must set out the familiar academic or existing knowledge to see if our new observations are consistent with it or reveal some undiscovered features. There are many regions of the spectra of sound and light where resonant frequencies can be used to pass them through the same lens, but none so common and practical as those we use everyday in our television, telephone, radar and satellite communications. This is in the region of those microwave wavelengths between one to three inches. This is also the region of sound between 4,500 cycles to 13,200 cycles per second, which covers that part of the spectrum of vibration in acoustics with which all stereo music and high fidelity recordings are concerned.

In the electromagnetic spectrum just beyond the limits of our senses of sound and visible light this region of the invisible microwaves is very important to the telephone and T.V. networks. The same lenses, if effective for focussing both types of waves, can be used interchangably or simultaneously for both sets of phenomena.

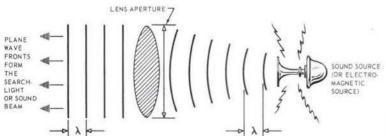
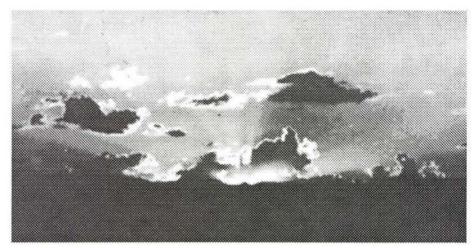


Fig. (223)

A lens of a given aperture in terms of wavelengths will create the same beam whether sound or electromagnetic energy is involved.



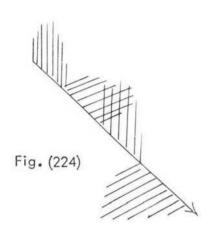
In calculating the difference in frequency between a sound wave of one-inch wavelength and an electromagnetic wave of one-inch in wavelength we have an equation which reveals 13,200 cycles for sound and 11,800,000,000 cycles for light. The wide difference in frequency of these two one-inch waves, combined with the wide difference in velocity, permits the wavelengths of both sound and light to be one inch long. The focussing action of a dual lens that facilitates both sound and light fortunately depends on wavelength and not the frequency or velocity.

SUPERSENSONICS BASED ON PROPORTIONAL DISTANCE, NOT VELOCITY.



This wavelength effect on propagation was not known when Einstein formulated his famous theories based on the velocity of light. Although the phenomena does not affect the mathematical theory simply because Einstein's concepts can only be proved over the very great distances which interstellar light travels, they do affect our thoughts about local reality. If sound can be focussed through the same lenses as light and its patterns of energy be transmitted through oscillations which do not depend on velocity or frequency, then we have proved that local disturbances and accretions in matter do not depend on the speed of light or its frequency but only depend on wavelength; in other words, on the spatial distance from one wave-form peak to another. If spatial distance is a key to the vibrational result in nature, this alters the whole concept of a universe based on space - time or the velocity of light. This proportional distance effect means that our experience of sense objects can be distorted by our proximity or by distance away. As Ronchi states in his"New Optics, the distance away from a mirror or a lens or an object is not accounted for in the present theoretical considerations of all our present mathematical representations of matter, the observing of matter, or the choice of instruments used to measure these velocities and frequencies which are the backbone of today's science.

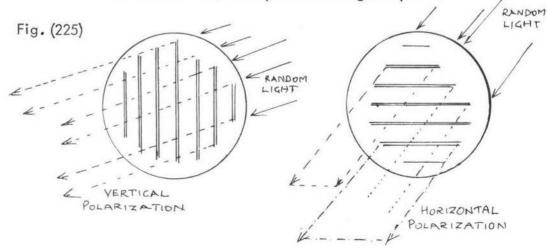
ELECTROMAGNETIC WAVES & POLARIZATION.



The transmission of light waves and radiation is academically considered to be in transverse waves. They can be generated by a rapid alternation of a current flowing in an electric wire or spark. The tower of a radio station constitutes such a wire and if a current is caused to flow in the wire in the tower, electromagnetic waves are radiated in all directions of the compass. Because the tower is vertical the waves are polarized vertically. In the U.S.A., when using the shorter wavelengths in the radio spectrum, the horizontal polarization is used and therefore all antennas are horizontal rather than vertical. In England the television waves are vertical and therefore great tall towers are used with the antennas on the rooftops vertical to receive the vertically polarized waves.

If the plane of polarization continuously rotates as the wavefield propagates itself away from the source of excitation then it is thought that a spiral wave is created as a combination of both vertical and horizontal plane polarization. This is called a circularly polarized wave.

Since light waves are polarized like all other electromagnetic waves it is important to know how they become orientated to some polar direction. Light is considered to be generated by the rapid oscillation of millions of electrically charged electrons. Because electrons move from side to side and up and down in every direction, light from all natural sources is randomly polarized. Polarized light can be produced by simply filtering out all the waves except those in a given plane.



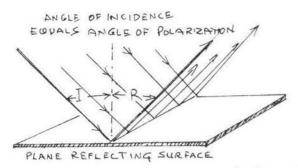
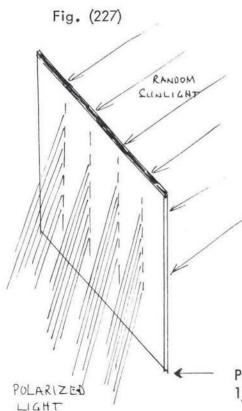


Fig. (226)

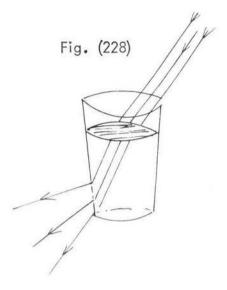
A piece of polaroid sheeting permits only waves in one plane to pass through, whilst absorbing all others. The visual receptors of the human eye are not consciously sensitive to polarization. However light reflected from any mirror surface would have been reflected according to the plane of the surface. In Supersensonics we call all light reflected from surfaces which have this "polarization effect" secondary light, whereas light which is not polarized and still has its random polarization is called primary light. When randomly polarized, primary sunlight or starlight or cosmic energy of any electromagnetic kind, strikes an object or obliquely glances off the surface of a body of water, a large percentage of the waves of vertically polarized light is absorbed; whereas the horizontally polarized light waves are practically all reflected.

All reflected light therefore is strongly polarized in some direction simply because every object absorbs some of the primary radiation we call "light" in the process of reflection.

Owing to the polarized wave nature of sound and light we can apply the phenomenon of interference where our wave overlaps or interferes with another to "see" electromagnetic waves through diffraction gratings. By applying this principle to concentrating the waves, rather than disintegrating them with interference patterns, we can construct lenses which amplify and concentrate the phases so that constructive interference results. By generating light waves in this way coherently we can create a laser in the same way that we can generate coherent electromagnetic radio waves. By generating radio waves with very short wavelengths called microwaves in the electromagnetic spectrum we can focus them into a narrow pencil-like beam. These are conducted along a rectangular metal tube called a "wave-guide" to a horn from which they are issued. These are shot at a specially designed diffraction lens which focusses the microwaves of say a frequency of 9,100,000,000 per second, corresponding to 1.3 inches, which can then be married with a focussed sound wave of the same wavelenath and sent forward together through the lens.



Polaroid sheeting 1/4 wave plate.

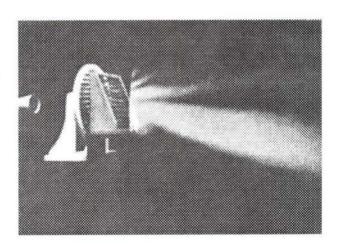


The region of sound waves used covers the range of frequencies from 4,000 c.p.s. to 13,200 c.p.s. For instance, an electromagnetic wave of 11,800,000,000 cycles per second has the same wavelength of one inch as a sound wave of 13,200 c.p.s. of one inch.

It is known that when wave energy of either microwaves or sound pass through a medium and enter a new medium the ray deflection is bent if the velocities of propagation are different. This is the cause of refraction. Through a common medium two different velocities of energy or light will be deflected at different angles. Similarly the velocity of propagation is not always the same for all substances, just as light travels faster in air than it does in water. When the waves pass through a more dense medium they bend. Any change in velocity brings about a change in direction in accordance with the index of refraction. The spectrum seen through a prism is caused by the rays emerging from the refracting substance of the prism at different angles. The diffraction of a wave direction by a prism can be found for sound also in the same way by an acoustic prism, which controls the dispersion of sound waves. Just as the glass prism separates the different electromagnetic frequencies constituting white light, so an acoustic prism can separate the sound frequencies and components of a sound wave consisting of several tones. Prisms can be designed which are effective for both sound waves and electromagnetic waves in the microwave range. These can concentrate the energy of the wave fronts in one dimension only such as the vertical plane or can be concentrated in both the horizontal and vertical planes by a circular refracting structure such as an acoustic lens.

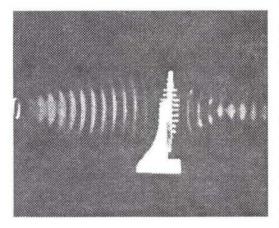
Fig. (229)

The focused beam of sound waves formed by an acoustic lens is deflected downward by an acoustic prism.



SUPERSENSONIC VERSIONS OF WAVE-GUIDES, RULES & DISCS.

Fig. (230)



Circularly diverging sound waves issuing from the horn at the left are converted, by the acoustic lens, into circularly converging waves at the right. We have previously linked the human consciousness and its perception of wave-fields of electromagnetic light oscillations with the concentration of psychic forces acting through centers in the human bio-energetic system. As we shall see later in a much clearer way, the invention of rules acting as wave-guides for the light of consciousness only worked because consciousness and radiation are really the same things in reality. To actually realize this intellectually is one thing but to realize it in one's practical life in the absorption of cosmic energies is another. The use of wave-guides for thought energies will soon be with us, however farfetched it sounds to present day mankind. The rules and detectors of Supersensonics will eventually provide as much insight into the nature of light and radiation as the invention of optical telescopes, microscopes and spectroscopy have provided for modern science once human bigotry and blindness are melted away by facts of life.

Just as horns and cylindrical tubes act as wave-guides for sounds and prevent divergence of the wave-forms and create a directional effect so that the wave-field travels in a straight line, so will the rules and wave-quides of Supersensonics create the same effects for thought energy and the oscillating waves of mind-stuff. We will see the equivalent of today's microwave generators which radiate waves which add in phase along the line of end-fire arrays and radiate off the end of the linear structure designed for making the array. In exactly the same way consciousness simulated by an array of points on a Supersensonic rule or wave-guide directs the thought energy as a hose directs a jet of water. The orientation of the rule causes the selective consciousness to radiate in a specific direction or polarization only. The same phenomena is common in the propagation of microwave energy in radar equipment and by testing nature's own wave-guides such as the human nervous system and its psychic lenses we can discover the true nature of man's consciousness.

Fig. (231)

An end-fire array results when radiators are placed in a row and energized, not in phase, but in such a way that proper phase addition occurs in a given direction. In the illustration, this direction is to the right.

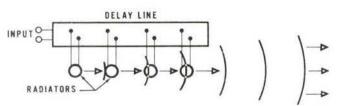
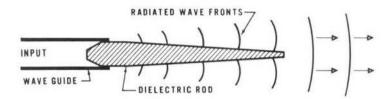


Fig. (232)

A tapered dielectric rod which not only guides electromagnetic energy but also radiates it gradually, constitutes a useful end-fire radiator.



A simple explanation of a dielectric rod used for microwave amplification is shown in the figure above in which waves continue to advance in the rod, but at the point where the wave-guide ends, the wave energy leaks out and more and more energy is radiated out over its entire length. Because the energy of the radiating parts of a dielectric rod is travelling at the same velocity as light in free space, the rod acts as an end-fire radiator in the same way that the diviner's rod "fires" when there is resonance between thought pattern and the object sought. The picture of the Egyptian type of rod is depicted below.



Rod without energy of consciousness is dead.



Rod comes alive when thought

A directional pattern is generated by the orientation of the waveguide or the rule, and will yield the polarized horizontal or vertical wave-fields emitted by a sample at one end of the thought wave-guide in accordance with the earth's magnetic field of which the sample is part.

NEW MICROWAVES OF THOUGHT.

During World War II a new method of generating and transmitting electromagnetic waves was evolved by the Bell Telephone laboratories. Immediately on seeing a model of this transmission allowing the filtering of colored beams of light through a wave-guide which acted as a carrier of sound and light waves together, the author had an insight into the way the psychic centers receive and filter the different levels of light energy absorbed by human beings from the Cosmos. After some 20 years of research into the way this worked from the psychological and spiritual point of view, this physical example of the phenomenon shocked the author into a completely new concept of what had been noted for thousands of years as aura colors. The close connection with the results of radiesthesia, radionics and divining all fell into place at once.

The research groups who used these hollow tubes called wave-guides to conduct electromagnetic energy were doing the same thing as the old radiesthetists were doing with thought energy. The only difference was that one was an electronic device which had completely revolutionized the prevailing ideas about electrical signals and the other was a representational device which could do the same with "psychic electricity" in other octaves of light and color. The only difference was that between the resonant frequencies involved in <u>living biological matter</u> and the frequencies of the energy known as <u>light or radiation</u>. As a result of this insight in 1966, I wrote "Nuclear Evolution" and for the past 10 years have been trying to explain it in terms which reveal its consistency with our experimental but partial and unrelated knowledge of nature.

Fig. (234)



CURRENTS OF PSYCHIC ELECTRICITY ACTING AS A WAVEGUIDE

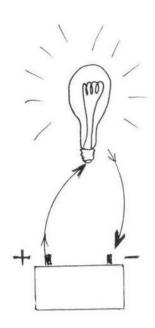
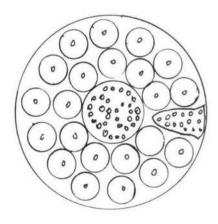


Fig. (235)



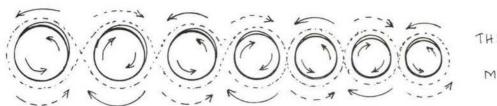
CO-AXIAL CABLE

To appreciate how radical a break this insight was, one must have some background of the electrical theories prevailing at that time. The concept of a direct electric current was demonstrated when a battery was hooked up to a bulb and the direct current would begin to flow. Two wires, one positive and the other negative, were needed to deliver the charge to the bulb. The current could flow to the bulb over one lead and return to the battery through the other lead. It was thought by researchers in the early stages of electrical development that an alternating current could not have a return lead because both leads act as conveyors of the back and forth flow – first as input and then as output. A motor which uses AC current alternates as fast as 60 cycles per second. However, it was later found that in order to alternate, AC circuits had to have two leads, one negative and one positive for each polarity.

Even the coaxial cable developed for telephone transmission carries two leads which alternate back and forth at millions of cycles per second. The central conductor acts as one wire while the outer cylindrical shell of the cable acts as another wire in the AC circuit.

So it was a big step when the originators of the mirror-tube wave-guide could transport electric energy over a single conductor. Where was the return circuit for this hollow metal tube which conducted the current outwards? How did it get back? It was soon recognized by the science of optics that electromagnetic waves such as radio, microwaves, light, radiation, etc. are all the same and should behave alike. Then the idea of passing light down a tube with mirror walls did not seem so spectacular. Yet if we thought of light and consciousness as being the same energy and of using a tube or some other conductor for propagating thought waves, those same physicists would have thought the suggestion ludicrous.

Figs: 222, 223, 229, 230, 231, 232, were taken from "Sound Waves and Light Waves" by Winston E. Kock, published by Doubleday Anchor.



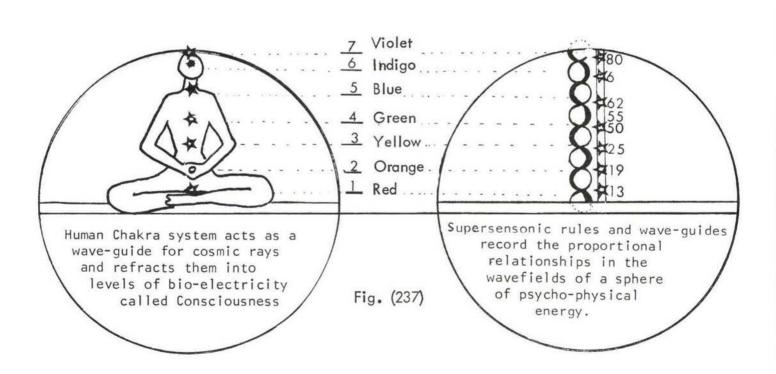
THE CADUCEUS

OR

MERU DANDA

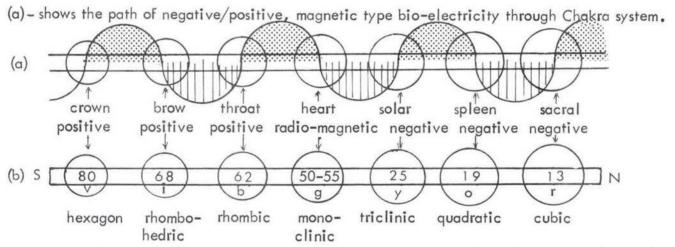
Fig. (236)

For Supersensonic purposes we conceptualize the wave-guide not as a conductor of ordinary AC electricity but as a confining structure for very subtle electromagnetic waves of light which we call psychic electricity. Both radio waves that we call electromagnetic and light waves are so short that the waves confined along a wave-guide behave like a thought guide. In nature man himself acts as a wave-guide of biological energies which include the absorption and emitting of light frequencies of very subtle wavelenaths which soak up cosmic energy and recreate it into consciousness which is then re-radiated out to all objects in the cosmos, enabling us to "see" far distant stars as well as nearby objects. We cannot "see" this light pouring out of our eyes and senses anymore than we can see the invisible radiations of microwaves and light. Man's mind-stuff and the way it is molded acts as a human wave-guide which is then represented by the rule or disc of the Supersensonic operator.



Just as physicists use a mathematical representation which is not real, which serves to predict the statistical flow of forces in a natural system, so does the Supersensonic operator use a balance or rule which acts as a wave-guide through which the consciousness forces the thought energy along a specific direction in the dominant mode of conceptualization. Just as with radio transmission where a wave-guide need not be straight, so in Supersensonics, the wave trains of electromagnetic light, being made of the same primordial stuff as consciousness itself, can be conducted around corners, channeled along spiral paths in the chakras and eventually in the form of the light of consciousness can be made to travel along the black ink lines on paper as it is doing now in reading these words. The letters of the alphabet become a wave-guide for consciousness at the sound and thought level, whereas the consciousness which travels along the Supersensonic wave-guide of subtle matter is at the level of direct perception of wave-fields invisible to the ordinary eve.

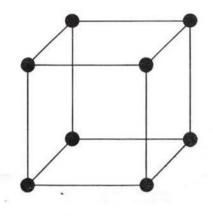
Fig. (238)



(b) - shows a supersensonic wave-guide rule giving a cross-section of a sphere. Crystal form detected.

Figure (b) shows a Supersensonic wave-guide rule giving a cross-section of a sphere showing the edges of the fields of each chakra in proportional numbers from zero. Comparison of (a) the wave-fields of consciousness with any physical object (b) yields harmonic relationship in the microcosm which is merely an image of the macrocosm in the operator's consciousness. The form of the structure of matter is related to the consciousness which perceives it which in turn is dictated by the molecular structure of the human body as a wave-field of vibrational forces.

The conducting of thought waves along some physical waveguide such as a Supersensonic rule acts as a shield for extraneous vibrations and prevents the interactions between the subtle energy levels of mental energy in system (a) from interferring with the propagation of consciousness in a lower amplitude in system (b). Each psychic chakra overlaps and sometimes interferes with other chakras and confuses the projection of consciousness along the wave-guide (b) and therefore the concentration of thought energy along a wave-guide helps our sensitivity to specific wave-fields.

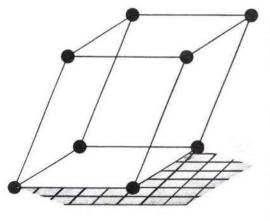


L-13 SIMPLE CUBIC

There are interesting correlations between the forms of crystal elements in nature and the resonance patterns of psychic electricity in the human Chakras. Since crystals are stable matter and are just the opposite of the disintegrating type of radioactive matter it is interesting to note that radiation of a certain nature particular to each crystal form is induced when the crystal is placed on the Radium Block at Zero on the wave-guide. Thus each of the seven crystal forms has a specific place on the diviner's rule at certain proportional measurements according to their molecular structure, which in turn resonates in harmony with their Atomic structure, which again in turn resonates with the perceptive functions of the seven chakra centres.

Also interesting is the fact that a diviner finds no known natural crystal form which gives pendulum beats towards the West —
the orientation of the disintegrative type of radiative energies.
Pendulum beats are however found for the various crystal forms in all other directions as follows:

Cubic	L- 13	N.W.	Red
Quadratic	L- 19	North	Orange
Triclinic	L- 25	N.E.	Yellow
Monoclinic	L- 55	East	Green
Rhombic	L- 62	S.E.	Blue
Rhomohedric	L- 68	South	Indigo
Hexagonal	L- 80	S.W.	Violet



L-25 SIMPLE TRICLINIC

The crystal forms of elements which lie in between these seven basic forms can be found to have angles on the Turrene Disc.

The L-fields can be detected on a rule having the marks 13 to 80 correctly spaced by the cross-beats of the pendulum. A sample may produce a colour harmonic beat according to its group without aid of a Radium-Block but for distinguishing between its molecular nature and its atomic nature and its respective colour expressed as Z-numbers in the Periodic table the Radium Block or HEFIGAR amplifier on the North-South orientation is necessary.

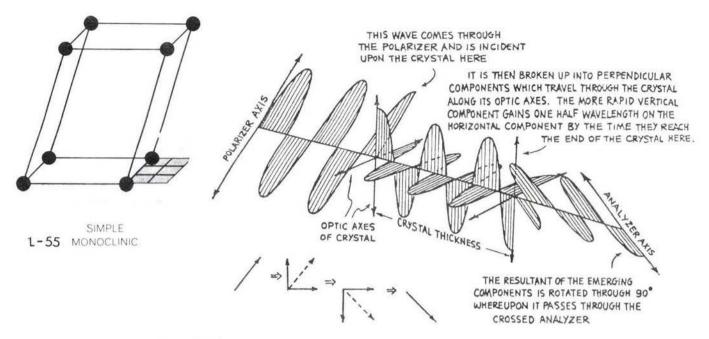
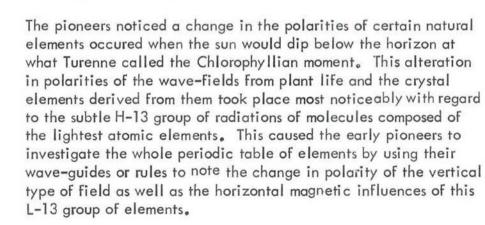


Fig. (239) A wave diagram of polarized light undergoing rotation through a crystal.

POLARIZATION OF THOUGHT FIELDS.

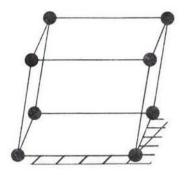
The polarization of wave fields in Supersensonic operations appears to coincide with the later developments in microwave technology although these concepts were developed by the early radiesthetists over 40 years ago. The concept of a spherical wave-field propagating longitudinally along a front was not born out in the radiesthesia H-fields detected transversally across the line of wave propagation which creates the L-field. The discovery of the entirely different behavior of electromagnetic waves called "polarization" brought physics into line with the early Supersensonic operators.



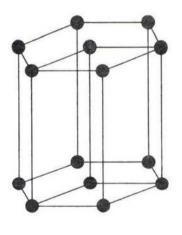
In the appendix to this chapter will be found the list of plants arranged in their atomic H-groups along with a table of elements and their wave-guide edges.



. . . 2 ORTHORHOMBIC



L68 RHOMBOHEDRAL



L-80 HEXAGONAL

PROPAGATION OF WAVE-FIELDS.

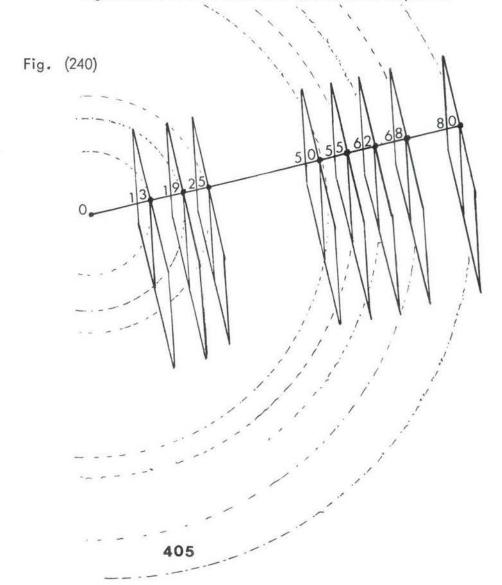
The polarities were discovered by marking the rule in centimeters as a convention. It was found that strong vertical type wave-fields existed at the L-field edges. The plants which produced these vertical type waves were either narcotics or poisons. These pioneers found that all derivatives of opium poppies produced vertical waves at various H-field positions and that Ether which causes loss of self-consciousness gave similar vertical field edges.

From this point on it was necessary to create a rule long enough to act as a wave-quide for the subtle vibratory field of radium element number 88 which in the early days was the only known radioactive element and this gave an H-field of 155 cms. where the pendulum produces a cross beat at that point. Later Turenne found with the addition of the radium block that all the wavefields were amplified on the wave-guide and the diviner's reaction was found to be applicable to all kinds of matter. Any chemical compound however complex would produce the L-fields of its base and liquid chemicals and gasses could be examined in glass phials and reveal their atomic structure by their field-edges on the wave-guide. It then became possible to extend the wavequide rule and predict the existence of other atomic H-fields of as yet unidentified elements and to determine their vertical and horizontal polarities. In a later chapter in Volume IV we shall deal with these atomic numbers in detail but for our purpose of understanding the nature of the Supersensonic wave-guides and their different forms such as rules, discs, and geometrical representations we shall confine our discussion to the polarization of the wave-fields.

Although physics later discovered all the elements found to be missing on the wave-guides' H-fields the polarity of physical particles in terms of horizontal or vertical orbits is still rarely available to the chemist or physicist who can only predict statistically what the composition of an atom or molecule is like.

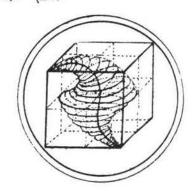
Since the early radiesthesia pioneers discovered that all matter and radiation sent out subtle radiations whose transverse waves were polarized, it has been discovered that they were only looking at a cross section of a spherical spiral wave-field. This did not change or contradict anything but added another dimension to the use of wave-guides of thought energy.

It was believed in physics that the chemical elements have their electrons arranged in rings or circles and that the outer rings were unstable and therefore combine with the unstable electrons of another elements atoms, thus giving us many different chemical compounds. The development of the Turenne wave-guide revealed the elements stimulated by a radioactive source such as a radium block showed field edges corresponding to the outer rings. The pendulum beats indicated the outer edges or surfaces of a spherical H-field at a radius of 13, 19, 25, 50-55, 62, 68, 80 and that this represented a field in the horizontal plane which was cut by subtle forces in vertical planes at these points. The following figure shows a cross-section of the radius of a sphere.

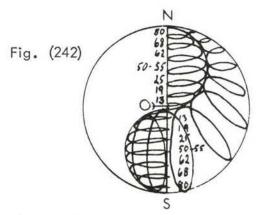


However, it can be seen that these planes could also represent the levels of a spiral field which looks more like a ying yang symbol when seen as a cross-section of a whole sphere and that polarities would all change and reverse themselves when crossing through the center point to the other side of the sphere as in Fig. (241).

Fig. (241)

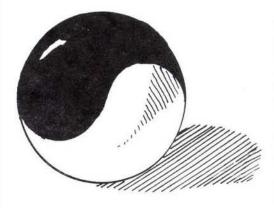


Wave spirals on their waveshaft as seen from outside the system in a three dimensional space framework.



The spiral waveshaft as seen from the zero point at the centre of the wavefield inside a multi-dimensional space framework

It was found that when the wave-guide rule was reversed and the north end of the rule was put to the south that all the polarities within the vertical and horizontal fields reversed. In the same way a person's horizontal wave-field is artificially converted to vertical type polarization while his radiations are being detected by a diviner looking through a mirror. The result is not a penetrating vertical wave because the phase has been turned through 90 degrees. If we look at the lower section of the right hand Fig. (242) we see the O - S polarization of the wave is always at right angles to the direction of propagation and that as it passes through the center, the polarity will reverse in completing the second half of its phase O - N.



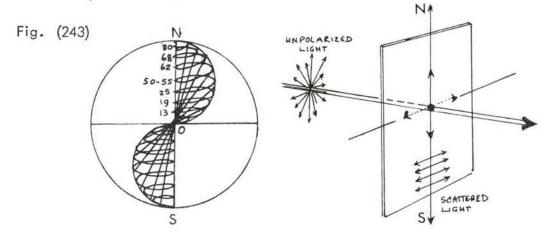
The fact that the ancient Chinese discovered this through Supersensonic methods of divination without any modern scientific tools is a demonstration that there are more ways than one of establishing the character of nature's eternal laws. The fact is they discovered first the way consciousness polarized the inner light and then through representations applied it to the material world to validate it. In modern science we do the opposite by trying to validate the representations of mathematical operations in consciousness externally, without first knowing what is validating what.

Through first investigating the wave-fields of plant life with their wave-guides and studying the action of the sun's light on the polarization of their wave-fields the early radiesthetists discovered that nature's vibrations of the atomic L-field are also reflected in the composition of molecules, which are then reflected in the H-fields of cells, which are again reflected in the vibrational patterns of organs. The compositio of most plants is most dominated by the bigger and heavier atomic elements represented by the outer H-rings 62, 68, and 80. The size of these molecules of plants in the elements making up the protein starches and sugars appears to be reflected by its atomic H-group and reveals that most edible matter of animal and plant origin was in those with H-62 and H-68 wave-fields with a few things in the H-80 group. Poisonous plants gave off subtle fields of H-13, H-19, and H-25 and foods radiating wave-fields in the H-50-55 group were not poison but merely indigestible molecules. A substance belonging to the H-80 group appeared to produce pendulum beats showing transverse vertical fields active at all the H-field points. The phenomenon of investigating polarization of the wave-fields then led to the techniques of Supersensonics far beyond the divination of field edges but to the angles of polarization in what is now called the fundamental rays.

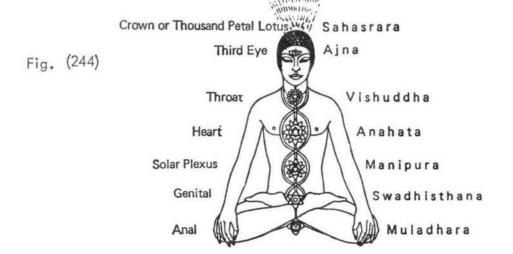
THE FUNDAMENTAL RAYS & POLARITY.

One of the ways of knowing the atomic structure of an unknown substance on a wave-guide was to place it at each H-field edge in turn. By placing a radium block at zero on an empty rule we caused all the transverse beats of the pendulum to reveal vertical fields at right angles to the horizontal field. By placing now a sample on the radium block at zero, only the beats of that sample are transmitted along the thought wave-guide of the rule. By placing the sample at each H-field point in turn we find that H-group to which the sample belongs will be shown by the position where laying the substance causes all the seven H-beats of the vertical field to return again. This is explained by recognizing that any sample will cease to create its own special radiation resonance in our consciousness whenever it is not producing an interference, because it lies at its own H-position on the wave-guide. If the substance is correctly placed on the Supersensonic rule, then all the seven H-wave edges of the element radium will disappear.

However, if we use a disc or circular rule as a wave-guide and construct a mental Supersensonic fundamental ray disc after Turenne's model then we can see from Fig.243 below that there is no linear restriction to wave-field polarization because circular polarization will result from thinking from the center, that the wave-guide is a spiral, rotating within a spherical field. Rather than just creating a wave-guide which is the linear cross-section of a half sphere, the rotating wave will give circular polarization.



It is important to view this rotating of the spiral waves from the center point on their wave shaft in order to get the conceptual structure for divining the elements of nature according to their fundamental angle of manifestation. The whole of nature is known to be one universal energy of radiation in different electrical configurations of polarized charges. The angle of manifestation may therefore be the aspect of matter which we call the material elements as these charges are sensed and presented to our consciousness as solids, gasses, or liquids or liquid crystals. The whole human biological structure can be viewed as an aggregate of liquid crystals and much of the human body is made of such liquid crystals like cholesterol, these crystal structures receiving the radiations of nature peculiar to each crystal form. The crystal elements according to science are stabilized products of conserved energy and are just the opposite of disintegrating matter which produces radiation. But when these crystals are squeezed or pressured by electrical charges or excited by radiation of any form from an external source, they themselves begin to oscillate and begin to produce electromagnetic radiomagnetic wave-fields from the nucleus of their atoms. The first radio sets were crystal oscillators and perhaps the human being will be the ultimate radio set when he can discover what H-fields excite his own molecular crystal structure through the induction of cosmic rays activated through Supersensonic wave-guides. We have said that man's body is a wave-guide antenna 1 - 5 and to make it into an excited antenna 1 - 3 - 5 requires the knowledge of the angle of polarization of the cosmic forces of creation radiating through the operators of consciousness.



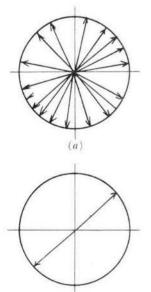
FUNDAMENTAL RAYS & CIRCULAR POLARIZATION.

What is implied in saying that the transverse waves of a spherical wave-field can be polarized at an angle may be related to phase reversals and circular polarization of radiation such as electromagnetic light waves. It will be remembered from former chapters that light travelling through free space is unquantized and unmanifest in its pre-physical primordial state before it interacts with the energy systems we call matter.

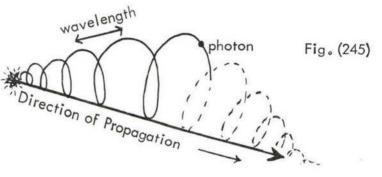
In a natural light source the observed output of the radiation which the eye translates into internal light of consciousness is the result of the excitement of countless electrons associated with the disturbance of individual atoms and molecules. These myriad independent events are assumed to be random contributions so that in each act of radiation a point source sends out a train of transverse system of waves travelling along a line of propagation. The vibration in such a wave train will lie in a plane containing the ray of light as shown in the Fig. 245 diagram of a particle called a photon.

SOURCE -

FIGURE (246) The structure (diagrammatic) of a beam of light. In ordinary, unpolarized light the vibration vectors lie in random directions around the line of propagation as in (a). If the vibrations are confined to just one direction, the light is plane-polarized, as shown in (b).



(b)



Because of the randomness of all these myriad occurrences there will be all kinds of orientations around the direction of propagation just like dropping matchsticks on the floor they will eventually describe a circle of angles around a center.

Fig. (246) shows the diagramatic representation of the unpolarized planes of a beam of ordinary light in nature. The vibration vectors lie in random directions around the line central to its propagation as in (a). If the vibrations are confined in a waveguide to just one direction the light is said to be plane polarized.

Fig. (247)

Graphic representation of planepolarized waves.

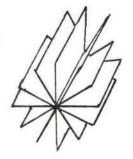
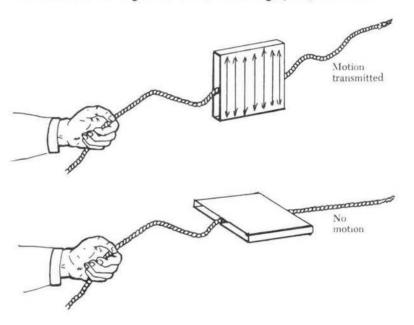


FIGURE (248) Waves on the rope pass freely through the box when the slot is lined up with the plane of vibration but are suppressed when the slot is turned in the crosswise direction. This behavior is a good analog of what happens when plane-polarized light strikes certain crystals.

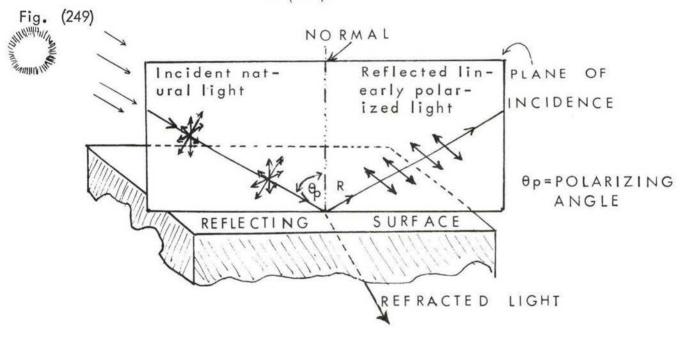
Whether we apply this analogy to a thought wave-guide or a mechanical one, the fact is that it's merely a matter of suppressing the vibrations in every direction except one. The remaining vibration in one transverse direction is polarized. A crude mechanical example of such a selective operation is represented in the concept of a rope passing through a slot in a box. If one end of the stretched rope is shaken back and forth in a plane at an angle to make waves pass through the slot the only part of the vibration that gets through the box is the wave motion in line with the plane of the slot. If in parallel line with the slot the energy gets transmitted along the entire vibration. If the shaking takes place in a crosswise plane, no energy or vibration will be transmitted through the box. See Fig. (248) below.



If the rope is replaced with a spiral spring the longitudinal waves generated through the spiral spring would pass through the box without regard to its angular orientation. The same is found to be true of a beam of light shot through a slot or reflected off the flat surface of a plane mirror. The process of scattering of sunlight through layers of molecules of air performs a similar polarization of sunlight which accounts for the blue color of the sky.

A consideration of all the light reaching the earth's surface and consequently each human absorbing liquid crystal is that all except the heavy cosmic rays penetrating directly through our material bodies have already been scattered and reflected in our atmosphere or off objects around us in the environment, and is therefore polarized secondary light. The primary light would only be possible if the human organism were situated in outer space. Yet the cosmic rays are primary radiation and they do reach us unpolarized and undeflected by any surface except our own consciousness.

When waves are reflected from any surface the angles of incidence and reflection are equal. They lie on opposite sides of the normal and all three lines are in the same plane. See Fig. (249);



Notice that Θ_p and R are also the angles between the wave-fronts and the reflecting surface. The law of reflection is found to be valid for a limited portion of any surface of any shape, not only for plane surfaces but for any material surface no matter how irregular the surface may be. When the waves are reflected from a spherical surface the reflected waves are again spherical but their curvature will have changed on reflection. The consequence of this change of curvature of light reflected from all curved or spiral entities, whether made of solid matter or merely another form of energy, is especially significant for our circular wave-guide for detection of fundamental rays.

THE DISC WAVE-GUIDE AS AN ANGULAR SPECTRUM.

In the experience of cosmic radiation which our consciousness turns into visible light, our senses only capture a narrow slit of vibrations and the main thrust of its energy passes through us unnoticed. Maxwell's electromagnetic theory suggested that light is essentially an electrical phenomenon propagated in free space without some hypothetical medium in which to travel. The Michelson-Morley experiments were supposed to confirm the prevailing suspicion that no such medium as an ether exists.

The use of an optical device called the Michelson interferometer caused a beam of light to split into two beams and travel out to two mirrors and thence to return along perpendicular paths to their starting point. All this proved was that there was no drift of a so-called ether which affects the transmission of a light beam. But this does not prove anything. It was a null experiment which did not take into account the fact that light in its primordial unquantized state is an unmanifested energy and that it only manifests on contact with matter either by absorption or reflection of its vibrations in secondary radiations which have in some way been polarized. By making contact with a mirror surface the light is immediately polarized and becomes a plane wave which has lost its spiral curvature. How can the correct angle at which certain material elements manifest from the unstructured continuum we call cosmic light radiation be determined? All our physical instruments through which we see the spectrum are in some way only an appearance or form which the light takes on passing through some medium, such as a prism.

Newton was accurate in giving the name "spectrum" to the bands of light since it is the Latin word for appearance or form. The content which is in the form still eludes man's knowing process.

Meson collision with a nucleus. A high-energy meson from secondary cosmic radiation struck a nucleus and produced a star made up of mesons and alpha particles (lower left), the energetic meson then traveled along the wavering path to the upper right, where it was finally stopped by collision with another nucleus.

Fig. (250)

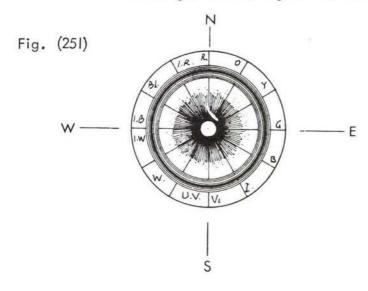
OF THE POLARIZATION
OF MATTER.

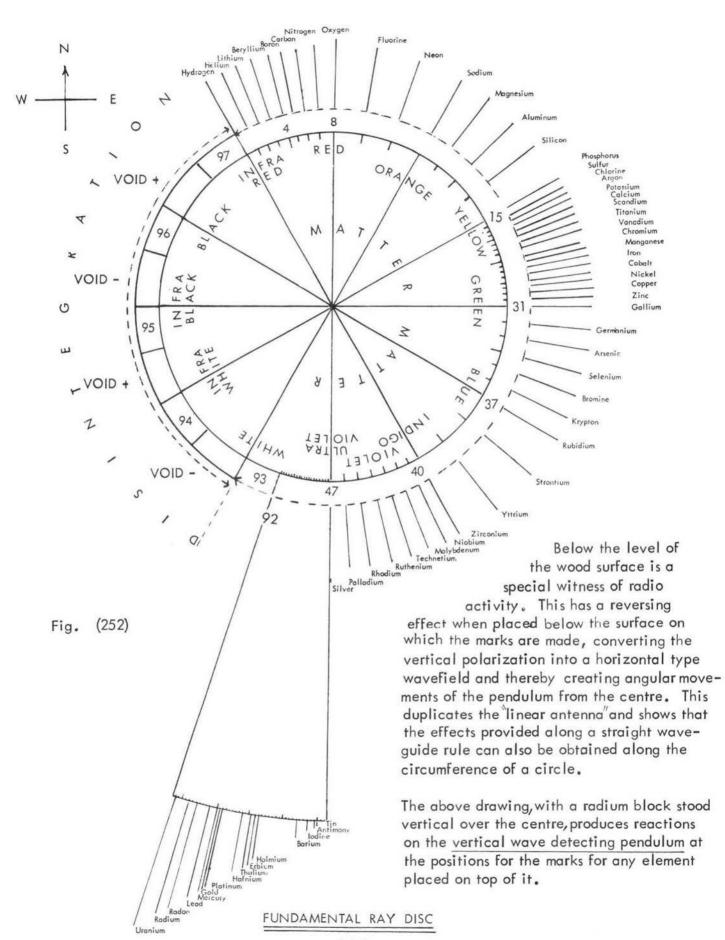
Let us view the Fundamental Ray disc as a wave-guide for nature's way of choosing in which way radiation or light will interact to sustain or disintegrate material forms or atomic patterns. We can use it as a direct perception into primordial light instead of measuring always with a polarized or modified energy.

By holding a material witness of an element and waiting for the diviner's reaction around the circumference of a circle we can determine the fundamental angle at which cosmic radiation is constantly manifesting in the form of crystals and elements of the atomic H-fields. This universal energy always appearing to our consciousness through the senses as solids, gases and liquids, allows us to use the disc as a wave-guide for unpolarized cosmic rays. Through Supersensonic training of our consciousness we gain a direct perception of the cosmic spiral wave-fields which are continuously pouring into each human biological system and the environmental patterns which it experiences as "real" matter. By thus understanding the interplay of cosmic forces with matter we can roam the universe from our own private room and find out the correct answer to any question which this human mind can formulate.

THE ZODIAC PATTERN DISC OF TURENNE.

The original wave-guide designed by Turenne was a drawing on a circular board of wood showing a circle divided into 12 sectors. Red to the north, green to the east, violet to the south. The eastern semicircle, see Fig.251, indicates the materialization of matter whilst the western semicircle concerns the higher frequencies of the wave-fields of any tested sample. The vestern sectors are related to the harmonic of infra-red, black, infra-black, infra-white, white and ultra-violet, the colors of disintegration relating to weak interactions of atomic nuclei.

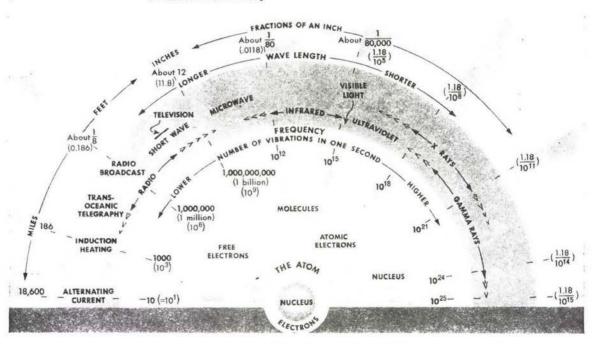




Outside of the circle there are sectors with the wave-fields associated with elements Uranium 92 and Neptunium 93 - these bordering the sector of the ultra-violet. Next are the positions of cavity or vacuum and Plutonium 94, then cavity and Americum Z95 of cavity and then Curium Z96 of cavity and Berkelium Z97. It must be remembered that some of these material elements were not discovered in 1935 when Turenne designed the disc but were divined as being there through the pendulum reactions. The excited nature of these radioactive atoms could be determined Supersensonically by the amount of light energy radiated when they pass from the state of void/cavity to their ground state in which they normally exist.

This position of their energy now called a "quantum" of light was detected by this Supersensonic disc. The only difference between these elements was their anale of manifestation in the universal wave-field. We know in the spectrum that there are different colors of visible light beginning with red through violet and that invisible rays of radiation exist such as ultra-violet X-rays; but all these rays have the same nature and do not differ from each other any more than sound differs from music. All the different notes distinguishable to our consciousness are also or one nature. As vibrations in air they differ only in the frequency of the vibration. Yet the pattern of these notes and the patterns of these vibrations of atoms form the spectrum, just as sounds form music. So the zodiac disc reveals that atoms are only differing in their form and angle and that they are just electromagnetic radiation in integrative or disintegrative states of manifestation.

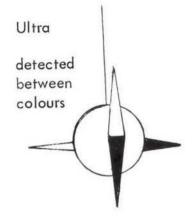
Fig. (253)



THE GREAT SPECTRUM OF ELECTROMAGNETIC RADIATIONS

PRE-DISCOVERY OF NATURE'S UNMANIFEST FORCES.

Fig. (254)



The Mendelevev Periodic table consists of 92 elements and the transuranium elements were as yet undiscovered when Turenne designed his Zodiac disc. Do these elements really exist? The elements at first believed to be transuranium were in fact something else. Element 93 Neptunium is produced in the bombardment of Uranium 92 with neutrons with a half life of 2.3 days. The next element was discovered in 1940 called Plutonium with a half life of 2.0 days. The next elements made by man in a cyclotron are 95 and 96 called respectively Americum and Curium. The radioactive isotopes of elements with atomic numbers 97 and 98 were only obtained in 1950 and were called Berkelium and Californium. By continually bombarding the nuclei of these man-made elements, new isotopes are found but all these transuranium elements are unstable and are continually in a state of decay as shown by Turenne's disc.

The particular properties of this disc when considered as a waveauide for investigation of nature are due to the proportional relationships of the invisible harmonics of colors on one half of the disc and the visible spectrum on the other. A special impregnation of radioactive powder of very weak strength was placed under the small hole at the center to act as a radium block and amplifier. The hole was intended to allow light to enter and stimulate the powder.

METHOD OF OPERATING THE SUPERSENSONIC DISC.

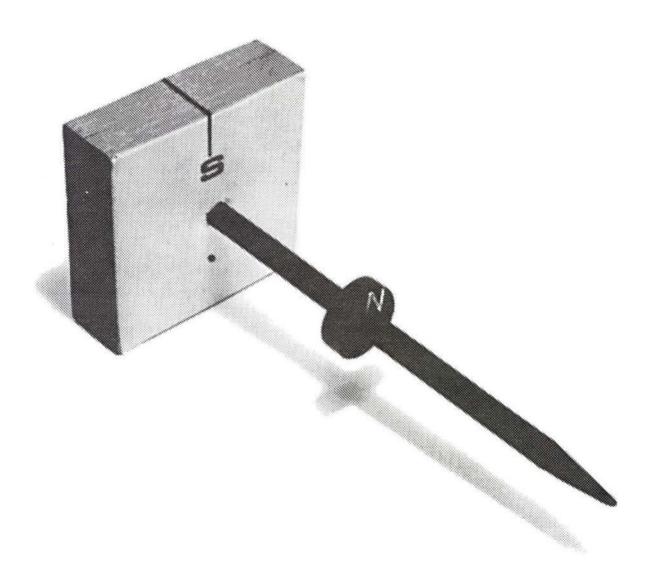
Fig. (255)

Infra-White Infra-Black disintegration between Black and White

Any human witness or test sample laid at the center causes the selective pendulum with needles vertical (+) to beat along an angle of a radius corresponding to the position of vitality on the universal rule or linear antenna. Perfect health is shown by a beat towards due west. If we set the needles to the position with one magnet needle vertical (+) and one horizontal then the pendulum reaction for perfect health generates an oscillation over the four sectors named "infra" and due east. As many rays of the circular polarization wave-field are suppressed and only one remains for a given sample, this is called the fundamental ray" and is measured in degrees clockwise from the west.

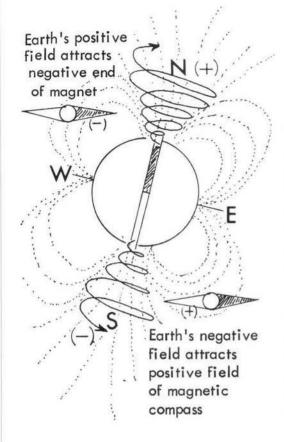
> The fitted magnets are clipped on with a snap fastener to enable the magnets to be swivelled to different positions.

Many other students found a pattern of several rays leaving a test sample in the form of a radial spectrum and the task was to use the circular wave-guide to suppress all but the fundamental ray to get the polarization angle of an element's manifestation. More of the implications of form and color will be discussed in Volume IV but here we must now compare these discoveries with modern electromagnetic wave-guides.



HEFIGAR means: "Hills End Fire Intensifying Guide And Radiator". It incorporates a weak radioactive source (harmless) and a focussed magnetic field which is tuned with the aid of a magnet-fitted pendulum. The rod is a polyrod as used in the propagation of microwaves and helps intensify the diviner's own reactions.

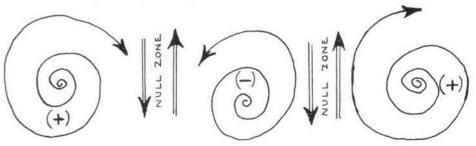
SUMMARY ON POLARITY



The student is reminded that the Supersensonic polarity is always relative to something else. Positive is relative to the earth's negative field, as shown by the magnetic compass. The positive field of the earth is relative to the negative needle of the compass. Indeed, even the polarity of an object or sample is relative to the environment represented by what is on the experimenter's table, as well as to the qualities of the pendulum used and the operator himself.

This is a very important point if consistent results are required for comparison with other operators, because even the finger employed in holding the thread as well as the length of the pendulum thread will give different polarities from those reported by Turenne and Lesourd. The conditions required for consistent polarity results relative to Turenne for instance are: finger and thumb and thread length which first shows the east-west oscillation on the east side of a compass magnet or radium block. When testing for this east-west oscillation, one can create an artificial environment with the presence of a Hefigar or radium block. The radium block is stood on end when the vertical type wavefields are being checked for polarity, although it is possible to detect vertical waves when the pendulum bob is higher than 20 cms above the sample when it lies on the radium block lying flat on a rule or wave-quide aligned north-south.

If different polarities are achieved, this should not discourage the student. It is more important that students learn by observation and from using the testing rules and wave-guides and checking where the polarity of any rotation starts to come to an end.



APPENDIX TO CHAPTER 23.



There are many paths to knowledge of reality. The <u>first</u> of these is the direct perception of consciousness. The <u>second</u> path is that of nature which scientists and students of life tread along with poets. The <u>third</u> path to knowledge is the timeless <u>essence knowing</u> to be found in the great master works of all cultures. These are not separate paths in that the laws of consciousness are different from the laws governing the material existence. It is obvious that the great masters have used the laws of consciousness to originate the laws of matter.

However our consciousness does not exist in time and space and therefore is not subject to measurement in terms of clocks and spatial coordinates. But consciousness can be measured in proportional terms of number because not only is God nature's most original mathematician, but number itself has no time and no space in our consciousness. Numbers are pure integers and have no value except those placed upon them by our human consciousness. Hence those proportions and intervals we create as ratios in the musical world of sound vibration are no different in the world of light or electromagnetic radiation. Consciousness has been likened in one ancient culture to God's eternal Song or the Naam which resonates with all names. In another, to the logos or the original word in which all men have their being. The path leading through consciousness therefore brings us to all the great teachings and insights of countless random lives who have first validated and then carried the essence knowledge through the ages. The Truth that consciousness and light are one can only come to one who can so polarize the consciousness that it can see on many planes of existence and measure the many worlds of vibration.

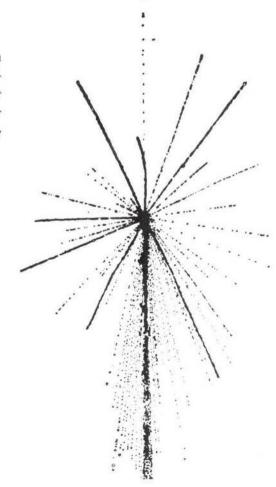


The following H-fields are proportions and not exact mathematical values. They can be measured in centimeters or meters or yards because they are only determinations in the consciousness of one man. Each person who is a Supersensonic operator can create his own code in communicating with nature just as they would if they had to communicate with a "space-man" or a human from out of the jungle. Once a convention is agreed upon, the measurements will appear to be the same if they are in tune with nature's proportions. They will vary with those who start their zero in a different place.

TURENNE RULE READINGS.

For the interest of chemists in particular, a Table of the Elements preceded by their Mendeleef Z order is given at the end of this Appendix. Here examples taken from the animal, plant and mineral kingdoms show the universal nature of the wave-field, from which a universal cause may be supposed. It is not surprising therefore that Turenne has submitted the hypothesis that this field is related to electronic characteristics of the molecules concerned. Each field is bordered by a kind of wave-membrane. Following the views of modern science, the whole effect can be considered as one of induced radioactivity from cosmic rays of high penetration.

SMASHING OF A SILVER ATOM by a 30,000-Bev cosmic ray. The collision of the cosmic particle with the silver nucleus produced 95 nuclear fragments, whose tracks form the star.



ORGANIC SPECIM	ENS	MEDICINAL PLANTS					
	Н.						
Albumen	68	Aconite	13				
Bladder	13	Aloe	19				
Brain	80	Anthracene	V19				
Cholesterin	80	Arnica	68				
Eye	80	Belladonna	V68				
Heart	80	Bryony, white	25				
Intestine	13	Cinchona	50-55				
Kidney	68	Chloroform	V62				
Liver	50-55	Cocaine	V50-55				
Medulla oblongata	80	Colchicum	V68				
	80	Cubebs	V50-55				
Ovary	62	Copahu	V68				
Pancreas	50-55	Digitalis	V50-55				
Parathyroid	80	Ether	V19				
Pituitary	25	Formol	V25				
Stomach		Henbane	V62				
Suprerenal	13 80	Irish L	V80				
Testes	68	Menthol	V68				
Thyroid	19	Murex purp.	50-55				
Urea	17	Nux juglans	50-55				
	A P	Nux vomica	19				
		Opium	V13				
		Petroleum	62				
	and a	Phenacetin	V50-55				
100	2 1	Phenolphthalein					
		Poppy	V13, 50				
" STATES OF THE		Quinine	50-55				
		Santal	V62				
		Symphitum	50-55				
		Thuja	50-55				
	an any service and a service a	Turpentine	50-55				
	1 Circles						
WILK IS	10000						
	1 69 45 5 5 5 5 2 m						
	10000						

MEDICINAL PLANTS: Alcoholic tinctures containing active alkaloids produce the same effects as the plants. It will be found that the principle medicines and drugs produce vertical type waves (V) at the 'H' positions. For comparison organic chemicals have been included in the list on the right, where vertical waves are marked V. In medical practice these vertical type waves have considerable importance.

50-55

CHEMICA	L ELEME	NTS	THE SAME IN THEIR ATOMIC ORDER.				
		H.			H.		
Arsenic	Z.33	25	Z.11	Sodium	13		
Bismuth	84	68	19	Potassium	19		
Bromine	35	25	29	Copper	25		
Copper	29	25	33	Arsenic	25		
Gold	79	68	35	Bromine	25		
Iodine	53	50-55	53	lodine	50-55		
Mercury	80	68	79	Gold	68		
Potassium	19	19	80	Mercury	68		
Radium	88	80	84	Bismuth	68		
Sodium	11	13	88	Radium	80		

To the physicist or chemist the conclusion is obvious. An examination of alpha, beta, and gamma rays shows that these components of radium's radio-activity are vertical type wave-fields. The 'H' grouping is probably related to structure of the molecule as the crystal 'H' readings suggest.

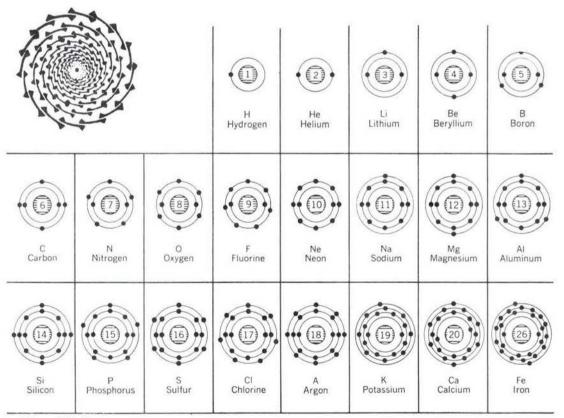


Fig. (256) First part of the Periodic Table diagraming the structure of atoms. The central number represents the nucleus and its net positive charge—the atomic number. Small black dots represent planetary electrons, negatively charged, in their respective orbits. The atoms shown include those of elements common (C, H, O, N) or essential (Na, P, etc.) in living matter; still others are present in minute amounts as trace elements (Fe, Si, etc.). Five kinds of atoms are omitted between calcium and iron.

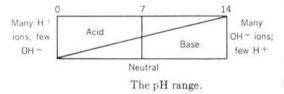
Mellin found in the 1920's that soil providing a Fundamental Ray of angle X has its special plant-growing qualities improved by a fertilizer or chemical producing the same angle. The plant suited by soil of angle X will itself as a test sample produce the same angle X. This was shown to be true by many subsequent agricultural tests. By taking Fundamental Ray angles of crops suitable for each field soil the correct fertilizer could also be predicted.

The Fundamental Rays can be identified roughly for the following types of soil constituents:

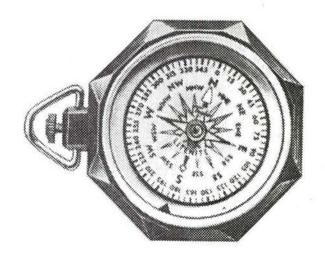
N – reaction for chalk	S - reaction for clay
E - reaction for sand	W- reaction for pure humus

Blended samples will produce oscillations in between, such as:

sand & chalk	E x NE	clay & sand	S x SE
sand & clay	E×SE	clay & chalk	SE
sand & humus	SW	clay & humus	$S \times SW$
very acid soil	$W \times SW$	phosphates	SW x S.SE
strong soil	$SW \times S$	nitrate	S to SE
weak soil	S.SE to E.NE	potash	S.SE to E.NE
useless soil	E. NE to N	ammonia	SW x S



The above are very rough angles because only a specific sample will give specific angles. Mellin goes into great depth concerning Ph of soil and was a professional teaching at an agricultural college in France.







FOR BACTERIOLOGISTS:

The commoner European diseases have 'h' readings of horizontal magnetic (X) form and vertical waves of electrical energy shown below:

	13	19	25	50-55	62	68	80
Anthrax	X		V				
Auto-intoxication		V	X				
Cold (grippe)	X			V			
Coli. b.				V X & V			
Diphtheria			V			X	
Dysentery						X & V	
Encephalitis	X		V				
Enteritis			V		X		
Gonococcus	V	V	V V X	X & V	V	V	
Influenza			X				V
Koch. b.		X				V	
Malaria	V V	X & V	V	X & V	V	V	
Measles	V			×			
Paratyphoid		V				×	
Pneumococcus	V	X & V	V	V	V	V	
Poliomyelitis	× ×		V				
Scarlatina	X					V	
Smallpox				V		V X	
Staph. alb.	V		X				
Staph. aur.		V				X	
Streptoc.	V	V	V	V	X & V	\vee	V
Syphilis	× ×					V	
Tetanus	X					V	
Tuberculosis		X & V					
Taenia	V	V	V	V	V	X & V	
Typhoid	•			V		X	
Whooping Cough	X & V	1					



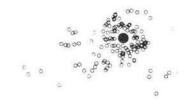
Amoebina

(× 22) Foraminifera

It will be observed that diseases and also medicines produce waves of different types both horizontal and vertical at different centimeter distances from zero, though of different wave types. This may explain why readings, done without polarizing selecting apparatus, sometimes differ from those obtained by Turenne methods. Turenne recommends the identification of vertical type waves by the Disc process. Here a sympathy between disease waves and the vertical waves of specific viral Elements provides further differentiation.

+ for Positive RM for Radiomagnetic Measured clockwise from West.
- for Negative RA for Radioactive

	Horizontal	'L' in meters	Vertical Dis	sc Angle
(RED HARMONIC)				
Z.1-HYDROGEN	_	8	RA	5
2-HELIUM	none	8	+	11
3-Lithium	+	10		17
4-Glucinium	+	6	+	22
5-Boron	_	12	+	28
6-CARBON	+	8	RA	34
7-NITROGEN	_	2 8	RA	39
8-OXYGEN	RM		RA	45
9-FLUORINE	+	40	+	59
10-NEON	none	14	RA	73
11-SODIUM	+	9	none without R.B.	86*
12-MAGNESIUM	_	80	H: H: H	98 *
13-Aluminium	RM	6	RA	109
14-SILICON	+	10	none without R.B.	120 ≯
15-PHOSPHORUS	+	8	+	131
16-SULPHUR	none	8	none without R.B.	134≯
17-CHLORINE	-	3	+	137
18-ARGON	none	2	-	140
(ORANGE HARMONIC)		2		
Z.19-POTASSIUM	RM	1	RA	143
20-Calcium	+	5.5	none without R.B.	146≯
21-Scandium	_	100	-	149
22-TITANIUM	_	7	none without R.B.	152≯
00 1/11/14 511111	1	20		155
23-VANADIUM	+	80	_	155



25-MANGANESE

26-IRON

27-Cobalt

28-NICKEL

H.1

H. 1

NOTE: Most Z's in capitals in animal tissue produce L-8m or a harmonic (fraction or multiple). (The other 4 are 'Transuranians' detected in the brain.) Normal man or woman: At H.80, equals a Pendular L-8m = Disc's Violet harmonic.

RA

RA

161

164

167

170

8 to 10

9

8

7 to 8 (zone)

H.26 (YELLOW HARMONIC)

	A PERSONAL PROPERTY OF THE PRO					
	Z.29-Copper	+		7 (7.50 to	7) +	173
	30-Zinc		_	7	_	176
	31-GALLIUM		_	16	none without R.B.	179*
	32-Germanium		_	16	—	182
	33-ARSENIC	+		22	1	185
	34-Selenium	I		22	+	197
	35-Bromine	++		70	Ţ	208
	36-KRYPTON		-	50	none w/out R.B.	220★
H.50	(GREEN HARMONIC)					
	Z.37-Rubidium		_	70	-	237
	38-Strontium		_	7	_	243
	39-Yttrium		_	2	_	255
	40-Zirconium		_	10	+	266
	41-Colombium		_	7	+	273
	42-Molybdenum		_	24	+	279
	43-Masurium		_	18	÷	285
	44-Ruthenium	+		9	+	291
	45-Rhodium		_	5	_	298
	46-Palladium	+		1	_	304
H.55	(GREEN CONTINUED)					
	Z.47-SILVER		-	8	RA	310
	48-Cadmium		-	10	+	316
	49-Indium		_	9 to 10	į.	317
	50-Tin	RA	٨	5	none w/out R.B.	318*
	51-Antimony	KIV		0.5	1 one wy out K.D.	319
	52-Tellurium			15	i	320
	53-IODINE		_	8	i	321
	54-XENON		_	10	÷	322
	55-Caesium		_	24	+	323
	56-BARIUM	_		20	RA	324
	57-Larthanum	37 € 2.		20	+	325
	58-Cerium	+	(587)	4	T _	326
	59-Praseodymium	+		1	<u> </u>	327
	60-Neodymium	ा	_	0.5		328
	61			7 to 10	+	329
	62-SAMARIUM			1	+	330
	63-Europium		_	10	Ī	331
	64-Gadolinium			10	т_	332
	65-Terbium			13	_	333
	66-Dysprosium			5	_	334
	67-Holmium	+	1000	20	1	
	68-Erbium	+		22	T.	335
	00-LIDIUM		_	22	Τ.	336

^{*}Represents the nine elements detected in the Sun's light reflected from the lunar surface.



		Horizontal	'L' in meters V	ertical	Disc Angles
H.62	(BLUE HARMONIC)				
11.02	Z.69-Thulium	_	16	+	337
	70-Ytterbium	000 TA	10	+	338
	71-Lutecium	-	22	· _	339
	72-CELTIUM (HAFNIUM)		10	+	340
	73-TANTALUM		1	-	341
	74-TUNGSTEN	+	0.5	+	342
	75-Rhenium	+	100	+	343
	76-Osmium	RM	16	RA	344
	77-Iridium	RM	16	RA	345
	78-Platinum	RM	16	RA	346
H.68	(INDIGO HARMONIC)				
	Z.79-Gold	+	9	RA	347
	80-MERCURY	+	4	+	348
	81-THALLIUM	+	10	+	349
	82-LEAD		9	-	350
	83-Bismuth	+ + +	10	+	351
	84-POLONIUM	+	2	+	352
	85-Astatine	+	0.5	RA	353
	86-Niton (Radon)	RM	1.55	RA	354
H.80	(VIOLET HARMONIC)				
	Z.87-Francium	RM	1.55	RA	355
	88-Radium	RM	1.55	RA	356
	89-Actinium	none	10	RA	357
	90-Thorium	none	10	RA	358
	91-Brevium	+	1.55	RA	359
	92-URANIUM and	RM	1.55	RA	360
	Z.93-	none	(1.55		
			(1 to 10m zone) RA	360

TRANSURANIANS (4 outside Disc). Positive or negative, 1 to 45 degrees.

NOTE: Later investigation gives Uranium's Angle a trace less than 360 degrees, i.e. not due West.

(See information on Turenne's - "ZODIAC-PATTERN DISC".)



1	Absinthe	24	Benoite	47	Cumin	69	Hysope	92	Ortie brûlante	115	Ronce
2	Ache	25	Bétoine	48	Cyprès	70	Lamier blanc	93	Pariétaire	116	Salicaire
3	Adonis vernalis	26	Bistorte	49	Douce amère	71	Lavande	94	Patience	117	Salsepareille
4	Aigremoine	27	Bouillon blanc	50	Epine vinette	72	Lichen d'Islande	95	Passiflore	118	Santoline
5	Airelle	28	Bouleau	51	Erysimum	73	Lierre terrestre	96	Pêcher	119	Saponaire
6	Alchemille	29	Bourdaine	52	Eucalyptus	74	Liseron	97	Pensée sauvage	120	Sauge
7	Aneth	30	Bourrache	53	Euphraise	75	Maïs	98	Persicaire	121	Saule
8	Angelique	31	Bourse à pasteur	54	Fenouil	76	Mariolaine	99	Persil	122	Scabieuse
9	Anis vert	32	Bruyére	5.5	Ficaire	77	Marrube blanc	100	Pervenche	123	Seneçon
10	Arenaria rubra	33	Bugrane	56	Fraisier	78	Matricaire	101	Petit houx	124	Serpolet
11	Argentine	34	Buis	57	Frêne	79	Mauve	102	Piloselle	125	Solidago
12	Aristoloche	3.5	Busserole	58	Fucus ves	80	Mélisse	103	Pimprenelle	126	Souci
13	Armoise	36	Capillaire	59	Fumeterre	81	Menthe	104	Pin	127	Sureau
14	Arnica	37	Carvi	60	Genêt	82	Menyanthe	105	Pissenlit	128	Tanaisie
15	Artichaut	38	Cassis	61	Genévrier	83	Mercuriale	106	Pivoine	129	Tormentille
16	Asperge	39	Centaurée	62	Gentiane	84	Millefeuilles	107	Plantain	130	Tussilage
2000	Aspérule	40	Chardon bénit	63	Geranium Robert	85	Millepertuis	108	Polypode	131	Ulmaire
18	Aubépine	41	Chélidoine	64	Germandrée	86	Muguet	109	Prêle	132	Valériane
19	Aunée	42	Chêne	65	Gui	87	Noyer	110	Primevère	133	Véronique
20	Baguenaudier	43	Chiendent	66	Guimauve	88	Olivier	111	Pulmonaire	134	Verveine,
21	Balsamite	44	Consoude	67	Houblon	89	Oranger	112	Pyrole	135	Vigne rouge
22	Bardane	45	Coquelicot	68	Houx	90	Origan	113	Réglissa	136	Violette
1000	Basilic	46	Coriandre	-		91	Orme	114	Romarin		

Herb samples: Two boxes containing 136 witnesses of nature's herbs and medicinal plants used for locating specimens in the wild and also for analysis and detection of their properties, effects and potency.

429

24

MODERN TRANSMISSION OF RADIATION FIELDS. A strange phenomenon has been found to happen with the modern wave-guides for microwaves which may show something analogous about the human wave-guides who use the more subtle and higher frequencies of thought. Electromagnetic waves used in tele-communication are confined in a wave-guide which speeds up the waves while the energy slows down. In free space where they are unrestricted and spontaneously free to propagate, the electromagnetic waves of light radiation travel at the same speed as the speed at which the waves oscillate to and fro. The propagation of the energy is thus related to the frequency of the waves, whereas in the man-made wave-guides the two velocities are different. The energy of the propagation travels at what is called the "group velocity" and the velocity with which the oscillating waves themselves move is called the "phase velocity".



Whenever we throw a stone in a pond we can see a mechanical example of the difference between "group velocity" and "phase velocity" demonstrated. Ripples going out from the center grow into ever-increasing circular patterns. If we put our attention on the crests of the waves and the troughs which make up this ever-widening ring of ripples, we can see that the crests move the waves outward faster than the ring does. They appear to be created at an inner portion of the ring of waves but as they become full waves they move out faster than the ring and then die as they reach the outer periphery of the ring. The speed of the wave crests and troughs seems to be faster than the ring itself. This corresponds to the "phase velocity", whereas the energy imprisoned in the wave itself, which moves the speed of the ring, corresponds to "group velocity".

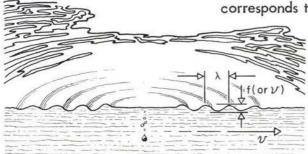


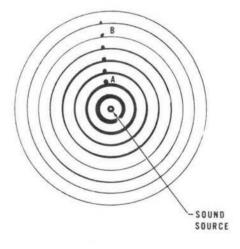
Fig. (257)

Water waves on a pond. The speed v is called the velocity of propagation, the distance from crest to crest the wavelength λ , and the periodicity of the up-and-down motion of a point on the surface is called frequency f (or ν).

The stone in the pond analogy, however, is relevant only when there is one up and down displacement which continues until all the energy of the stone's impact is dissipated. If we had a continuous displacement at the same frequency of the original waves then the ripples would be reinforced and we would have a "standing wave" which kept sending out ripples of the same frequency and did not die down, because the displacement energy was continually being replaced from somewhere.

Fig. (259)

Sound waves from a non-directional sound source move out in all directions and the energy at a point in each successive ring becomes smaller. Because of this dissipation of energy the sound at A is louder than at B. The weight of line in a circle suggests the relative energy at that distance from source.



The circular wave fronts of a multidirectional sound source are shown above. The energy of the sound oscillator radiates in all directions. The circles on the drawing are merely a theoretical representation of the wave fronts which are really sections of spheres. We can see that as the circles representing wave ripples are growing larger the energy in the wave remains constant and therefore the sound energy at any given area will disperse as the distance from the center increases. This is calculated by the famous proportional inverse square law mentioned in Chapter 14.

The diagram indicates this proportional relationship by showing a decreasing thickness of the circular lines, representing the waves dissipating energy as the circles become larger. Anyone listening at point A will experience a more intense sound than an observer listening at point B even though the frequency of the sound would be the same at any of the points on the crests of the waves between A - B.

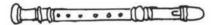
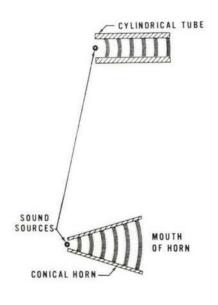


Fig. (260)

Wave energy, such as sound, propagating in a cylindrical tube does not spread out; the intensity or loudness remains fairly constant. The situation is somewhat similar in a conical tube.

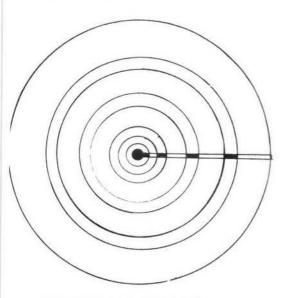




In the above illustration the waves of sound energy are confined first in a cylindrical tube as they are in a flute and in the second example in a conical horn. Within the wave-guide of the tube there is no divergence of the energy and the sound remains at a constant intensity along the length of the tube. Within the horn there is some divergence, but because the energy cannot escape and disperse, the intensity at the mouth of the horn is still very high. Since the energy is propagated along a line which is perpendicular to the wave fronts there is a concentration of energy from the sound source in the direction in which the horn is pointed.

How do these models fit in with the thought wave-guides of Supersensonics and are the various radium blocks, compass magnets and other stimulators of bombarding light waves analogous to the concentration of subtle energy along a linear rule?

Fig. (261)



BENDING LIGHT BACKWARDS.

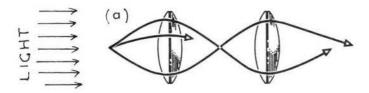
When we confine electromagnetic waves to a wave-guide of this type the energy slows down and the waves speed up, and a situation analogous to the speed of motion of the wave crests of the ripples on the pond, which move faster than the energy of the ripples, is thereby created. If we exploit this unusual wave property of a guide and apply it to the linear antenna described in Chapters 8 &23 for our thought concentration of consciousness we can see that the increased velocity of the waves can be stepped up while the energy involved is slowed down. We must always remember the wave-guide or rule is only one cross section of the radius of the vibrating sphere and all the energy of the source at the center of the sphere is concentrated and confined in the wave-guide. Since there is no artificial medium through which the waves pass as they do with a glass lens the usual optical laws of refraction do not apply.

It will be recalled from the Chapter 16, on the work of Vasco Ronchi, that converging lenses made of glass are thick at the center and thin at the outer edge. This structure of glass lenses was discovered because of the condensing effect of the bent rays of light passing through the medium which always cause the refracting materials to produce a wave velocity that is less than the velocity of light in free space. But these micro wave-guides exhibit an opposite feature and increase the phase velocity so that they exceed the free space velocity of light. Here we are using the current academic term "light" as being interchangeable with microwaves, radiation, electromagnetic waves, which according to Einstein's theory, all travel at the same velocity irrespective of the source and, what is more fundamental, the theory prohibits anything in the material world exceeding the velocity of light.

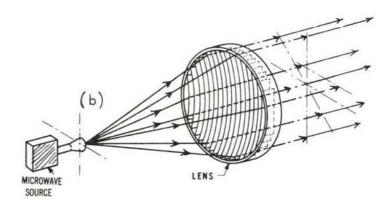
Because of this opposite feature, where the phase velocity is greater than the free-space velocity of electromagnetic waves such as light, the convergent lens for these wave-guides becomes concave in form, whereas with glass they are thicker and convex. We hereby see that the form is determined by the type of radiation propagation.

Lenses which focus ordinary light as in the Fig. 262 diagram (a) are the opposite of microwaves which are depicted in diagram (b).

Fig. (262)



(a) bends light towards the wave axis, but in (b) the lens uses the property of waveguides to make wave crests travel faster than the energy itself and focus in straight rays.



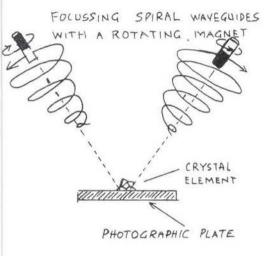
ELECTROMAGNETIC WAVE-GUIDES FOR THOUGHT ENERGY.

It is now important to study the results of concentrating consciousness by using Supersensonic wave-guides for chanelling thought patterns and to see if these results are consistent with the proven physical results as found by scientific experiment.

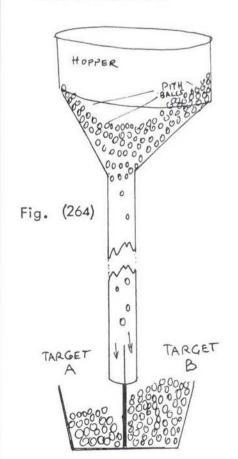
At the time of their invention the operators of the instruments of diviners would not have been able to accept that their dowsing instruments did nothing material and could have been entirely constructed in the mind. It was just as hard for them to accept with their notions about consciousness that light and consciousness could be identical phenomena as it would be today for a microwave engineer sending T.V. waves through a lens (b) to imagine that thought could be focussed along with the carrier wave as sound is.

Fig. (263)

THE THOUGHT CAMERA

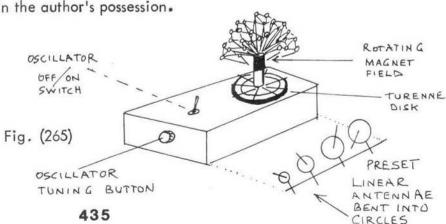


GRAVITATIONAL EXPERIMENTS.



The fact that thought operations are not dependent on theory, time, or measurement, or the speed of light makes it difficult for some people just to get up and try it with any sense of conviction. However, it was just this sense of conviction in their consciousness that they were really onto something big which caused thousands of radiesthesia enthusiasts to invent the most elaborate wave-guides, rules, discs and more recently the De La Warr radionic devices. Although George and Marjorie De La Warr were the first to admit that consciousness was the energy in the equipment, George would always add that the equipment did something on its own if it was left accidentally switched on. His daughter, however, who worked at the laboratory for several years and eventually became my secretary, would agree that all the results could be duplicated by thought alone. So even amongst one close family of pioneers we could find no exact agreement as to what actually worked. It was enough for all three, however, that it did work. The Radionic Camera which only certain people could work, was a different kind of wave-guide requiring very exact focussing of spiral lenses, to produce a thought photograph on a photographic plate. Yet in tests conducted over several weeks with a group of 20 people, four could regularly achieve images by placing their hand directly over a leaf placed on the same type of photographic plate obtained from De La Warr.

An example can be seen in the simple phenomena of gravitation which causes objects to have weight or mass. A hopper full of pith balls was allowed to fall freely down a tube which was divided in two at the bottom so the balls would fall into two target boxes. Some would be allowed to fall randomly and others would be willed to fall to one target or the other and on each occasion weighed. Allowing for error in the set-up by reversing the targets it was found that the mind could indeed interfere with objects in a free gravitational fall. Another example was to employ the exact properties of vibration and resonance to thought waves in the design and development of thought wave-guides and to see if they would work. From these experiments instruments for the individual tuning of emotional energy and a higher consciousness stimulator were produced in 1960 and these pioneer units are in the author's possession.



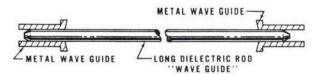


Fig. (266) A length of dielectric wave guide can connect two metallic wave guides.

The confining effect of a dielectric rod results from the lower wave velocity within the rod which tilts the wave fronts inward.

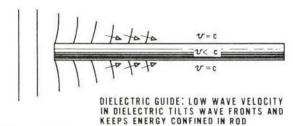


Fig. (267)

SUPERSENSONIC ANALOGIES WITH MICRO-WAVES & LIGHT. We have seen that within the modern metallic wave-guide used for transmission of microwave communication the same phenomenon of Supersensonics is observed. The speed of the advancing wave crests and trough becomes faster than the speed of advance of the electromagnetic energy. The "phase velocity" exceeds the wave velocity as the radiation is passing through free space, while the "group velocity" is slower than the free space wave velocity. The proportional measurement of each of these velocities shows that the total product of the phase and group velocities is exactly equal to the square of the free space velocities in a wave-guide. Therefore fast and slow velocities have been mathematically balanced somehow in the boundary of the free space velocity of light.

This unique radiation propagation property of a microwave guide reveals something about the velocity of light waves. Normally all fixed frequency signals sent out into free space, like the radiating light of the sun or a radio wave are all supposed to travel at the same speed and the wavelength is directly proportional to the velocity. The stretching of the wavelength within the wave-guide and the fact that the phase velocity increases beyond the wave velocity of light has made the existence of unusual types of microwave lenses possible.



A number of wave-refracting devices have been originated which have transcended the old theories that the bending of light waves passing through a medium are merely deflected because of the refractive index of the medium. The old theory fits phenomena to the form of lens whereas the new knowledge says the form fits the types of different phenomena. Here we can apply this reasoning to the instruments and phenomena of Supersensonics whose forms have evolved to fit the phenomena rather than the scientific trend to fit the phenomena to some theoretical representation or mathematical form.

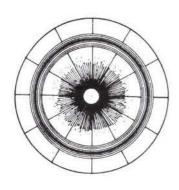
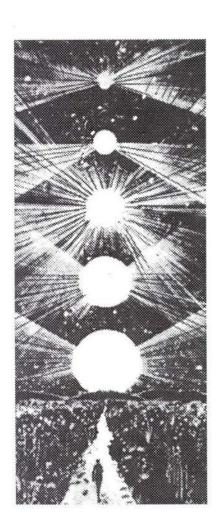


Fig. (268)

WAVE-GUIDES IN NATURE.



Not only do the human psychic layers of the seven levels of consciousness act as wave-guides for consciousness, reflecting it back into the centers, but there are natural wave-guides in the atmosphere for both microwaves and sound. These are caused by the moisture content which often produces its layers according to height. In deep portions of the ocean the variations of gravity pressure and water temperature create a sound channel which can guide sound along distances of many hundreds of miles. The unusual transmission of electromagnetic waves over the atmospheric ducts is called "anomalous propagation" in the field

An example of this is the designing of an instrument such as a Turenne disc which lets the test sample or element of nature determine its own fundamental ray according to its angle of polarization of electromagnetic energy in the nucleus and the

shells of its atoms. See outline of this in Chapter 23.

The strong analogy which has been built up by the perfection of microwave techniques and the behavior of sound waves reveals that the energy in electromagnetic waves can be also present in properly focussed acoustic lenses. The next development for mankind will be to use these techniques for focussing Consciousness. The early pioneers of radiesthesia began by searching for wave-guides along which supposed etheric currents were made to travel. They presumed that the radiation detected was emitted from the object being investigated but constructed rules and discs which acted as lenses for consciousness.

The patterns of energy dowsed by the early pendulum, rods and wave-guides look suspiciously identical to those now being found in the study of light radiation and microwaves. Therefore before going on to the more recently developed instruments of Supersensonics, we will cover the concepts of the early pioneers with the hindsight of our knowledge of today.

of radio and radar transmission.

25

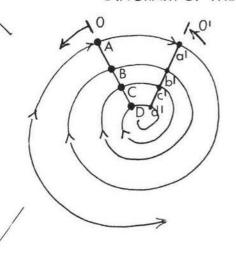
MEASURING THE ETHER.

One of the most difficult concepts for both scientists and spiritual researchers of consciousness is the one which Einstein made the basis of his theory of relativity. It was that of an "ideal observer" created mathematically, who would see the universe the same for all observers, regardless of their location, whether they were at the center or the periphery, without any favored position or boundaries, thereby creating a centerless system.

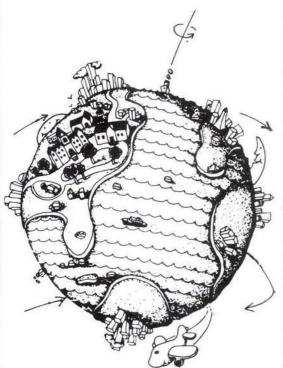
However, in reality we all know that the view from the center of a rotating gravitational system would be quite different from that of an observer whirling through space on the outer edge of such a galaxy. Although time would not be affected in terms of cyclic intervals, the velocity, in order to keep the same interval of time near to the center, would be quite different, as we can see in Fig.269 if we place ourselves actually at these points. Rather than just imagine them theoretically as an observer separated from the paper they are drawn on, as Einstein did, we must now put our consciousness as actually being present there at these points in reality.



DIAGRAM OF THE SPINNING GALAXY PLUS ALL OF BOUNDLESS SPACE



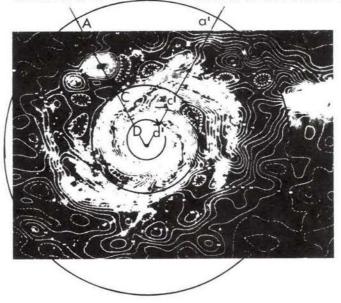
- 0 : relative starting point of stationary space.
- 0'- : position in space of observer after elapse of x amount of universal time.
- A-a': distance travelled in x time.
- B b': distance travelled in x time.
- C-c': distance travelled in x time.
- D-d': distance travelled in x time.



If the observer is on one of the spokes of the wheel situated simultaneously at all points A-D or a'-d' the time in cycles would be the same even though the <u>distance</u> and the <u>speed</u> of galactic travel would be different for each observer. The amount of time elapsed or the interval between the points A+D and a'+d' relative to an observer in a frame of surrounding space would be the same for all observers. There would be resonance at all these points if the whole system were a vibrating oscillating disc. If we picture the disc as a drumskin vibrating universally at the same frequency, then all nodal points would have the same <u>time</u> reality because they were all of the same frequency, but their reality would not be related to the <u>speed of light</u> or the velocity of travel.

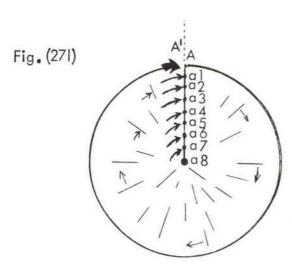
The increased speed between A-a' in reality is not experienced, just as we do not experience the rotation of the earth. Velocity would only become evident to an observer if he looked away from the center of the galaxy and saw some fixed objects or stars in the external stationary space frame. The absurdity of the thought, that there is still yet something outside of the whole or totality of space to relate to, comes from the unreal position of the artificial observer looking down on paper from outside the whole. Not even God can be more than his wholeness or be outside of his own total mind, yet this is a common trick which all scientific measurements now play on the observer. They first create the illusion that the observer is separate, then they assume this as a self-evident unquestionable fact, and from this generalization of a fact, they proceed mathematically to prove the existence of a separate space, other than the consciousness of the observer. This observer then logically is made to travel at the speed of light at the outer edge of the universe in order to keep up with observers situated at C-c' and D-d' nearer to the center of the system.

Fig. (270)



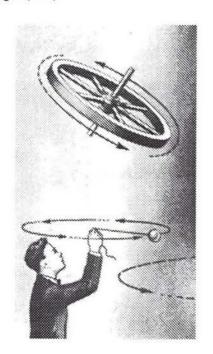
THE RELATIVITY OF PERIODIC OCCURRENCES.

This artificial representation becomes clear if we now do away with intervals of earth time, temporarily forgetting those clocks based on revolutions of the globe or orbital motion around the sun and instead think of an observer in universal time completing one cycle as in Fig.271. (Note we have not said one cycle per)



All observers at A-a1, A-a2, a3, etc experience the same cycle of time as the near center observer at a7, unless they are outside the wheel. Velocity only has a meaning relative to a direction, relative to an external frame.

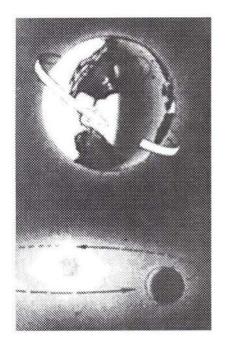
Fig. (272)



The whole universe with surrounding space included can in Truth only be theoretically experienced and actually experienced simultaneously at one spot - the center - because any other spot would require a relative velocity to keep the same time of one cycle in respect to the stationary surrounding space. At the "a8" center there is an absolute state of "no cycle", since it is a multidirectional observer experiencing all spokes at the same time. Only when consciousness decisively chooses to look in one direction towards the spoke A, does it experience a time dimension of one cycle from A-A'. Only when it further rationalizes that one cycle is meaningless by itself, without saying one cycle per something (i.e. per second, per year, per light year, etc.) does it create time and velocity.

WHY RELATIVITY OF TIME, SPACE & VELOCITY FAILS.

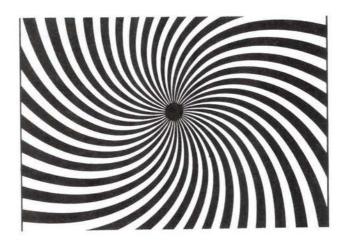
Fig. (273)



NO CENTER NO REALITY

Einstein's theories are based on the notion of space, time and velocity; these three imaginary non-existent realities, can arise only in our consciousness of intervals of earth time because of direct reference to an external framework of space, which then falsely creates a notion of "direction" in space. This is the fundamental reason why he could not include these theories in any concept of a unified field. By insisting on strict objectivity he created an "observer" who was outside of reality, who did not experience the same time and resonance at different points along the spoke of the wheel. We call this effect on the direct perception of phenomena by the nomenclature of the "wheel effect". You can only get off the wheel in the mind and in reality at the same time by becoming the center of the system observed. This applies to all reasoning and to all physical systems and only in this way can a universal observer be created by the consciousness.

Now we come to see why there can be no existence of an ether for those trapped in theory in their consciousness, that they are physically in motion at high velocities relative to the center. Relative to the center there is no motion in reality because in nature everything is actually moving with the center. But relative to an artificial theoretical observer situated outside the total universe being investigated, the velocity and motion is created by our consciousness of being separate. The illusion is carried forward into our experience of objects, because again and again we think ourselves separate from the universe we live in and the objects inhabiting it. Only when we can permanently come to see that consciousness extends around all these objects, which we call objective, and see that they are the center, in other words, really experienced inside consciousness and not external to it, can we experience the flash of illumination.



This flash comes with the knowledge of the objective fact that subjective consciousness is not separate from radiation, that in fact light and consciousness are scientifically speaking the same thing. It cannot be disproved because there is nothing in consciousness or light which can sensually discriminate any difference between them. They are both invisible and unquantized until they hit something, they both course endlessly through space until something stops them, and they both are timeless and immortal until they gravitate to the center and their grave. The very word 'grave' is linked with gravity because light and consciousness is levity. Annihilation of their levity through gravitation to the center is the death of time, space and velocity.

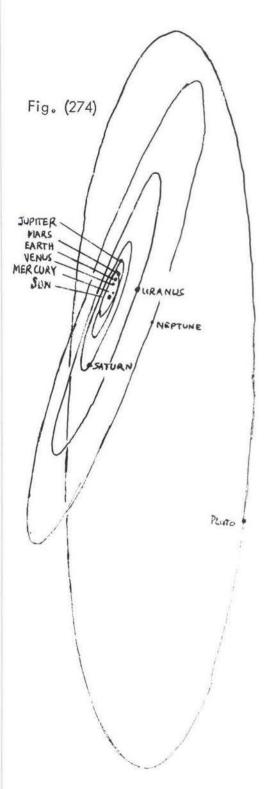
ETHER IS A PROPERTY OF CONSCIOUSNESS.

To look at the universe from the center of every system is to cause the immediate death of relativity and to create an absolute mathematical entity called zero with no relation to anything else. But all cyclic activity can be related to it, just as sound is related to silence. Zero is ONE without a second.

The fact that both gravitational waves and light are presumed by modern science to require no ether or medium for the transmittance of their oscillations through space is born out of the human ignorance of the fact that ether is a property of our consciousness. Ether is not of the physical world of separate bits of manifested energy which can be measured by our senses. Ether is not quantized like light.

Ether can be looked on as <u>subtle matter</u> since in a unified field of consciousness there cannot be any separation in reality between matter and any other octaves of the Universal vibration. However it cannot be measured except by <u>its effect on consciousness</u> and not by any effect on grosser matter.



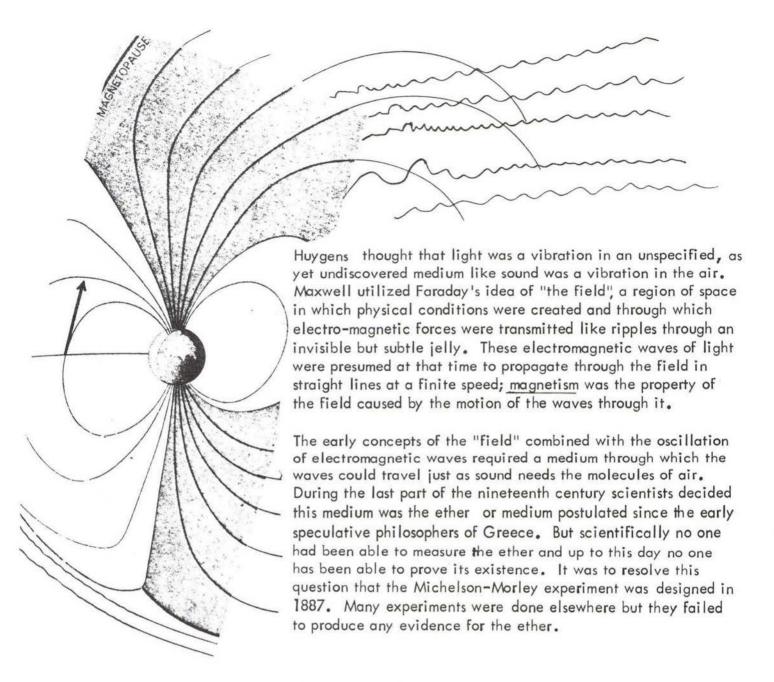


If we think about this deeply we see clearly that this is also the case with all our other measurements of physical matter. In Truth these are measurements of effects on our consciousness interacting with the grosser sensations of matter. But some persons see these measurements as independent of our human consciousness and see this as being scientific.

Before we go on to describe actual methods of measuring the ether or subtle matter a brief review of the background development of our present scientific views of ether may help to rethink and understand how mathematical representation and the self-deception of an artificial observer, separate in his consciousness from the universe being observed, has brought most of scientific mankind to his present confirmation of a physical objective reality, leading even the very elect into an ignorance which depends on an external reality. As long as any thought of separation exists between the Self and the total universe, then time and space and etherial beings, from flying saucers to cosmic computers talking in man-made light years, will dominate the consciousness of man.

We can follow this effect of theory and the "separate observer" throughout man's history in his concepts of an external ether. Along with the question of man's adding of earth time to cyclic events there is another field which has not been completely explained away by mathematics and relativity in the work on the concept of the subtle ether.* Called "Akasha" in Sanskrit it means the invisible all-pervading unmanifested medium through which "kasha" or the visible light passes throughout space as a manifestation of vibration.





THE ERROR OF A STATIONARY ETHER CONCEPT.

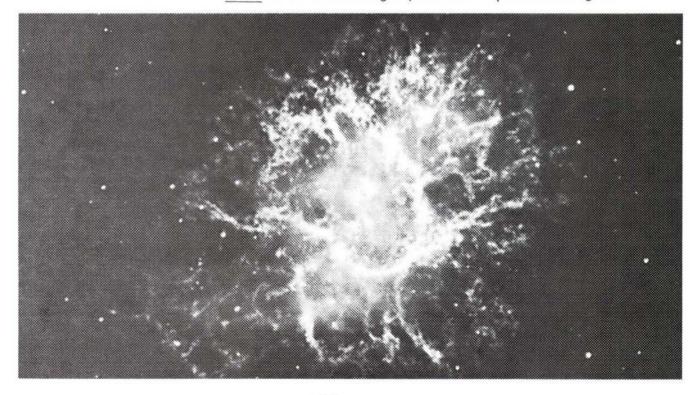
Michelson-Morley set out to discover what was the effect of the earth's passage through the ether of space on the speed of light. Again it is a purely mathematical experiment which postulated that there must be some drag as if the earth were some boat drifting through water. The stationary ether streaming past the earth at 20 miles per second as the earth moved in its orbit around the sun would represent the current of water in which the earth ship was sailing. If the "ether flow" had any mechanical effects on rays of light then two beams of light would be shifted out of phase. The result would be optical interference fringes which would enable calculation of any drift. The fact that the light did not shift or change led scientists to reject the concept of ether even though they had no idea whether the subtle ether had mass, was really anymore than mathematically stationery, or whether it needs to have any real effect on light waves.

Einstein's special theory reasoned that because light travelled at a constant speed it was independent of the bodies receiving or emitting it, and therefore this would explain why we could discover no movement of the earth in respect to the ether. It was as if Einstein went up in a cosmic helicopter and mathematically looked down at the universe. If he had been able to do that actually perhaps he would have seen that velocity, distance and time are an illusion to an all-pervading, all-present observer's consciousness. Why light has a constant speed no one in science even today knows. Yet the velocity has been verified many times as a property of light rather than of the medium it passes through.

BEYOND THE VELOCITY OF LIGHT.

Whether it is the maximum boundary of light or just the maximum transmitting power of the subtle ether is difficult to conceive. Perhaps a fantasy of the author that light does not travel and that it is our consciousness that is the medium for light energy would suggest that there are real boundaries or levels in consciousness, that the velocity of light is thereby a limiting factor in the creation of matter by thought waves. To take this fantasy further we will develop a novel method of measuring which will do away with the need for consistency with existing knowledge confirmed by exact calculation. We will use numbers as identifying the properties of light and matter to measure reality just as it is, by direct perception beyond the speed of the mind. In other words we will create the instruments out of consciousness, which is vibrating at frequencies beyond the speed of light and thought and tap the cause of mind-stuffitself. In this way we shall use the ether which is vibrating beyond the frequencies of light.

X-RAY SOURCE IN CRAB NEBULA



REVIEW AND SUMMARY OF PENDULUM REACTIONS

The first subtle radiation of "disintegration" producing a Supersensonic influence is the radio-magnetic or R-M, expressed (+-). This causes an alternation of rotations of an ordinary black pendulum or the Turenne pendulum with its magnet needles horizontal. Many operators call this mistakenly "radioactive", thus annoying physicists who reserve this term only for pulses of energy spontaneously released from radium and certain isotopes in Alpha, Beta and Gamma particles ejected from the nucleus of an atom. Radio-magnetic is therefore a more acceptable term for the normal "disintegration" wave-field orientation of the nucleus connected with the earth's magnetic horizontal wave-field.

The pendulum of the student should always be compared by first seeing how its own influences are detected in comparison with a magnetic compass or those of a radium block lying north-south. Compare your proposed pendulum with that of a simple black cotton spool over a compass in order to check its polarity and note any difference.

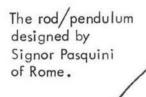
The sign of radioactivity or (R-A) or a subtle degree of detectable radiation caused by the nucleus being excited by some external ionizing energy is expressed as (R-A +-) and is always associated with the vertical electric field. This causes a set of movements in a magnet-fitted pendulum: first the (+) rotation, then the (-) rotation, then the north-south oscillation and finally the east-west oscillation, all with magnet needles vertical and positive poles both up. The pendulum polarities observed by Turenne, are for a black pendulum bob for horizontal waves and a green pendulum ball for vertical type waves. Samples should be tested for their polarities while lying mid-way on the lath of wood or rule used as a wave-guide aligned north-south.

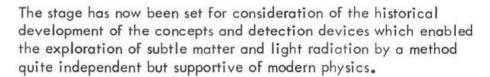
The Hills (+) Green pendulum is a modification of Turenne's magnet-fitted pendulum for detecting <u>vertical wavefields</u>. The difference is that a source of radio-active Radium Ore powder is enclosed at the centre of the green bob, making it selective of <u>vertical waves</u> and <u>positive green</u> in a clockwise rotation. <u>Negative green</u> is the anti-clockwise direction. (R .A.+-) is the same as for the Turenne, first + then + then + then + Turenne, then + then + then + Turenne, acting as a point below, which always points to the centre of the earth in the vertical plane.

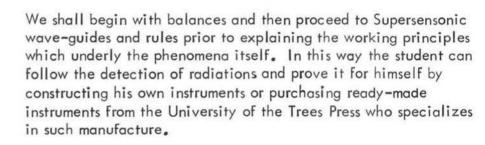
For enhancing detection of <u>Horizontal wave-fields</u> the Hills type pendulum should be substituted for the plain black pendulum or cotton spool. Its selective properties are also stimulated by the same principle of waveguide intensification, but the point below orientates itself to the centre of the earth in the Horizontal plane.

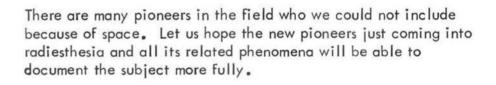
PART III

SUPERSENSONIC DETECTORS.



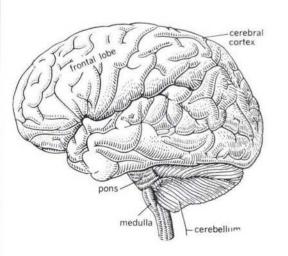








The more recent developments in Supersensonic training go far beyond the instrumentation used. They involve a form of brain development in the unused frontal lobes which evolution has gifted mankind. This training is given in practical form on a series of 24 cassette tapes with the purpose of creating a human detecting antenna acting as a stimulator of consciousness. It is the yogic equivalent of "The Higher Consciousness Stimulator" described at the end of Part III.



26

THE DOWSER'S TOOLS.



In describing the faculty of divining referred to in Part I, we mentioned briefly the diviner's rod and the radium block which enhanced the selected phenomena and acted as an amplifier of the subtle matter emanating from a sample. Instead of discussing the faculty itself, what it can do, we will describe the effects of the different rods, rules and discs to bring out the field force characteristics of a test product. In this way the faculty inherent in our consciousness to detect these radiations will be automatically described.

THE DIVINER'S ROD.

A diviner's rod is sometimes preferred to the pendulum and often both are used by a diviner to cross check his results. The rod consists of two bar antennae as described in Part I each being a strip of whalebone or flexible wood. Most diviners use rods made from two, twelve-inch lengths of whalebone bound together at one end with a black silk thread.

Both the rod held in the hands and the operator must do their detection with the help of terrestrial magnetic fields and the spiral forces which create the magnetic field. The physical body of the diviner is also reacting directly to these influences provided by the earth's magnetic effects acting on the sample. The diviner's own body is divided into planes of radiation as with the Antenna 1-5 explained earlier. A simple test with a rod or pendulum around the body will show this resonance pattern of nodal points.

Fig.(275)



From the study of wave effects from bar magnets we can take an easy step to understanding the diviner's rod by testing the V shapes in all of nature. A person with a forked rod or magnet fitted pendulum bob has the faculty of detection by the same process which finds its parallels in the insect world. The antennas of insects, if they are studied with the Supersensonic detectors, show that it is a natural phenomenon which enables location and perception at a distance.

The rod helps to bring the holder a selective radiation and not all radiations. Hence most people are only aware of the selective power of a forked rod over a body of water. This electrical or magnetic influence in all cases in Supersensonics is the same as that which the witness or selector produces on the rod itself; in the case of water divining, the human body being 90 percent water acts as a selector when the operator holds the thought of "water".

There are rods some five or six inches long which are like the 'wish bone' of a roast turkey. Short rods of this length give sudden reactions and are suitable for detecting radiations in laboratory or medical work. Rods have been designed throughout history of all lengths. The longer they are the slower the reaction and the shorter they are the more rapid the result. The more selective the witness employed, the more accurate is the result.

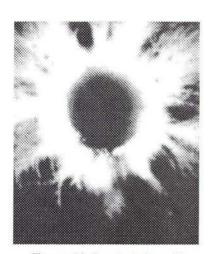
WHY WAS RADIESTHESIA NEVER ACCEPTED AS SCIENTIFIC?

In the early days of modern divining many operators employed a small sample of colored ribbon or paper inside a closed phial which when held in the hand tuned the rod or pendulum to show the diviner holding it when the radiation received was in resonance with the same vibrational qualities. In this way they explored the spectrum and its connection to material vibrations and compared it with the chemical and atomic periodic tables. However in this case the knowledge did not come by passing the radiations through a prism or medium in order to see the groupings around the lines in the spectrum, but it came directly to the nervous system. In this way the proper observation of a natural system was possible without disturbing its natural patterns as we do in the act of measuring and observing in physics. The process seemed just too simple to those who had built up a faith in expensive and accurate gadgetry. Because of the subjective interference and man's penchant for quackery and self-deception, the method was open to serious denunciations from the more rigorous scientists.



Also the fact that it could be performed by anyone by means of just a twisted piano wire, each end of a loop being held in the diviner's hand, led those who had received years of academic training to regard the whole area with suspicion. The scientists and physicists who risked their names in this forbidden territory were immediately excommunicated from the respected scientific strongholds of reliability and consequently the field has hardly been looked at by modern scientists. Its much greater implications as a new mode of perception have been overlooked even by those who became "believers" by experimenting with rods and pendulums for themselves. The early work of radiesthesia operators shows that a considerable number of old researchers had been content to get working results without any explanation of the phenomena itself. This is an identical situation parallel with the present scientific approach where we know so much about light, radiation and electricity but we do not have any idea or explantion of what these are or even how the spectrum arises. Supersensonics attempts to rectify this shortcoming by direct perception of reality.

PARAPHYSICS & DIVINING.



The aura of the fingertip of a 7 year old photographed with Kirlian equipment.

Because of the difficulty of investigating wave phenomena in electro-vibratory systems the diviner's rod as an accessory to modern scientific methods will become acceptable when the skills are learned. The wave selection of these tools is assured not only by the addition of magnets but by understanding the selective powers of one's own hands and finger tips. The discovery of Kirlian photography has convinced many scientists of the bio-electrical energies. The type selection of wave phenomena as described in Part I through attention to which fingers touch a rod or pendulum string is difficult but by using the pendulum to ask questions of the subconscious this becomes possible, to ensure more accurate results. Most diviners are not aware of this since they hold the rod by the whole hand. A pendulum user has an advantage in this over the rod user because he can select a wave-type not through the holding fingers but by using a finger of his other hand as a pointer.



THE POLARITY OF THE BIOLOGICAL REACTIONS.

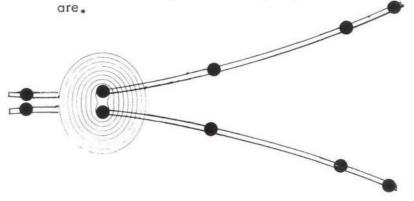
The thumb is suitable for vertical type detection along with the second and fourth fingers. The remaining fingers are selective of horizontal type wave-fields. To know this immediately increases the value of a diviner's rod.

Similar effects can be created by applying an electrical pressure to the rod such as a small voltage which will affect the Supersensonic balance. This can easily be observed directly by connecting the terminal of a dry cell battery to one of the rod's V branches. This produces the same effects as attaching magnets to the plain divining rod and gives a corresponding wave-field type and polarity selectivity. If both the positive and negative poles of the battery are attached to one of the rod's branches then it will become selective of radiomagnetic and radioactive wave trains.

The student using a pendulum can experiment by using the rod as a laboratory sample, placing a single pole of a magnet at one end of the divining rod's branch. If a positive pole touches the single branch and the rod is directed north, south, east or west, the diviner gets a reaction at the flame-point; the field around it is positive while the southern part is "dead" producing a non-polar influence. If the poles are reversed then the opposite field effect is produced. If one touches the V branch with the equator of the magnet and uses it as a selector the rod becomes active as an oscillating instrument showing that the field around the flamepoint is radiomagnetic. In all cases the affixing of magnets to a plain rod by a thread or rivet must be done at one of the five points of the "Antenna 1-5" pattern, otherwise the results are stifled. These experiments can be done on a "representation" such as a drawing, for the ink marks are just as much "matter" as the whalebone and sticks of wood in the rod. Since it is consciousness and thought which is reacting to fields, it matters not whether these are virtual, real or imaginary like mathematical formulas

FLAME POINT IS APPROXIMATELY 1/7TH FROM END OF 1-5 ANTENNA

Fig. (276)



DOUBLE MAGNETS (LIKE THE DOUBLE DORJE)



When pairs of magnets are attached at the resonant point 1-5 the rod can be made selective to produce only east-west lines of force by inverting the magnets as described in Part I. By setting the magnets vertically their inductive effect is to select only the vertically polarized wave and to exclude the horizontal type. Using a sample piece of lead, element No. 82, we can control the influences emanating by checking its positive horizontal type wave and excluding its negative vertical polarization and then testing it vice versa.

Having mastered this question of polarity and found the selective effects of attached magnets or electrical charges, the next step is to determine the effect of adding a "witness" or a test sample either in the hand or attached to the rod or pendulum. A rod with a herb or rose leaf attached to one of its branches, being held between the branch and the skin of the operator's hand, becomes a selector of that herb or rose and does not react in a resonant way with some other herb or flower.

The word rod implies roundness but in Supersensonics the rods are plane surfaces such as square or rectangular. If any straight baror rod is laid on the table north-south the usual pattern of a magnetic field appears around it even around non-magnetic plastics and dielectric substances. The vertical type wave causes a pendulum but at the point of the Antenna 1-5 pattern to beat north-south along its length it changes to east-west.

When the straight linear antenna is laid in the east-west direction instead of north-south, the same field is detectable but the 1-5 points have coalesced into one single point and the pattern is detected as a cross with its arms orientated to the compass and its center at the equator of the antenna.

If the bar or rod is then stood on its end in a vertical position then the magnetic center of the cross becomes a single point and the pendulum reaction is circular or spherical.

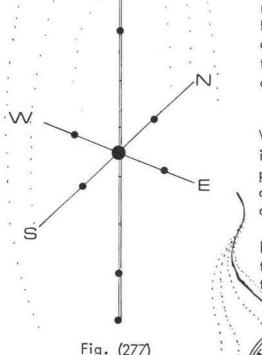
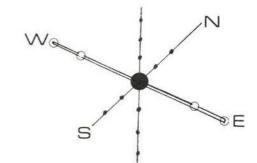
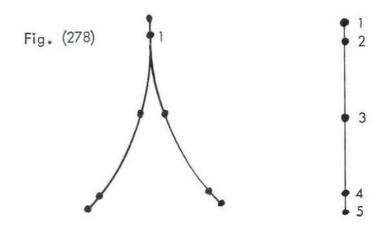


Fig. (277)

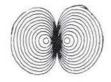


TWO ANTENNAS LINKED.

When the two bars or branches of wood are joined together in the diviner's rod to form a V with the apex towards the north or south the same effects as before are detected, but the cross is then not found at the central equator of each single branch of the V but more towards the apex at the flame point. This is so even though the Antenna 1-5 effect is still found along each single branch with No. 1 resonant point at the cross.

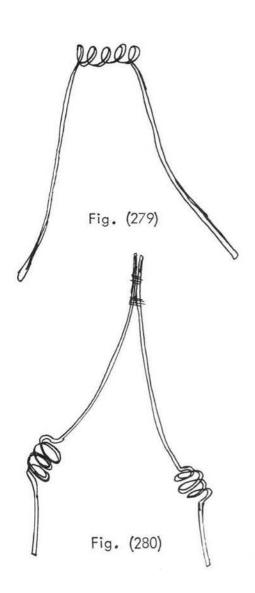


By holding such a V made of two linear antennas 1-5 we have the diviner's rod in our hands. The detection then of all radiations passes to the flame-point whenever there is resonance between the object or the question or thought predominant in the mind-stuff and the reality of the natural situation we are investigating. From the flame-point it is transmitted through the diviner's hands to the neuro-muscular system which reacts in accordance with a previous representation in the operator's consciousness.



Holding a rod therefore is a virtual bar magnet which is tuned to subtle biological – radio frequencies which will manifest the pattern of a bar magnet's field or pattern of any field-force emanating from a physical object. Here then we have a waveguide of biological – psychic energies which causes like wavefields to pass along a conductor which is itself vibrating with the same wave frequency or wave length. This is merely a restatement of the laws of modern radio propagation coming from 50 years ago through a direct method of perception. Since then billions of dollars have been invested in research plus the encouragements and research spin-off of two world wars and several trips to the moon. With a pair of whalebones or two bits of piano wire the early radiesthesia investigators discovered the patterns of atom and radiation and like the ancient Egyptians and Chinese before them were cast out of the halls of respectable logic.

ORIENTATION
TO POLARIZATION.



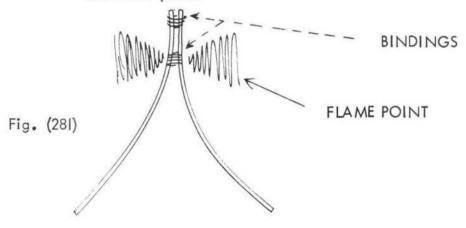
We mentioned earlier the nature of wave-guides and their polarization of wave-fronts and the need for correct orientation of the receiving antenna either in the horizontal plane for microwaves used in U.S.A. or in the vertical plane for those generated in England. Even in dowsing this phenomena was discovered over 50 years ago when it was found that pointing a plain rod without magnets towards a source of energy would produce a different reaction to that obtained when the divining rod is at right angles to the source of the force-field. This is always evident in water divining and may also be investigated by students by doing the laboratory table experiments. The operator should always bear in mind that a rod may be caused to dip or fall when previously over the same sample it was caused to rise; this is often due to the second test being made from a different direction. By careful investigation of the field around small bar magnets and conductors of electric current or radio oscillation the operator becomes familiar with the results of orientation, e.g. alignment to a train of polarized waves gives a selection of the corresponding electrical or vertical waves. When the selective magnets are set for the magnetic horizontal plane the magnetic wave-trains are generated at right angles to its path of propagation.

A way of making a rod permanently sensitive to the magnetic component of electro-magnetic radiation is to introduce a coil. A micro-ammeter shows a small current flowing from one hand to the other whenever the diviner's rod is a conductor such as a flexible steel rod or wire. (See "Psychic Physics" by V. Tromp.) Therefore the introduction of a coil in the human nervous circuit is the equivalent of holding a magnet as a witness. By making the the diviner's rod out of a conductive material such as steel or piano wire with part of it twisted in the form of a spiral or coil, we can make the selectivity of that plain rod sensitive to the magnetic waves at will. Everyone who investigates the divining phenomena deeply, eventually likes to create their own pattern of dowsing rod and can therefore investigate its selectivity with this knowledge. The nature and design of the rod that the student uses can be controlled by laying it as a sample on the experimental table and testing its properties.

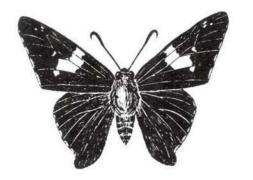
EFFECT OF COLORS ON RODS.

While everyone likes to discover perfection in designing their own rod it may here be pointed out that color incorporated as part of a rod will also bring about wave-selective properties. Colored rods were used extensively by Henri Mager who found that an operator holding a colored witness when using a black rod obtains the use of several colored rods without carrying around a collection of different colored rods. The Abbe Mermet provided Mager with his findings. A black and white rod is often appreciated by water diviners or prospectors of minerals because black beside white in a Supersensonic balance equals the color green.

Even the color of the binding of the two antenna rods or whalebones together, making the branches of the V, may have an effect on the divining rod because one part of the binding is at the flame-point.



A rod without magnets which is black and has a white binding is good for vertical type wave-fields but ineffective for the detection of horizontal fields. More will be given on color in a later chapter on that subject.



INVESTIGATE ALL ANTENNA
"V" PORMS IN NATURE
FOR SENSING COLOURS.

Fig. (282)

TRAINING FOR DIVINERS.

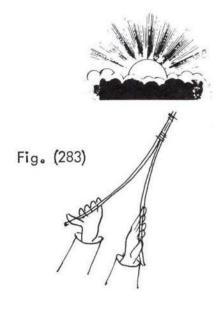
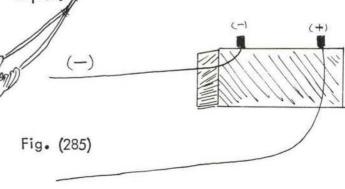


Fig. (284)

Part I concentrated on the use of the pendulum but for some the rod will be even more rewarding. The crucial moment of faith in this training will come when the first sensation passes to the diviner through the rod and the operator feels the uncontrollable bending and twisting of the rod independent of the muscles trying to keep it straight. It is important to recognize the similarity between the pendulum reactions and those of a rod while investigating the same circumstances. The most pronounced time of the day when the "diviner's reaction" is greatest is when the sun is setting and the "chlorophyllian moment" comes. Sometimes referred to as the green flash it really lasts for 52 seconds during which time all objects and plants seem to be alive and sending out subtle radioactive influences. The rod jerks in the hands and the muscles twitch whenever it is brought close to almost any plant or tree at that moment.

The operator should next attempt to detect the effects of the negative vertical wave-field above flowing water. It can be water flowing down a drain near an indoors basin or an out-ofdoors pipe. The effects are the same as D.C. electricity flowing along a conductor such as a wire between a battery and a lamp. This shows that running water has an electrical core which twists into a central spiral and sends out a radiation to the diviner's consciousness. The rod usually rises strongly when the diviner walks towards the source of the stream just as it does when the rod is pointed towards the source of the electric current in a D.C. wire coming from the negative terminal of the battery. The diviner's rod is in fact a remarkable modern detector showing the flow of electrons from the negative terminal rather than the oldfashioned idea that the current comes from the positive terminal. Another experiment can be used for training by having someone else bury a block of iron at least 8 inches below the surface. The detection of the vertical type wave-field from iron when the magnets are arranged vertically enables one to locate the hidden object.



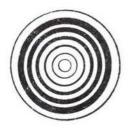
SERIAL WAVE-FIELDS

Fig. (286)

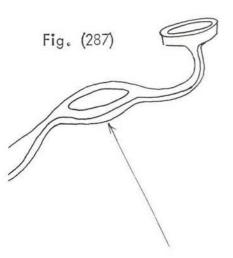
PHONOGRAPH

RECORD OF NON CONDUCTIVE MATERIAL

This is the first time that the serial movements of a divining rod have been mentioned in this volume. A serial appears in all cases when the muscles and nerves are saturated with bio-energetic charges caused by the radiation of subtle matter from the object. A special chapter will be devoted to the explanation of serials in Vol.4 of this series but in the meantime we must emphasize that serial numbers of the rod movements can vary with each individual operator, so each diviner should keep notes of his own lists of serials by creating a standard environment with a radium block standing just to the west of the test sample. A serial is found when a diviner detects the sample's wave-fields at the same place which causes the rod to rise and fall a given number of times before the muscles and nerves cease to operate. Research shows that this is due to the leaking away of the biological radioenergies which are going out to the sample and returning like a radar signal. The number of times the signal returns is the "serial" for that particular radiation of the sample. The serial numbers obtained by a diviner lead to the conclusion that they depend on the wave-selecting qualities of the pendulum or rod used, coupled with the diviner's own saturation with static-free electricity fields. These have penetration of many non-conductive materials such as phonograph records, plastics, wood, skin, hair, etc. The subtle energy which passes through these and between the hands of the diviner are of the dielectric kind. For many years physicists who became dowsers did not associate this energy with electromagnetic waves even though electric charges produced the same effect. They considered that electromagnetic waves only travelled straight and could not travel along circuits which were non-metallic such as lines on paper. Therefore Supersensonic energies were only felt to be associated incidentally with electromagnetic waves. However in modern times we have waveguides such as fibre optics which will transmit electromagnetic waves of light around corners through all kinds of electrical nonconductors. The early pioneers also did not couple the behavior of free electrons in static fields with human consciousness as did the ancient Chinese and Egyptians.



ANCIENT CHINESE RODS.



CEREMONIAL TYPE
CHINESE DIVINING
STYLUS

In later radionic instruments the static charge at the end of the finger tips corresponding to minute, currents of biological and psychic electricity was brought into discharge when the thought pattern resonated with the actual reality in nature. The well-known effects of bringing the hand near to a cigarette paper suspended by a cobweb or by a fine thread of rubber cement solution demonstrates this effect. Repulsion between like charges and attraction of opposite charges will show the electric potentials of the fingers. The discharging of the charge stored in a phonograph record, by a mental command which causes the field to move into the operator's body is another demonstration of the effect of thought on static fields.

The Jui scepter often seen in the hands of old sculpture of figures is in fact a Supersensonic implement used in ceremonial ritual as a symbol for higher faculties of perception. As an instrument for divination it originated as a stylus held in the hand whilst in a state of meditative trance and allowed to rest on a tray scattered with fine sand. Sand writing was a common form of thought reading and our gospels tell us that even Christ used this method to read the thoughts of those around him. (See gospel of St. John, Ch. 8, v.6.) The method was to allow for the divining faculty to immerse itself in the mind-stuff and just as we dowse for water with a rod, allow the unconscious neuro-muscular influences to move the stylus across the dusty sandy surface. Much of the I Ching and the positive and negative relationships of the Chinese hexagrams or Pa-kua symbols were derived from nature's own finer forces in this way. The diviner's rod coupled with the hexagram symbols held in one hand as a witness reveal the selection of influences according to the principle that like fields have an inductive action on like, at a distance, while at close quarters the action between similars can be repulsive or neutralizingly antidotal. The inductive effect of the diviner walking around a sample with another like sample as a witness in his hand, reveals the line of direction of the distant sample or situation having the same field as the witness near him. It would seem that the ancient Chinese used these visual witnesses of nature's phenomena to detect results in astronomy and medicine, to plot not only the courses of the planets against the backdrop of the stars but also the location of nodal points and meridians in the human body. The development of Acupuncture was primarily based on the correct location of these points by the dowser's faculty.

BIOLOGICAL ELECTRICAL TENSION.

Various rods have been fitted with springs although not essential to the results. The supplying of a tension to the rod helps to increase the speed of the neuro-muscular reactions and thus the diviner's sensitivity is amplified. Basically the reactions all take place in the diviner's own body. When thoughts are in tune with the situation then the muscles act like electrical condensers which produce contractions due to the discharge of bioelectrical currents of accumulated energy. The position of the diviner's legs is important for an optimum flow of these polarized currents and should be kept apart like the V shape of the rod in order to pick up the earth's magnetism and tap the E-W flow.

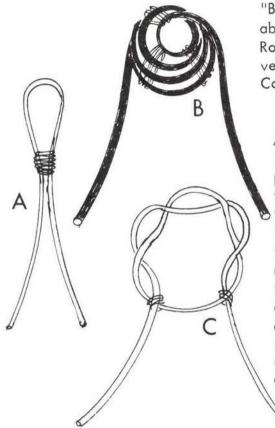
The ultimate power of consciousness over biological matter such as the polarity of the atoms and molecules of our bodies and its chemical charges are often ignored by the layman and doctor alike. States of deep hypnosis and trance achieved by self-suggestion can change even the structure of bones as well as change the whole Ph of the body. The metabolism of the cerebrospinal fluid can be influenced merely by thought energy to increase the induction of cosmic rays and effect protein synthesis. Therefore the causing of a neuro-muscular reaction to the thought pattern which exists in the form of some electromagnetic current in the brain is not extraordinary. Thought and electromagnetism may not be the same energy but many diviners believe they are closely associated with radiomagnetic carrier waves. Most amplifiers of the diviner's signals are based on some electromagnetic excitation of the subtle energy field by means of radio waves or radioactivity.

This transduction of thought energy through the electromagnetic carrier waves into physical energy has been the concept held by over 1500 radiesthetists in France since 1930. The author found that thought patterns held in his own mind could be beamed at photographs with the assistance of radio waves of different frequencies. These oscillating electromagnetic waves could be tuned to the photographs by means of the diviner's rod. Many experiments which will be described later proved that electromagnetic waves including light radiations do provide a universal link between thought energy and its action at a distance.

Radio Source beamed at photographs as physical stimulus is equivalent to a Radium Block

Fig. (288)

Illustration shows the poor man's dielectric divining rods made from polyethlene, polypropylene or nylon available from the publishers. Rod "A" dips down in the presence of water's negative vertical waves. Costs \$6.50 while rod "B" uses 4 ft of rod and twists down and sideways over (-) and (+) vertical fields and costs \$8.50.



"B" was designed in 1920 by Turenne but then abandoned in favour of magnet fitted rods.

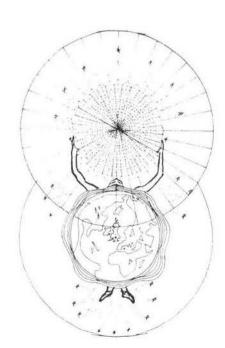
Rod "C" introduces a coil which selects (+) vertical fields and costs \$7.50 custom made.

Colours Wh. with Black bindings effects result.

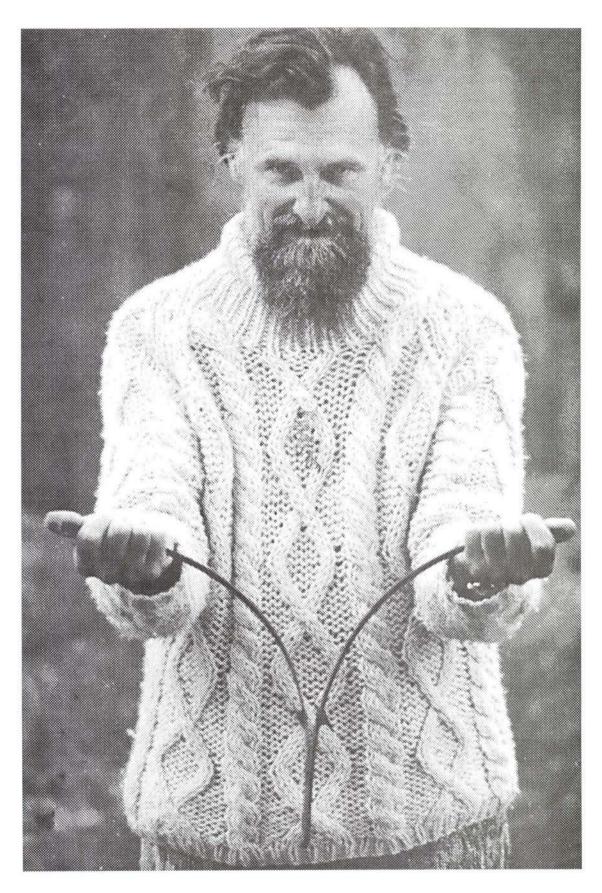
As we discover the different tools used by diviners since the 1920's we will begin to form some picture of our own mental powers and carry out tests with rods and pendulum to see if we too as a student of Supersensonics can tune our thoughts to radio transmissions. Then the feats of such people as Uri Geller and Ted Serios in psychic photography and the transmission of energy to viewers of television will seem only to be an extension of our normal powers of perception. Gaining a familiar knowledge of these biological reactions to the tensions of psychic electricity of thought energies for ourselves, through making our own diviner's rod, will eventually enable us to throw away the rod and use the arms and fingers only. Reading a hundred books, however erudite or theoretical, will not convince us as much as one good demonstration to ourself by ourself.

PRACTICAL HINTS ON HOLDING THE DIVINER'S ROD.

After you have constructed your rod or purchased one from the publishers of this volume, you can begin to understand the connection between your consciousness and what you put in it by direct experiment. All extraneous thoughts and theories should be put away while actually dowsing, otherwise they will interfere with the results just as much as any physical objects or colors present in your environment.



Firstly holding the diviner's rod correctly is not always easy because the position of the hands on the branches is not an expected one. In order to be fully charged with the universal field and the radiomagnetic forces which determine the flow of cosmic rays and other radiations which make up your consciousness, the operator must consider himself to be the instrument not the divining rod. The rod is only the indicator like the pendulum, an appendage by which you notice the reaction of your nerves and muscles. Therefore the operator should keep his arms slightly separated from the sides of the body and higher than his navel center. The solar plexus center receives the radiations from the earth through the lower parts of the body.



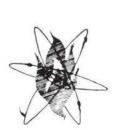
THE AUTHOR HOLDING A MAGNET FITTED DIVING ROD TUNED FOR VERTICAL WAVE FIELDS. THE ROD IS SHOWN TWISTING DOWN OVER A SOURCE OF WATER. THE ROD WAS MADE BY L. TURENNE.

With legs apart to receive the earth's magnetic force, the forearms are kept horizontal. The outstretched hands are turned over from the normal position so that the palms are up and visible to the operator. Each branch of the forked rod is then held with the fingers surrounding it with the extreme end of each branch of the rod being covered by the pad of one's thumbs. When the correct position in which the diviner's rod is held has been learned, the operator gets in touch with the wave-field by moving the rod forward. A beginner is well advised to walk forward towards the field while the adept would merely extend the arms forward while standing still, at the same time holding the thought of the tested situation in the mind. An experienced water diviner does not need to get out of his car when he arrives to dowse for a well on a property. He can just point to the spot where the reaction to his line of sight occurs.

EXPERIMENT TO PROVE BIOELECTRICAL FIELDS.

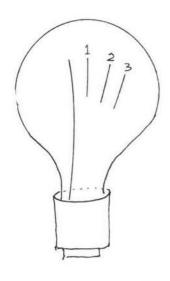


VOLTA
First Producer of Current
Electricity



The suspending of a cigarette paper from a cobweb or the dangling of a human hair will act as a useful voltmeter to test the induction of a current of electrostatic energy when brought near to the hand while holding the rod. There is some connection between the wave-fields which is taking place between the hands holding the rod. The hair voltmeter shows that an influence between a detected substance and the diviner's rod passes across the gap between the rod and the diviner's hands.

The making of such a voltmeter with the hair from one's head is an idea which I gained from Volta himself. I was visiting the museum and temple erected to Volta in Lake Como to celebrate the first international meeting of physicists there and my friend Professor Campi, who was Director of the Leonardo Physics Museum in Milan, was showing me round. Campi as a young physicist at Como in 1926 had been given the job of being secretary to that historic occasion and was showing me the first Valtaic cell in existence.



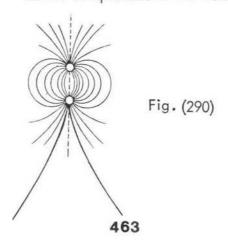
VOLTA'S PIG BRISTLE

Fig. (289)

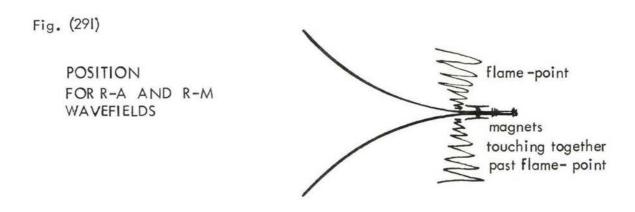
Then he showed me the first voltmeter consisting of a spike of a pig's bristle erect in a vacuum tube. Volta had calculated the amount of electricity to move the pig's bristle to a mark on the tube as one volt. I instantly saw how the pig's bristle could be replaced by a human hair suspended and hanging freely in the tube for detecting the flow of psychic electricity. Campi and I were discussing a theory for the phenomenon of psychic displacement of electrical charges and I measured the field on a gramaphone record when we got home and discharged it mentally as a demonstration. Later on I showed Professor Gaetamo Boschi, the president of the Italian Medical Society and an imminent professor of Neurology in Bologna, the same phenomenon. In homage to Volta's pig's bristle, the "Supersensor" of subtle electrical fields had been born. Whether it is eventually called a Hillsmeter will be historical matter but I remember distinctly being quite excited to have a physical indicator which could guage the strengths of psychic static wave-fields and be able to trace the invisible edges of the field with even more accuracy than with the diviner's rod. Undoubtedly the student may find the hair indicator useful since he can carry it around on his own head but it does not take the place of a magnet-fitted selective rod or pendulum.

THE TURENNE MAGNET-FITTED ROD.

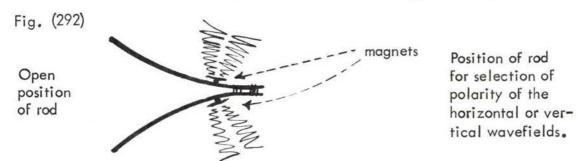
Special advice is needed for those intending to use the magnet-fitted Turenne rod which has been described. The rod designed by Turenne is basically the same as a plain rod made of two whalebones, one from a female whale and the other from a male whale. The length of each branch is 50 cms because this dimension insured a balance between the positive and negative wave-fields detected by the Turenne pendulum described earlier. This antenna length allows the operator to get polarity results consistent with the reactions to the radiomagnetic and the radioactive components of the wave-field.



Such a Turenne rod gives a reaction to the radiomagnetic when the magnets are fitted to the rod forward of the flame-point. In order to give this position to the magnets the forward portion of the rod is closed together so that the V shape is pressed together through the inward flexion of the wrists making the magnets come together past the flame-point as in the diagram below:



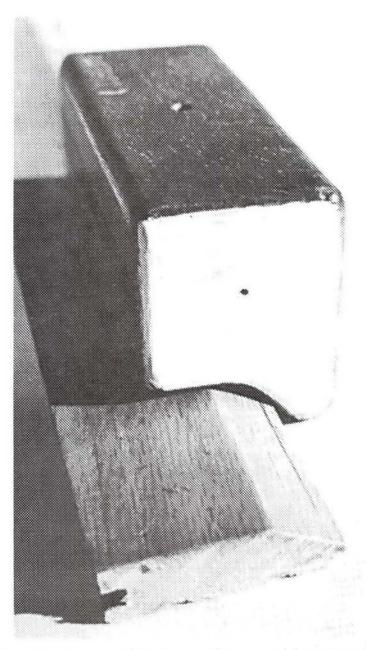
This shortening of the V shape is the effect of pressing the rod branches together but when divining for ordinary polar influences the V shape of the rod is kept open so that the magnets are slightly apart and are exactly placed at the flame point on each forked branch of the rod as in the diagram below:



The magnets are aligned in the same way as on the magnetfitted pendulum.

The length of the rod branches at 50 cms is not always regarded as optimum by all diviners. Most diviners use a 12 inch rod recommended by the water divining committee of the British Society of Dowsers. However the various lengths of rods are merely a matter of individual preference and even Turenne's 50 cms (19 3/4 inches) becomes a 13 3/4 inch rod when measured from where the magnets are fitted. The variable length of the Turenne rod obtained by pressing its forked branches together is

only a "thought device" in the author's opinion, helping the operator to concentrate on the thought pattern of R-A and R-M wave-fields and thereby getting a stronger resonance effect with the test situation. If the operator is fully experienced, the flexing of the rod inwards need not make that much difference in results but to a beginner the ability to get more complete resonance will definitely affect the diviner's reactions to the "thought fields" held in the mind-stuff.



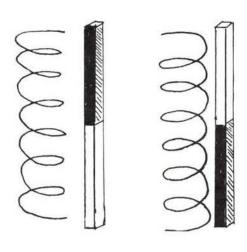
The Turenne Radium Block was modified several times and here it is shown in its final form designed to slide on the rule to enable accurate orientation north-south along the rule. The tested sample is placed on top. The Block produces beats and oscillations at all seven nodal points which disappear when the sample is placed over the correct element number.

27

DETECTION THROUGH LINE OF SIGHT.

Fig. (293)
Try the pendulum

over these drawings.



E-W wave form

The identification of the mind-stuff of the operator with matter and the visualization of images of the apparent world in our consciousness tells us little about the real world which is made up of radiation energy which science has given the name light. The images we form in our consciousness resulting from the waves of energy impinging on our receptors, such as our eyesight, are purely re-constructed by the brain and mind to present an external picture which we assume to be real but which is merely an internal operation. The same can be said about a drawing or a photograph which is looked at by a human eye. The mind reconstructs and localizes the images in the mind-stuff. This has important consequences for Supersensonics because it brings the possibility of using drawings or mathematical representations of number and proportional measurements as symbols standing for reality. In other words we can use the drawings on paper as a means of controlling our "thought energy" to create apparatus for measuring the invisible wave-fields around objects. We have already observed the results of pendulum reactions at different nodal points over sketches of the linear antenna in Chapter 10 and of making drawings and standard models of divining rods, circles and discs which give results as if they were the real objects themselves.

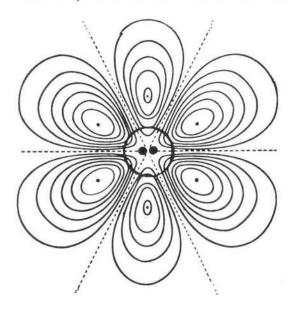
Drawings can even indicate the properties of solenoids, a single layer of coiled wire being represented on the flat paper by loops crossing or joining each other along one side of a drawing of an antenna length. We can dangle our pendulum over a left-hand spiral solenoid drawn on paper and it will begin to rotate in sympathy to the left as long as we are looking at it with our consciousness. In some way the drawing is invested with our consciousness and energizes it. If we draw a right-hand solenoid alongside of it strangely enough we find the pendulum reacts to it with a right-hand swinging. When two solenoids drawn on paper, each representing the wave equivalent of a bar magnet, are laid side by side with one drawing inverted in respect to the other, the subtle radiation reflected to our consciousness by the two spirals is the east-west flow type of wave-field. The two drawings placed end on with the clockwise RH spiral pointing north will give the pendulum the normal reaction to the field of a bar magnet.



Placing a radium block on the table near the two drawings makes the detection easier but does not alter the effects of the geometrical form representing a real magnet. This gives us a strong clue as to why the results of mathematical formula and various scientific models can simulate the real world of nature very accurately in the world of thought alone. The effect of our vision and the consciousness which actually uses it upon these representations is identical with the effect of our vision on the real objects. This process of identification of the mind-stuff is too complicated for discussion here although a full understanding of it is presented orally in a series of 24 cassette tapes called the Rumf Roomph Yoga series available from the publishers. Let us say, like many scientists, that we accept a phenomenon because it works in order to proceed with practical applications of this phenomenon.

LOADING CONSCIOUSNESS INTO GEOMETRIC FORMS.

By the above means people can test out their designs of equipment or divine the practicality of a scheme of construction during the planning stage of an experiment or project. Such effects of imbuing drawings, figures or numbers with consciousness, support the belief in the role of a universal field in life which interacts with electromagnetic forces. Even mathematical symbols can be tested for their proportional validity since they represent only mental operations in our consciousness.



GEOMETRIC FORM

ASTROLOGY AS SYMBOLIC OF COSMIC FORCES.

PENDULUM MAGNET

NEEDLES INVERTED

SHOWS E-> W OSCILLATIONS

WITH PENDULUM

MAGNETS VERTICAL

OSCILLATION BECOMES

NORTH -> SOUTH

It is easy to see that if consciousness can invest mental forces in diagrams then the erection of horoscopes, which represent cosmic forces, may in some way depict the energies and influences unconsciously affecting the subtle thought-fields of individuals. The identification of the mind-stuff with planets instead of the geometrical relationships between planets can be compared with the identification of physics with real concrete matter and the mathematical structures representing nature in science. The author is not an avid astrologer although he studied it for some years and found that consciousness is not often aware of its own powers of suggestion in both science and astrology. In most cases identification with geometric form induces the very thought-forms unconsciously sought for in the subject's own consciousness.

Let us take an example from the left-hand and right-hand spiral reaction of the pendulum to the solenoids mentioned above and apply it to the geometric form of the triangle. In this way we could say the properties of actual triangular objects can be tested. We have already mentioned the telemetric triangle in which the whole of science, except Ronchi, invests its consciousness and therefore has based its explanation of the faculty of vision. From our investigation of a triangle on paper we can find that there is a central point, where the reaction of the selective pendulum indicates passage of vertical waves. At this point at the center there is a reaction equivalent to the "flame point" on a divining rod. The surface of the triangle is equally balanced if the triangle is equilateral with the edges producing a radiomagnetic pendulum oscillation in our consciousness. Now if we align one side of this equilateral triangle north-south or east-west certain differences will occur in the reaction. The user of a magnet-fitted pendulum will find that a specific northsouth type of wave-field or an east-west radiative influence will result. It is important for the student to try this in order to understand it intellectually.

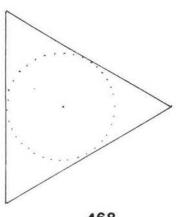


Fig. (295)



PENDULUM DOES

NOT DETECT E-W WAVEFIELD

WITH MAGNETS INVERTED

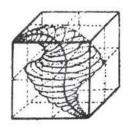


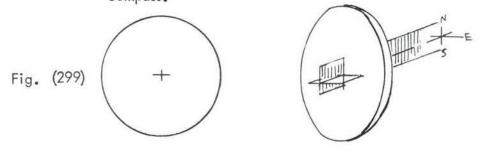
Fig. (296)

Here for the first time we can learn by experiment with a drawing that the east-west flow type of wave-field is not merely east-west as an oscillation of a pendulum reaction at right angles to the magnetic north-south alignment, but is also an invisible force at right angles to some composite primary force. Another way of looking at this east-west flow of electrons would be to see it as the progenitor of both the horizontal magnetic field and the vertical electric field at right angles to both of them. These two polarities make up the components of one primary spiralling force as shown in Chapter 8,P.123.



Fig. (298)

However we find that it is not even necessary to draw the sides of the triangle; three dots positioned on the paper as an equilateral triangle give the influence of a circle within them. If we take a circular length of piano wire and make it into a diviner's rod we will find as with the straight linear antenna rod that there is one single point of wave-field reception. A straight rod has this at its flame point but a circlular rod receives the induction through the center of the circle. A drawing of a circle on paper will illustrate this point that the field being radiomagnetic produces the radioactive reaction at its center causing the vertical type wave-field to pass through the center point north to south and the east-west wave-field to pass through the same point at right angles to it, just as we found with the null point of a magnetic compass.



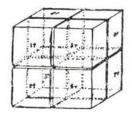


Fig. (300)

After studying the effects over equilateral triangles and circles we may proceed to examine the effects over square figures and cubes. It is remarkable that pendulum reactions are most pronounced over figures which "go into" a circle or sphere. The regular triangle, square, and hexagon are used by the inventors of many Supersensonic instruments and discs in order to provide various kinds of analysis. We shall describe some of these specifically in later chapters but here we can note that the construction of these instruments in these forms is to limit the wave-fields to a central point in order to observe any deviations or imbalance.

PHYSICAL RELATIONSHIPS OF WAVE-FIELDS OF SIGHT.

We have outlined the effect of looking into mirrors in the chapter on Ronchi's New Optics and now by using the divining faculty we can investigate what really happens by drawing a paraboloid on paper and then actually testing the results found in the reflector of an old car headlight or some other paraboloid mirror. The experiment on paper should be limited to one cross section of the paraboloid such as the drawn parabola provided in Ronchi's example in Chapter 15.

Fig. (301)



This figure it will be found with the pendulum has a R-A focus where the car headlight bulb is located. There are lines of force parallel to the horizontal axis. This parabola on paper provides the same effect as a paraboloid in reality. If a sample of lead (Pb) is laid at the focus then the wave-field of lead is reflected and sensed by the pendulum quite a way outside of the figure on paper which is emitting the wave energy of lead. Similarly other substances can reflect and their wave-fields can be projected or received at the focal point of the drawing. A test of this effect is to draw another parabola but on this occasion do not draw the lines parallel to its axis. The pendulum ceases to oscillate along the length of the beam for it is not reflecting any corresponding wave-fields. A drawing therefore can and does "represent" the true forces of nature depending on the consciousness which is seeing out of the eyes.

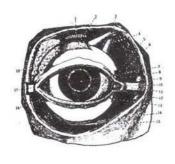


Fig. (302)

The next step for an interested student is to take an anatomical drawing of the eyes which is medically correct and investigate them from the physiological point of view to see what value the eyes and the consciousness wave-field shining out of them is to the diviner's Supersensonic detection.

The first fact to check is that important factor affecting all Supersensonic phenomena in Radiational physics. It is that the diviner's reaction is strongly influenced by what he is looking at. When people try to use the diviner's rod with a blindfold on they usually fail to detect anything. Unless they know that the skin itself can see and by training become skillful, they get very little reaction until they open their eyes. It is possible to train the blind once they become aware that they can "see" through their skin.

For the ordinary person, unaware of the effect of the mind-stuff on what he is seeing, the effect is so great that the wave-fields emitted by what he is looking at are much stronger than any subtle fields that may be impinging on the flame point of the diviner's rod. Even the personalities of some people are so strong that they completely mask the results of others. If they are standing beside the table on which experiments are going on they can be sending out their negative waves from the upright <u>linear antenna</u> of their body. This in turn is reinforced by their "sight beam" which can cause a diviner to pick up the interference of their thought wave-field. The eyes provide a carrier wave perceptible to Supersensonic detection.

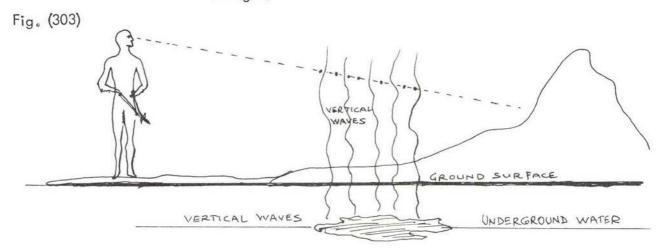


This faculty of the "sight beam" can be used in the open air by more gifted water diviners. For instance when the invisible waves, due to underground water in flow, correspond to the selected sample witness held, the rod gives the appropriate signal, when the particular wave-field sought is in line with the eye beam. Also by pointing the finger at a hillside and looking along the line of sight with a witness of an object in hand, while holding a pendulum, a hidden object with the same wave-field as the witness can be located by the diviner's reaction when resonance is established.



Eyesight then, having such strong wave-fields backed by the powerful energies of consciousness itself must be used positively. The operator should keep looking at his instrument or the test sample if the instrument is expected to do the work. We must make full use of the method of detecting through the eye beam and always bring the rod into the line of sight whereupon the detector reacts more readily and reveals the polarity of the wavefields reaching the eyes. The witness sample being held acts as a selector of the one specific type of radiation corresponding to that wave-field of the sought-for sample reaching the retina, as a composite representation of the sample's visible and invisible radiations. The eyes and the consciousness behind them therefore also record the invisible wave motions of solid objects and liquids. This is demonstrated by the invisible vertical type wave-fields which pass upwards from flowing water to the atmosphere above which can be located by the eye beam unconsciously.

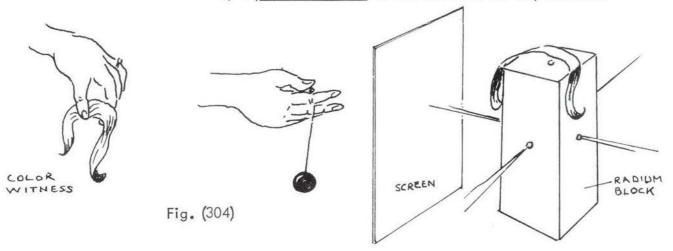
It would appear that the role of consciousness in the operation of the physical senses has a far greater role than science has so far imagined. What we take for granted as "sight" appears to be a carrier wave on which the consciousness is sent out. It then returns information about the wave-fields by travelling back to the retina or skin in order to give the Supersensonic diviner's reaction. The whole operation could be analogous to the beams of microwaves sent out through wave-guides in radar equipment which are reflected back to the source when they encounter a solid object. However there is an objection to this concept because the eye can pick up and detect the vertical waves radiated vertically from underground streams when there is no solid object to reflect them back as from a reflector in the line of sight.



By experience and practice of our tests it is difficult not to conclude that the eye, or something we call consciousness passing out through the eye, sends out a beam of invisible energy capable of detecting waves crossing or disturbing it. This is analogous to a radio signal of a given frequency changing the course of its direction and continuing to travel along a wave-field of the same frequency in another direction.

This change of direction can be demonstrated in Supersensonics by means of setting up two carrier beams, for instance those produced by two horseshoe magnets, two radium blocks or two wave-guides such as a radiesthesia rule or linear antenna. Then by placing a sample of an element such as lead (Pb) in the carrier wave we can detect with a selective pendulum or rod whether that specific wave-field passes from one carrier wave to the other. This demonstrates the anolog of the radar waves. To set up an experiment which demonstrates the eye's power to detect a radiation or wave-field not reflected by a solid object like a sample of lead or a physical element, we can perform the following test:

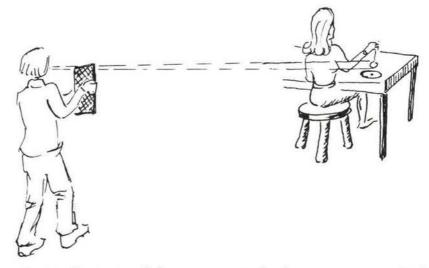
Let the diviner hold a color sample as a witness and recognize the same frequency of say a colored ribbon on a radium block some few yards away while the block itself and the ribbon are concealed by a six inch card serving as an upright screen. Have someone change the colors until you detect the correct frequency by a positive reaction of the selective rod or pendulum.



THE DETERMINATION OF THOUGHT FIELDS.

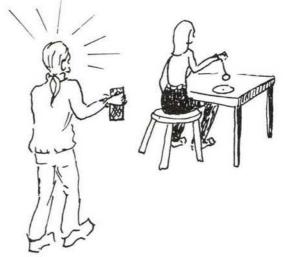
Now to test whether it is consciousness or merely the sight beam which is the Supersensonic faculty, set up your experimental table so that a friend can look at your pendulum without you being able to see which witness he is holding in his hand. Have your friend hold some color card witnesses and look at them in the line of sight of your pendulum, as in the diagram.

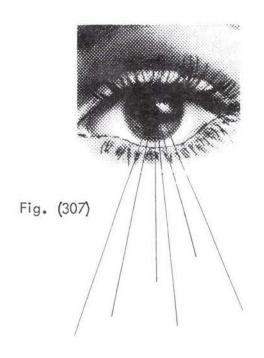




Suspend your pendulum over a circle drawn on paper which will ensure that all forces are balanced at the center. The pendulum you hold will gyrate according to the spectral color your friend is looking at and reveals the horizontal or vertical wave characteristics of that color. This demonstrates the passing of the sight beam as a carrier wave for specific color frequencies. Now varying the experiment, have the person just touch the color witness and look directly at the pendulum and see if the gyrations correspond. Now put away the witness and ask your friend merely to think of one of the colors and look directly at the pendulum.

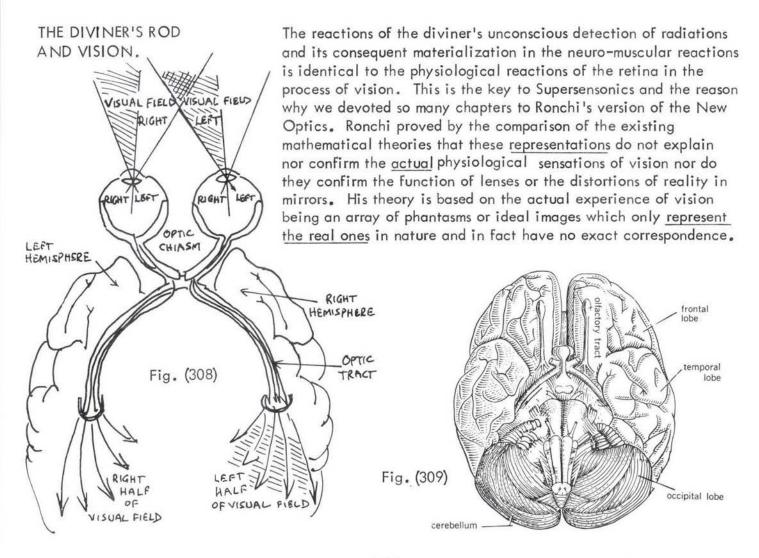
Fig. (306)

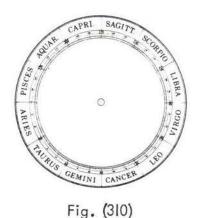




It will be concluded from these tests that the diviner's instruments are able to intercept a color carrier wave passing to a person's eyes and redirect it to the detector and also that the diviner can intercept the thought of a color transmitted through the eye beam to the diviner's pendulum.

A more acceptable indication that consciousness is the real carrier wave is that the diviner's method of selective detection is capable of reading another's thoughts through the wave-guide of the sight beam. Not all people are successful with these thought experiments because they unconsciously believe them to be impossible and therefore send out a negative self-suggestion in their projected wave-field. However about 80 percent of people using the pendulum are capable of this form of "pendulum thought reading" based on the signals detected by movements of the pendulum.

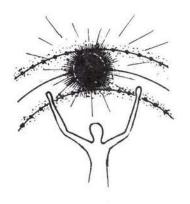




The mind and the memory is working just as unconsciously as does our visual process and puts together the rays of light received on the very narrow band of electromagnetic radiation we call visible light. In this way the reception of unconscious and unseen radiations affects the nervous antenna of the human bioenergetic electric system and responds to radiomagnetic phenomena of the subtle wave-fields of Supersensonics.

But the key to Supersensonics goes even further and reveals that not only do the eye and other senses unconsciously put together signals in the brain and then present them to our consciousness as "real", but our skin itself is a receptor far more sensitive to invisible force-fields than we have ever imagined.

THE SENSITIVITY OF THE SKIN.

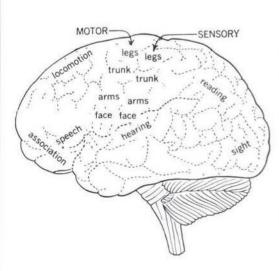


The author could list many instances and experiments done to prove that the skin can "see" and the skin can "hear" in the strict sense of these words. It is possible to train the skin of the hand to recognize the different colors red, green and blue quite quickly in the space of 1/2 hour to 1 1/2 hours depending on the sensitivity of the person. By constant practice just as we practice playing any instrument like a piano or guitar we can refine the awareness of these perceptions to the point that we could, through the skin of the hand, recognize any of the cards in a deck of 52 playing cards and by further training even read a newspaper through the fingertips.

This is not an isolated phenomenon as we are led to believe but a normal function of the skin which unconsciously is constantly acting as a filter of invisible light radiations as well as those in the visible spectrum. The dowsing phenomenon is only an extension of this human faculty which lies dormant in every human being. Many groups of children have been trained to "see" through the skin and since these children do not have a heavy investment of experience in the normal modes of perception they are easier to adapt than many adults who find it difficult to believe.

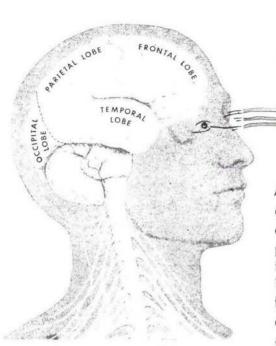
This doubt and skepticism that a thing is possible acts as a form of self-suggestion or hypnosis and hamstrings the adult who has settled into habitual thought patterns and memories which block the true perception of radiations of the wave-fields. It follows that children make the best dowsers and until they are made selfconscious of it, the gift is accurate. Once they become aware that the adult world regards this mode of perception as special and extraordinary the child becomes self-righteous and superior in finding he can perceive things that grown-ups cannot. It is this self-righteous and preconceived image of themselves that makes all humans very poor diviners since they are already programming the results with their expected performance. This in some way blocks the skin sensitivity or confuses the reactions in the brain to the subtle fields. Then the resonance effect disappears and the phenomena becomes inaccurate and unreliable. The actual perception reaction however is no different for "seeing" with the eye because the eye is merely a piece of skin which has become refined over millenia to become sensitive to only a very narrow band of electromagnetic frequencies, whereas the skin and nervous system are sensitive to all subtle radiations in the environment.

EVOLUTION OF THE RECEPTORS.



Mankind and his nervous system is not merely the result of accidental happenings and trials and errors. Supersensonics is a science which recognizes an evolutionary thrust in all of nature which provides the mechanisms of the biological machinery of perception, long before it is actually needed. The frontal lobes of the brain are an example of this. Almost 9/10ths of the brain are still unused by most humans since the remaining 1/10th is capable of running the unconscious mechanism of the human bioecological system to maintain survival in the physical sense.

Fig. (311)

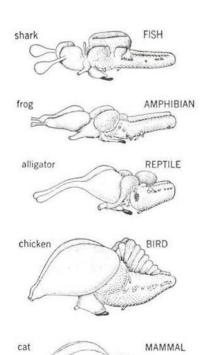


NONMYELINATED NERVE FIBERS

Fig. (312)

An interesting development of the human brain is that it was once merely a piece of sensitized skin. When the first progenitors of men appeared on earth their brains which governed their perception of the sensory objects in the environment such as food, warmth and light, were not protected by skulls and encased internally. But as their existence became more complex and the faculty of conceptualizing and localization of phenomena demanded memory as well as the putting together of the phantasms experienced, the sensitive portion of the skin began to fold in on itself and become a most vital organ, its delicate structures needing the protection of bone and hair.

THE SENSORS & THE MIND.



The abstraction of stimuli and sensory effects in man led to a separation in the evolutionary spiral in that mankind developed the frontal lobes in which the higher faculties of perception reside. The animals on the other hand, who have almost identical systems for perceiving light and sound in the same or nearly the same spectrums of sight, hearing and touch, have brains in which only the primordial sections have developed. Dogs have a greater range of hearing and smell but their skin is less sensitive, hence the frontal lobes have been developed to increase their perception by these means. However, compared with the broad spectrum of radiations invisibly present in every environment, the dogs and most other animals have developed only the minimal equipment for the abstraction of sensory signals into conceptual thoughts. Yet the eye of a cow or a dog or an owl works in basically similar ways to that of man, although the construction is slightly different, when compared with the vast differences that could exist in nature's perception of electro-vibratory phenomena. Even to look at the eyelashes of a cow is to realize that they are the envy of every woman who purchases false ones made by man. The varieties of perception in plants, animals and fish on a vast cosmic scale is not that different in principle. In fact it is this similarity which has enabled science to record the signals of the neuro-physiological spikes in the nervous systems of animal and plant sensitivity.

Fig.(313) The brains of representative vertebrates, showing progressive increase, especially in the cerebral hemispheres and cerebellum. Olfactory lobes, clear; eerebrum, lightly stippled; optic tracts and lobes, coarsely stippled; base of midbrain, wavy lines; eerebellum, vertical lines; medulla oblongata, horizontal dashes; pituitary body, black. Stubs of eranial nerves are outlined.



Fig. (314)

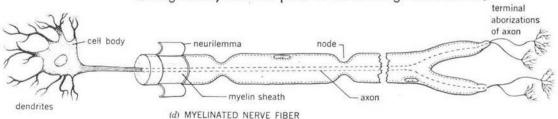
That plants have the dowsing faculty and show perception of human thought patterns has been recently demonstrated and confirmed by many researchers. That these brainless parts of creation have their sensitivity to such experiences as fear and love imprisoned in the cells of their skin is proved by the fixing of sensitive polygraphs to their skin.

This leads to the conclusion that human skin has a residual capacity to act like human brain cells and that only by becoming highly specialized to receive specific signals such as those narrow frequencies of sight and sound in the skin of the eye and the skin of the ear drum have these skin cells become highly differentiated. In other words these same skin cells could be taught to forget their present function as receptors and learn a new mode of perception. They could even revive an old mode of perception from several million years back which has been passed on by hereditary acquisition through the action of the evolutionary intelligence, which is building the human network of nerves and cells for an evolutionary purpose as yet only very dimly perceived by mankind.



Yet these skin cells which have migrated throughout man's biological history from an exposed external sensor to an internal interpretative role inside the folds of the brain are not so discriminative of the narrow bands of radiation because the nerve signals and spikes travelling to them along the optic and acoustic nerves are more or less identical wave-trains. The meaning of these signals is discriminated in the psychical representation which we call the mind-stuff where they are put together as an image or sound. Evolution has prepared man for sensing all the invisible radiations which he does not now perceive through the five different kinds of skin we call the senses, by incorporating the essence of his cosmic growth in every cell of his body. Hence the divining faculty is inherent in all kinds of skin and the act of "seeing" is merely an act of divining a pattern of physical radiations and forming a psychic representation of such in the mind. In exactly the same way the divining faculty uses the skin and causes neuro-muscular reactions to electromagnetic fields of strengths beyond our present measuring instruments.

Fig. (315)



THE LIMITATIONS OF SCIENCE.

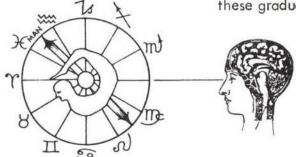


Just as science regards a good education in physical concepts as essential to the understanding of atomic phenomena so would it appear that for science to include the Supersensonic phenomena and methods of sensory perception in its investigation there must be some education in the functions of the mind-stuff and its power to deceive or misinterpret the sensations we receive from the physical world. The remarkable fact that very few if any physicists have ever undergone this training and that the investigation of the unconscious in the West is treated as unscientific, shows that the science of physics is unqualified to make any pronouncements about the mind-stuff.

The discovery of the unconscious in the West is credited to Liebnitz, as if the human race was totally disconnected from 2,500 years of Buddhism and perhaps even 5,000 years of recorded Yoga techniques which specifically deal with this area of man's being. It is not realized that if all the books written over these fifty centuries on the one subject of meditation, which concerns the exploration of consciousness, were listed, they would exceed the number of books available now in the Library of Congress on every modern subject. A computation of the book output of just one university at Nalanda between the 6th and 12th centuries in India, which required every one of its 20,000 students to produce a book on their studies once a year, reveals a sum of 12,000,000 books.

THE ASSUMPTION OF FALSE AUTHORITY.

It would seem impractical for a physicist with only a few years college education in the recent development of physics to make pronouncements as to the validity of subjects which he has neither studied nor knows anything about. Dressed in the little brief authority of a Nobel prize in chemistry or a chair in physics it appears that pronouncements are being made on all kinds of ancient subjects such as astrology and psychic matters, as if these graduates were the final authorities on reality and the mind.



Admittedly there is room for many charlatans in astrology and also many half-baked writers who cannot be checked out because of this very absence of real knowledge in the West. Whereas in the East an astrologer is judged by his performance and accuracy, in the West there are more gullible people who do not have the ability to check and who blindly accept these prognostications in newspapers or magazines. In speaking out against the gullible public and the charlatan, scientists also attempt to discredit astrology itself in the most naive way, revealing their antagonism and ignorance of the subject as seen in the following newspaper article.



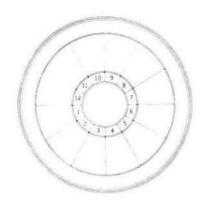
A typical "scientific" attitude which leads to ignorance of Nature's finer forces. Because there are many "quacks" genuine effects on consciousness are totally rejected and never researched. Challenging "the pretentious claims of astrological charlatans," a group of 186 prominent natural scientists, including 18 Nobel Prize winners, have taken issue with the "acceptance of astrology [that] pervades modern society."

Their statement, carried in the latest issue of the Humanist magazine, is a blunt warning that there are dangers inherent in the belief that the stars influence people's lives and foretell events. "We wish to caution the public," the statement reads, "against the unquestioning acceptance of the predictions and advice given privately and publicly by astrologers. Those who wish to believe in astrology should realize that there is no scientific foundation for its tenets."

The warning is timely. Astrology has become very much in vogue in recent years. One astrological group, the Academy of Mystic Arts in New York, claims that 50 million people in the United States are using astrology to shape their lives. That may be too high a figure, but the proliferation of astrological charts in newspapers and magazines, countless horoscope books, and other material treat the public to a sizable daily dose of forecasts about personal and national events.

The scientists worry that such forecasts, when accepted by people, will rob them of their faculty for thinking rationally. "It is simply a mistake," they assert, "to imagine that forces exerted by stars and planets at the moment of birth can in any way shape our future."

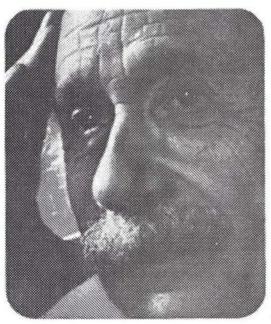
They could have gone further — noting how much astrology is part and parcel of the occultism of this era. Yet their forthright statement is a clarion call to mankind not to be deceived into thinking that the stars dictate the course of events. "We must realize that our futures lie in ourselves, and not in the stars," they conclude.



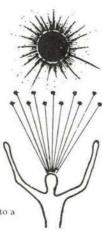
It is obvious that Supersensonics could easily check the effects of vibratory patterns of the planets on human consciousness but will not be able to validate anything until Radiational Paraphysics has been able to validate its own reality.

The author is not interested in preserving the reputation of astrology as a "science" but has had several unsolicited readings done by eminent astrologers in India who have literally predicted exact events both past and future of a unique kind which could not have been done by any exact science known by the arrogant 186 scientists who signed the above statement. The fact that in the limited experience of these 186 famed men there was not one who could attest to a similar experience, shows the narrowness of their minds and their unscientific approach to reality. If there is even one exception to a theory in science their hypothesis is destroyed. That exception has been demonstrated in the author's own life even though he agrees with the statements that many people are gullible and many astrologers are self-deceived charlatans. As long as there is one exception to the rule, astrology and its tenets cannot be totally discounted as unscientific. Neither can the findings of Supersensonics be discounted by those who have not learned to control their mental worlds nor studied the subject from a practical standpoint.

TEACHINGS CONCERNING THE MIND-STUFF.

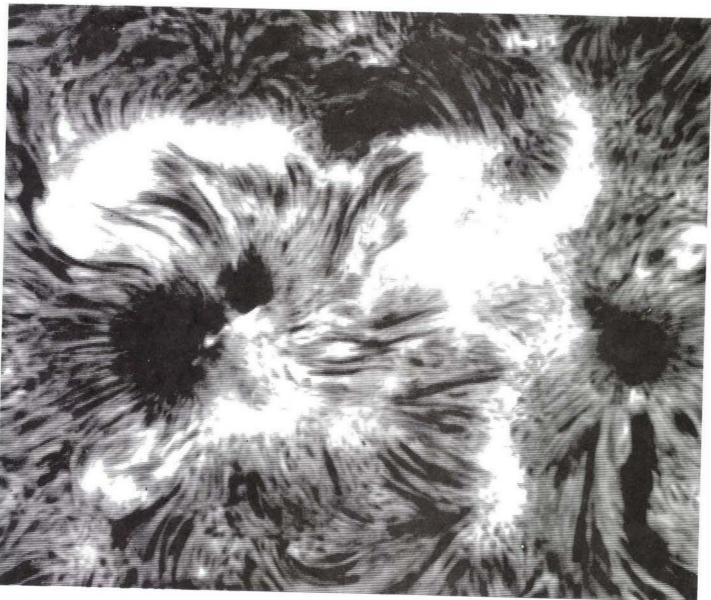


It is not the purpose of this book to delineate the extent of oral teachings on how the mind-stuff identifies with its object of study. This would require a whole book in itself. For those interested, however, there is a series of 24 two hour tapes available giving specific methods of training. Such a study makes the relevance of astrology and mathematical representation equally useless for the purpose of discovering reality. However, Supersensonics, with its methods of probing the inner worlds, can lead to awareness of Nature as it is and not as a speculative Reality.



"... space and time are welded together into a uniform four-dimensional continuum"

Therefore study the primordial action of the senses with the diviner's rod, study the action of planetary influences on matter with the diviner's rod, and study the nature of light with the diviner's rod; in short, study mathematics and everything with the diviner's rod, and it shall follow that the student will be led to understanding of the nature of consciousness and vision.

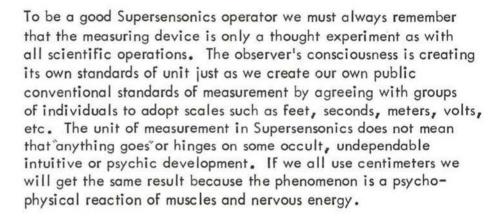


Hale Observatories

The activity of the Sun can be divined with a rod or pendulum and solar eruptions perceived about 5 minutes before the advent of a magnetic storm on the earth. This reveals that Supersensonic phenomena does not depend on the speed of light but detects events in the Universal Field. Intense solar activity acts as an amplifier and stimulator of the East-West flux in material objects.

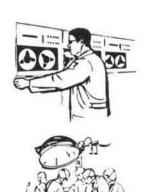
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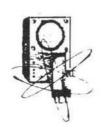
FROM RODS TO BALANCE RULES.



Before we describe some of the inventions of the various Balance Rules and their usefulness in this chapter we must consider a few errors of perception that can possibly upset the readings. There are several types of influences that can affect the recordings provided by the Supersensonic reactions of a pendulum or diviner's rod.

The radiations detected by a diviner may not always be the correct wave-fields described in the earlier chapters. The influences that extend outwards from a sample placed on a wave-guide or conductor, which the early radiesthetists called a "balance rule", may be affected by all those influences which pervade the atmosphere at every locality. Strong interference could come from subtle radiations from a light source or even the X-rays, electromagnetic waves, etc. emitted from T.V. sets and defective joints in the house electric wiring system. Tests should always be done before using any Supersensonic type of diviner's balance rules for analysis. It is important to make sure these subtle stray influences are not affecting the balance of the Null Point (N.P.) on the rule.





EXPLANATION OF THE PRECAUTIONS.

Our skin, hands and eyes are easily influenced by all waves of light although consciously we are not aware of it anymore than we are aware of the pressure of 14.7 pounds of atmosphere on our body. Our entire biological neural system is acting as an extremely sensitive absorber and emitter of radiations. This includes refractions and dispersion of color waves derived from the reflections of light from colored surfaces. The primary spectral colors such as orange, yellow, blue and violet are especially strong so care must be taken to work where the curtains or walls are neutral. Strong colors will affect the reting and nervous system and thereby influence our receptivity from the objects.

Now let us begin to conceptualize on one straight line balance rule which connects two samples through the subtle radiations of matter both from the samples themselves and the nature of the environment they exist in.

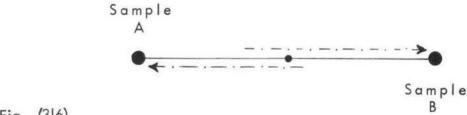


Fig. (316)

Many poor results with pendulum are due to lack of care over test conditions. For this same reason the test table used should be stained a natural dark brown or covered with a brown cloth. A green cloth is also a good neutralizer of spectrum colors because it is itself at the N.P. of red to violet. A green or white cloth is also neutral in balance tests on a rule although their influences should be evenly distributed. Any electric lighting used should come from all corners of the room evenly or from a central light placed directly over the N.P. of the balance rule. There should not be a preponderance of any one spectral color at the end of the testing room as this will affect our perception of the influence.

SOME EXAMPLES OF RULES & BALANCES.

We can now describe the appearance, the special qualities and composition of the various diviners balances in order to determine their value as aids in our detection of subtle radiations.

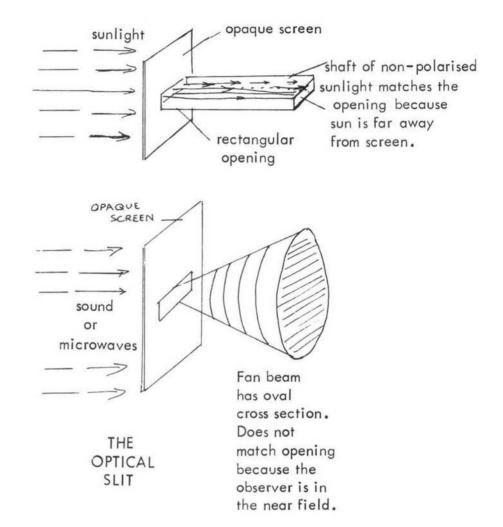
All rules and Supersensonic implements operate because the radiations emitted to the atmosphere over one sample A are capable of being linked through space to the influences created by another sample B.

The two samples are found to attract each other if they consist of the same product or if one is part of the other; like a glove would be the complement or the identical counterpart of its other hand, but would attract because it will be of opposite symmetrical polarity. If the products are closely alike (such as two right hand gloves) then two similars close together on the rule will repel each other, while two dissimlars will attract like the opposite poles of a magnet.

Fig. (317)

SHAFT OF SUNLIGHT OR STARLIGHT If the above may seem confusing to a beginner, one conclusion MATCHES DIMENSIONS OF OPENING FOR FAR FIELD must be retained in the student's mind which is that all balances are operating in the natural state according to whether samples A and B are compared close together within each other's field, or are far apart. SLIT The sun is a different body close to us than when it is far away. It is against our experience of reality to say that events are perceived by an observer in any part of the universe in exactly the same way as Einstein does. (See Chapter 20.) Sunlight coming through a slit would do quite a different thing if the sun, the source of light, were near to the slit. The position of observer is OPAQUE crucial to accurate measurement when dealing with the position SCREEN of two objects near to or far from each other. NEAR FIELD MAP OF ILLUMINATION SPREADS THE PATTERN ON THE LIGHT ON SCREEN SCREEN X -A-B. PATTERN RADIATION WHY STARLIGHT IS SLIT COHERENT LIGHT Fig. (318)

WHY STARLIGHT OR SUNLIGHT COHERES AND DOES NOT SPREAD OUT



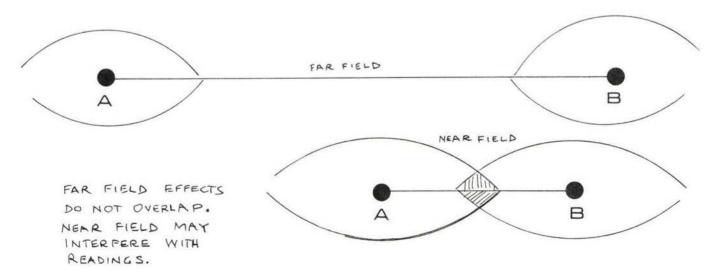
The question of near and far is avoided by Einstein by creating an observer who experiences the same reality everywhere at all points in the universe. Theoretically one can do this with consciousness but in real life our consciousness does not behave that way. Near and far create different results in our measurements. It is here where Supersensonic detection is able to help, since it is free of the time binding laws of physics and is not subject to the inverse square law.

When A and B are far apart the divining operation is of "distant detection", with the operator holding A as a sample witness while feeling the attractive pull of the other sample B which becomes the object detected in a given direction. In this sense the sample attracts its own vibrational pattern at a distance.

But when A and B are close together at the ends of a Balance Rule on an experimental table the effect is different. Then the horizontal magnetic law does not always operate with all like products drawing together and opposites repelling. When A and B are close together on a rule there is always a mutual connection in our consciousness as they interact with each other, either positively or negatively or radiomagnetically.

To artificially induce the effect of "detection at a distance" the operator can create vertical waves which temporarily mask the horizontal waves between A and B. This can be done by placing samples A and B separately upon the glass covers of two compass magnets. This procedure creates temporary vertical waves. Similarly by placing the samples on two vertical radium blocks, a practical result can be obtained by the diviner's identification of a sample A which contains an element emitted by a witness B. The influences detected in both these methods of producing vertical wave-fields are selectable only by means of the vertical wave-detecting pendulum or divining rod fitted with magnets in the position for selecting vertical fields referred to in Part I.

Fig. (319)



TESTS OF TURENNE'S METHOD.

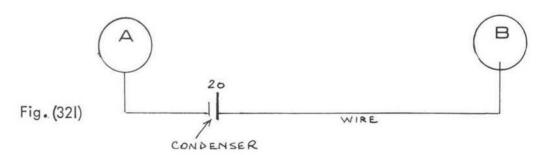
There are two tests of Turenne's techniques which can be done to show the similarities of whole samples, one with the rule in north-south direction and the other east-west direction. By setting the vertical magnets inverted to each other's poles an analysis of the sample's content can be divined, as in Fig. 320) below, of an east-west balance:



A and B are placed at separate ends of a tape on a magnetic compass or a vertical radium block. If sample B contains 20 c.c. of the element represented by Sample A, say a witness of magnesium or gold, the operator holding a second witness of magnesium or gold finds the Neutral Point (N.P.) at 20 units along a 100 unit tape between A and B. The detector with its selective magnets should be more than 8 inches above the samples or the surface of the table on which the rule is laid.

BRARD & GORCEIX RULE. (Balance Pendulair B-G)

The "B-G" balance operates to provide vertical waves by placing samples A and B in closed copper spheres:

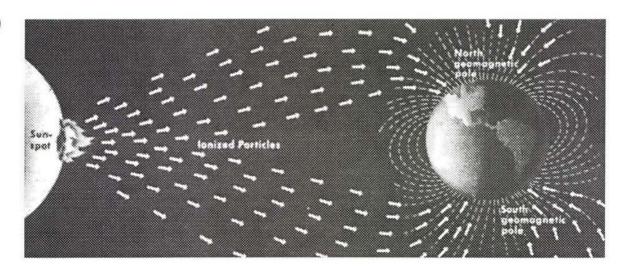


An indication of the vertical wave type on the "B-G"balance is the presence of an air gap in the condenser used for conducting the influence of the witness sample A along the wire to sample B the two influences meeting at the N.P. when there is balance of the proportion 20 c. to 100 c.

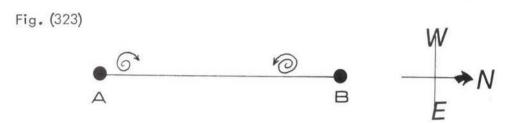
Turenne experimented by placing samples in evacuated tubes. As soon as a sample of lead is in a vacuum the (+) horizontal type influence of lead is gone and all that we can detect is the (-) vertical component of lead. This would suggest that vertical waves are not dependent on surrounding air or ionization of the environment but on the carrier wave properties of the subtle ether. It would seem from this that vertical waves are electrically penetrating whereas the horizontal magnetic type of wave influence is not. Vertical waves reflected back from an underground stream are identical to those of argon. The negative (-) vertical waves given off by the action of solar radiation on rocks and soil are nearly always those identical with (-) helium.

It would seem that there is an interplay between a small number of elements due to the action of the sun's radiation upon the magnetosphere around the earth planet. Atomic disintegration seems to be related to a special form of electrical vertical waves which accompany the detection of radiation and light. It appears that balances provide comparisons of vertical effects of wavetrains bombarding each other and providing a Neutral Point along the line of connection at a resonance point of thought. There are other balances specially tuned which can select primarily the horizontal magnetic type influences, which apply to nearly all substances exposed to the air. The work with these balances indicates that such horizontal influences are produced in the ambient air itself. This is especially evident if we bury the sample on test more than 8 inches below the earth's surface, or if we place the samples in boxes or hermetically sealed envelopes, because then the horizontal type of radiation immediately disappears.

Fig. (322)



LAW OF SIMILARS TEST. Balances were used in the ancient days of Egypt. More recently a pioneer of the pre 1914 period of radiesthesia M. Probst devised a useful test based on the comparison of samples A and B placed close together and aligned north-south on an experimental table. The test provides a comparison of surface area and shape.



If sample A's surface (not mass) is greater than that of sample B then an ordinary non-selective pendulum like a boxwood black ball gyrates in one direction from sample A to a neutral point somewhere on the line between A and B. From sample B on the other end of the tape it gyrates the opposite way towards the N.P. (Neutral Point).

The same law of similars test was used by Abbé Ferran at the end of the nineteenth century in tests of water divining. The N.P. between two coins stuck on a piece of wood, like the later flat strips used for diviners' rules, ceased to exist whenever the air in which the wood rule was used became heavily ionized. Whenever electromagnetic waves, for instance those radiated by an electric dynamo, were near the rule or pervaded the atmosphere in a laboratory the law of similars test would not work. In an identical way it was found that the N.P. on a balance rule was masked by vertical (a) radiations rising up from an underground stream and produced the same effect. This helped to explain why electrically operated ionization counters can locate underground streams through the ionization count of the ambient air. It appears that the strong vertical waves from the stream below nullify the horizontal wave-fields between the two samples A and B in the same way as it did with the two coins attached to Abbe Ferran's balance. This force detected between two samples A and B was in later times called the Ray of Union.

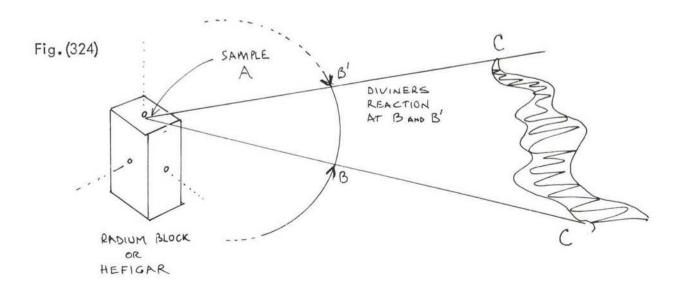
A Turenne pendulum with the magnetic needles vertical (+) appears to give signs of disimilitude and similitude by rotating to left or right between two samples A and B.

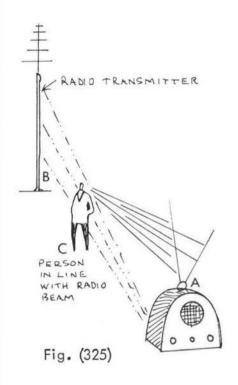
Also the location of a stream can be differentiated by the lefthand gyration immediately over the negative vertical waves of underground water.

All balance tests and rules depend on effects which were observed to happen along a line of connection which we now call a <u>linear antenna</u>. The early pioneers called it the "Ray of Union" or the "Wave of Bombardment" or the <u>law of Similars</u>. Such a line of connection was presumed to exist between very distant objects because in those days it was unthinkable to suggest that consciousness itself could be the connecting link.

ARTIFICIAL WATER DIRECTION FINDER.

An experiment done by some earlier diviners was to take a sample of water A and stimulate its radiation by placing it upon a vertically orientated radium block. With its vertical component amplified, the dowser would then walk around it at some distance with a sample witness B of the waterinhis hand. Whenever he crossed the line of direction between the sample and a distant stream C the detector would react and provide a similar result as the balance. In the diagram, A is the sample water on the radium block and sample B is the Null Point reaction between an underground stream some distance away at C.



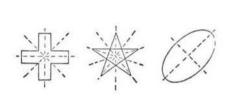


Similarly a spot of blood used as sample A can show an experienced diviner the direction of the blood donor at B. The distance to C could be ascertained by counting the number of beats of a pendulum and holding the thought pattern of miles or hundreds of miles.

In the same way a diviner can detect the direction of the distance between the wave-train reaching a receiver set and the transmission station. A method of checking was to place a sample of a blood spot of a person on top of the receiving set and out along the line of connection there should be a gyration of 13 vertical waves representing a living person. It was believed the radio transmission acted as a radioactive stimulator. Today there is no need for this blood spot check since the contact with the radio wave is in our consciousness and we can easily check the direction without a blood spot.

It was also later discovered by Dr. Guyon Richards that a sample laid somewhere on a linear antenna, in this case a wooden lath designed as a medical straight balance rule, produces its own image at the same distance from the other end of the antenna. Having found that a patient's blood smear or saliva laid a few inches from the north end of a 4 feet 6 inches table edge gave a pendulum reaction, Dr. Richards placed a witness of each organ at the other end of this makeshift balance rule. Compared with the sign of "normal organ", the half-way neutral point, he diagnosed the disease by testing for absence of disease by means of a disease witness. By coincidence his 48 inches makeshift balance had a length of 130 cms which is the same length as Turenne's atomic wave-field on 155 cms rule. Many other contributors, such as G. Noel an industrial chemist, used these balance tests to analyze the proportions contained in his inorganic samples. The work of Brard and Gorceix on their type of balance revealed that the action of light on the balance is a cause of a sample's wavefield and that colors (light frequency) exerted their effects on the balance, green being equivalent to the N.P. on the balance rule. Brard was a physicist whose "Direction-finder" balance detected a package of Selenium in Paris from Versailles 13 miles away.

GEOMETRICAL FORMS AND BALANCES.



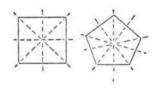


Fig. (326)



THE CIRCLE AND BALANCES.

Fig. (327)



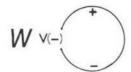
As we said earlier a straight line drawn on paper in indian ink or pencil serves just as well for a rule or balance as does any length of wood or tape marked out in metric units. Such a line is an elementary geometrical representation and does not exist in nature. According to Einstein, all space is curved and therefore there are no exact straight lines in nature. Nevertheless a balance can be used which is not merely a straight line aligned north-south but part of a circle.

In Supersensonics all geometrical figures whose angles coincide with a circle's circumference are closely related to circles; therefore both triangles and rectangles aligned north-south or east-west become active broadcasters of radionic energies of consciousness. The influence of the planets themselves in astrology may be more due to the effect of the geometrical configurations when acted upon by stimulating radioactive sources such as cosmic rays.

Radiesthetists even believe that 3 dots drawn on paper will give a diviner the field of a circle if they are placed so that a circle can be drawn through them. In Volume IV we shall go much deeper into the origin of numbers and their wave-fields in consciousness, but for the moment we will discuss the field of the circle and the spaces inside it and surrounding it from the point of view of its properties as a geometric representation in the field of consciousness.

An open circle, an open circuit or cycle, shows <u>horizontal type</u> waves with the oscillations being tangent above the drawn part of the circle, but between the two ends of the gap there is an oscillation similar to the <u>vertical negative</u> (—) wave type over the gap.

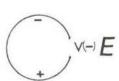
V(—)



HORIZONTAL TYPE WAYE FIELD POLARITIES ON THE DRAWN CIRCLE

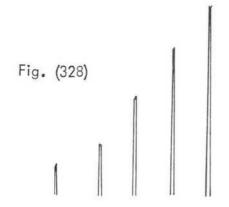


VERTICAL TYPE ALONG RADIUS OF A GAP.



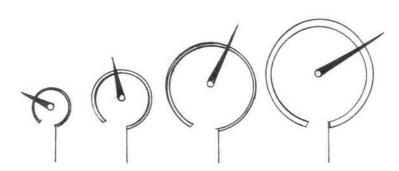
If we test this with our pendulum we find that there are differences according to whether the gap opens to the north or to the south. If we orientate the gap east or west there is a different oscillation and just opposite to the gap there is a perpendicular oscillation. This is very much like a <u>linear antenna</u> but curved round upon itself.

GEOMETRIC TUNING CIRCUITS FOR RADIONIC DEVICES.

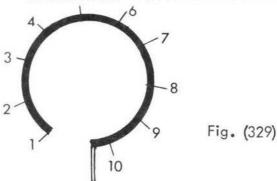


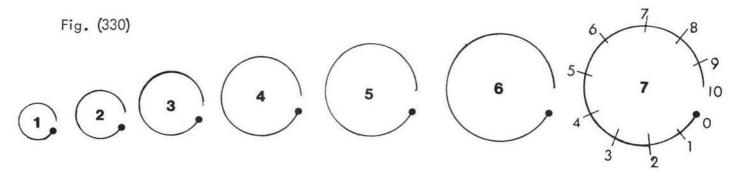
STRAIGHT ANTENNAS 1-5

The open circuit referred to above when taken as a set of different antenna lengths is the principle behind the tuning of the dials on the De La Warr instruments mentioned in Volume I. The electronic circuits in Dr. Mark Gallert's diagnostic set are merely the linking together with wires of 45 of such circular antennas of different lengths.



The cursor slides around the circumference and shortens the antenna length and is attached to a knob on the front of the set. When the correct length of antenna is reached there is a pendulum reaction, or the equivalent of a static electric "stick" on a rubbing plate provided. The "stick" occurs on the rubbing plate when "thought resonance" is achieved. The dial is then read from 1 to 10 and when all these circular antennas have been tuned one by one the numbers on each dial provide a "rate" of vibration pattern. More will be said on radionics in a chapter with that title but here we need to become familiar with the idea of building Supersensonic circuits which resonate like antennas in order to see clearly that these are psycho-physical mental circuits. Although these circuits are made of copper or steel wire in radionic devices they could be wired with silk thread or for an experienced diviner merely drawn on paper. In other words for the adept it is possible to work out a De La Warr "rate" for a certain disease pattern by drawing open circuits on paper in circular form and then measuring around the circumference divided into ten afterwards.





E.g. run a pencil round the circumference of the above circuits clockwise from the zero dot with a sample witness and pencil in your free hand. Hold the pendulum over the gap and let it oscillate; when pendulum changes direction of its oscillation over the gap make a dot on the circle. The witness could be the blood spot of a person with a problem or a sample of saliva. Or the diviner could test the "rate" for an element such as Number 82 lead (Pb). The computation of energy levels in an atom or the depiction of a pattern of energies are all possible by this type of numerical mapping of resonance fringes. While holding the sample witness, the thought pattern of a certain disease or condition is held as we run the pencil around the circuit. Alternatively, as in the De La Warr diagnostic sets, the witness is placed in or over a cavity above the dials (See page 60, Volume I,) and the disease "thought pattern" is checked by moving a slide across a list of locations and problems.

The appropriate remedy or vibrational treatment pattern is found by using the complement of the rate or by finding a new rate for the healing energy required by the diseased organs.

IS RADIONICS QUACKERY?

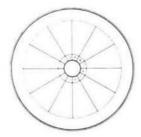
Here it must be mentioned before we go on that there is no electronic or electromagnetic energy in the ordinary sense passing along these circuits which are linked together by wires at the back of the dials. The sophisticated tuning instrument is merely a wave-guide for thought with greater tolerances of exactness. The fact that these instruments for tuning consciousness simulate electronic devices and give people the belief that something physical does actually flow through the instrument has led the American Medical Association to mount a campaign claiming they are nothing but deceptive quackery intended to defraud the public. The belief of the operator is unfortunately often necessary for some people in order to have the sense of conviction needed to make the "thought energy" work.

It is highly unlikely that scientists, who cannot test for any known energy in these circuits which only really exist in the mind-stuff, will ever approve such instrumentation. However, these principles, once known and understood, can be applied by doctors to the bio-energetic system and then the results checked out by more clinical methods of analysis. Since some idea of tuning "thought energy" is necessary for success, the negative thought fields will often mask any results quite effectively; thus it seems that the two schools of believers and non-believers will continue to separate further apart. However, the breakthrough may not take place in medicine or diagnosis of disease at all. It could be through a better understanding of light and matter that physicists will probe the way into the spiritual and mental levels of psychophysical consciousness and that medicine will then follow a few years later. The whole question revolves around the flame-point phenomenon. How can one test a momentary discharge of bioelectrical energy? This has already been done with galvanometers in the case of water diviners with metal rods. See "Psychical Physics" by S.W. Tromp referred to in Volume 1.

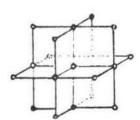
THE INFLUENCE OF GEOMETRICAL REPRESENTATIONS.

The effect on thought energies which are channelled through the mind-stuff in the conceptualizing process is not only limited to the open circuit of a circular antenna. Although we mentioned earlier that a circle of wire acting as a diviner's rod has a flame-point at its center at which all the three types of wave-fields intersect, we also find that other geometrical forms have Supersensonic applications.

Fig. (331)



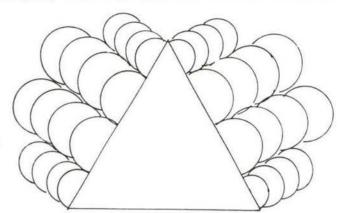




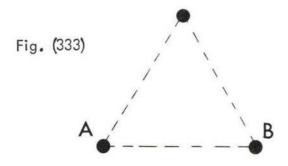
The outside of an equilateral triangle will show a pendulum reaction at right angles to the sides showing waves of thought energy at distances proportionally fixed in relation to the length of the side. This is the same as the linear antenna 1-5 effect.

Fig. (332)

All triangle sides give off L-fields and H-fields proportionate to the length of the sides.



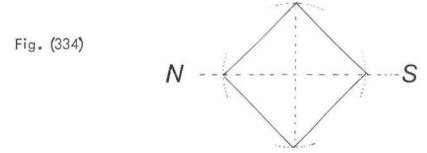
This effect being detected is the magnetic antenna found over all bars, tapes, wooden slats or rules and straight magnets when aligned north-south. It was concluded by earlier pioneers that in some way the earth's magnetic field acting on all sides of a triangle was related to the actual matter or ink drawn on paper. In other words the line on paper, being a layer of carbon higher than the plane of the paper, in some way screens the space on the paper inside the triangle, just as a circle's circumference line does for the area of an unbroken circle. It was this phenomenon which led Barraclough and Hurren to design a Triangle Balance for testing special samples which needed to be screened from influences coming from other objects lying on the laboratory table. If the samples A and B are placed at the corners of the triangle or even on black dots forming corners as in Mr. Hurren's diagnostic triangle, the result is the same as a balance rule. These triangle balances were employed successfully for interpreting the relative vibration patterns of organic cells in a similar way to the De La Warr use of circular antennae.



A series of connections found in other north-south balance rules comes into play such as the so-called Ray of Union linking the blood sample or witness to the patient or donor of that witness. The Ray of Union or "Ray of Bombardment" between A and B placed at two points at the angles of the triangle was claimed to produce all the accompanying wave-fields of the samples interacting. It could be said today that it is consciousness which is the primordial "Ray of Union" because if one was merely to draw the triangle or the straight antenna 1-5 in one's mind and then place the samples A and B on an imaginary line on the paper, the operative results would be identical for an experienced diviner.

THE SQUARE BALANCE.

Similarly the diagonal of the rectangle when aligned northsouth has been employed in the same way showing that two triangles having a common side will produce the same effect even when the diagonal is undrawn.



The circle having the points of the rectangle on its circumference produces the same vibration pattern. It was this form of balance which led Dr. Nebel of Lausanne, an authority on tuberculosis, to use this square with one diagonal orientated north-south. However, the results are no different when the balances used are "straight" rules or even when there is no wooden rule or line on paper but only an air space between the two similars. This shows that the ray of union in the law of similars test is an invisible connection in our own consciousness.

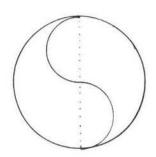
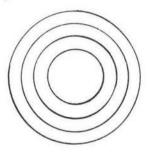


Fig. (335)



The same law of similars has been found to apply to concentric circles and octagons and forms such as the Chinese hexagrams and trigrams depicting similar relationships between dots, solids and circles and the Yin/Yang sign. The double triangle form shows the identical center of gravity as a coinciding circle around its points. At its center the pendulum oscillates north-south with the magnet-fitted selectors aligned vertically; while with the needles aligned vertical and the poles inverted, the oscillation is east-west. In the square the forces "liven up" when one diagonal is aligned north-south and the pendulum shows that the two diagonals, whether drawn or not, are the seat of vertical-inverted wave-fields, causing the pendulum to oscillate east-west in the same way as if there were a circle drawn around its corners.

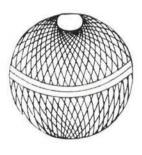
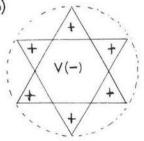


Fig. (336)



In the development of dowsing instruments all these forms have been used. In professional dowsing work in the field for ores, the prospectors use the law of similars test on a balance which detects the vertical wave-fields, while on their experimental tables the tests between samples are made on a horizontal plane. Between the two similars it was believed there was a primary cosmic force creating the wave-fields, linking them horizontally together because where the pendulum shows equality by a cross oscillation at the null point (N.P.) the diviner detects a beam-like vertical wave-field perpendicular to the primary line between them.

In the same way consciousness may be so structured that we experience the wave-fields in this pattern. The experimenter finds for example that taking two eyes as similars, the horizontal primary ray between them is intersected by the wave-field at right angles to them. When he touches the flesh between the eyes and takes a pendulum reading of the neutral point and extends it out forward from the brow, the line of sight causes a vertical oscillation.



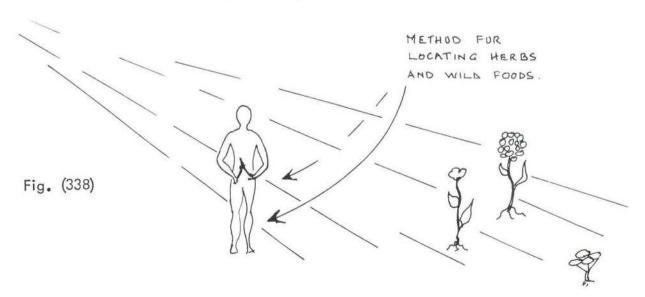
Fig. (337)

N.P.

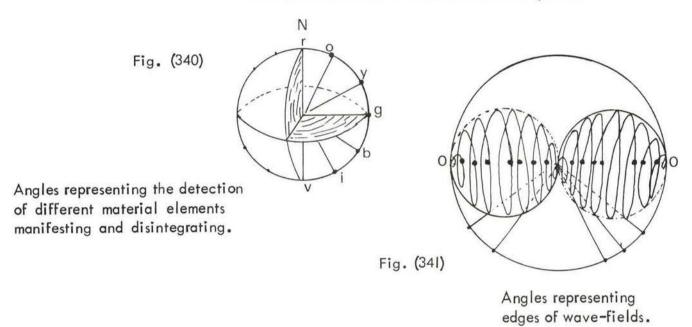
It can be concluded that the balances and rules based on the effects produced by similars enabled the early diviners to analyze a compound substance and that the mutual action between the similars, thought earlier to be a wave bombardment, was the result of the field of consciousness energizing the geometric concepts held by the diviner, in the same way that the formulas of science become "laws". We can also conclude that in some way light energy becomes a carrier wave for thoughts, so that an operator can objectify the thought forms with the use of a wave-guide or balance rule.

The use of the sun's light as a carrier wave acting in principle the same way as a rule or balance, enabled the outdoor diviners to provide a link between similars without any instrumentation; as for example when a naturalist wants to find rare herbs or plants in a wood. The operator walks across the direction of the sun's rays with his witness and pendulum detecting what is similar on the side further away from the sun than the operator. When the rays pass through him and reach the distant similar, the pendulum reaction occurs and he knows that the direction of the plant is in line with the sun's rays.





MAKING YOUR OWN TURENNE DISC. The original design of the zodiac pattern disc of Turenne arose from the fact that the same effects povided along a straight rule of Antenna 1-5 acting as a wave-guide, can also be obtained along the circumference of a circle. By bending the line round into a circle the results are shown as angles from the center rather than as the radius of a cross-section of a sphere.



Draw a circle say 20 cms in diameter and place at the center a radium block or some exciting agent such as the luminous paint from a wristwatch with a witness of one of the elements standing on the radium block. The direction of the vertical wave selected by the magnet-fitted pendulum will show the positions of the marks for these elements. If all these marks are drawn in, it will be found that the Disc will work without addition of any radium block and without magnetically orientating it to north. This device is then a device constructed by consciousness, capable of giving chemical analysis.

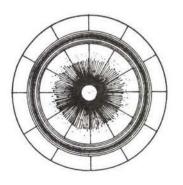


Fig. (342)

The earlier explanations of why this disc works by some psychophysiological reaction, was necessary to remove ideas that only psychic people can operate the disc by some intuitive gift. The disc can be used for buying food or selective remedies or answering questions about cell vibrations. The Zodiac Pattern disc, available from the publishers, is specially made with a starch witness powder at its center below the level of the surface on which the marks are made. This has a reversing effect allowing the readings to be made in the equivalent of horizontal wavefields as with the balance rule. The pendulum moves away from the center and provides angles of comparison indicating degrees of health.

MEXICAN AND AZTEC INSTRUMENTS.

Turenne declared that any person with a finger placed on the disc or rule who generated an L-field of 8 m in vertical waves would have healing rays leaving the finger tips. Travelling in Mexico in the 1920's Turenne discovered an old stone disc table in a cave and on the top was carved a bas relief showing a conch shell with crossed lances and a picture of the sun god's face familiar on all Aztec calendars. An Indian there explained that if a man who was ill was standing in line with one of the diagonal lances of the conch design the shaman medicine man could detect the type of illness and then, by adding one herb after the other, could find a remedy suitable for the condition. Turenne experimented over a copy of the conch design with a selective pendulum and found the Indian's story to be true even to the point that if a dagger point was made to fill the sun god's eye the diagram ceased to work.

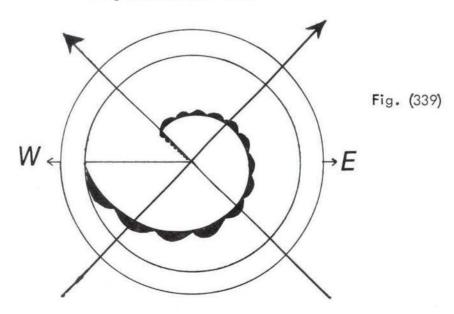




Fig. (343)

The pendulum gives the east-west flow from the upper diagonals, indicating that radiesthesia was known in the Americas over 2,000 years ago. The form of the calendar is built on seven concentric circles. This no doubt influenced the design of Turenne's disc which follows a similar basic pattern. Compare also the coming "alive" of Dr. Nebel's square when correctly orientated.

Subsequently it was found that Egyptian hieroglyphs were radiesthesically "alive" unless they were cut in half as they sometimes were. Then they gave the radiation of a "dead" object. The ancient sages were obviously diviners of some talent who deliberately made use of geometrical representation to depict energy patterns just as we do in mathematical representations such as $E = Mc^2$.



Fig. (344)

MANDALA CIRCLES AND POLARITIES.

Circles drawn on paper exert some attraction upon each other as we can see if we detect with our pendulum a link between a pair of circles separated on the same table or even upon separate tables. The connection is even found to be stronger if the two circles are sharing the same lines of magnetic force by their being placed either in a magnetic field or aligned north-south in the same elevation plane. If we try first to detect the connecting link between circles of equal diameter and then of various diameters we will find the result is an example of the law of similars.

Normally in Supersensonics we define the polarity of an object by noting the effects of only one surface. The phase reversal of the opposite side of a sphere or circle can be found by divining the polarity of the wave-field to be found for the underside of a drawn circle or geometric form. The polarity for instance under a pyramid form is different from that of the physical mass of the pyramid. This same phenomenon occurs for all the elements and objects of nature from apples to atoms.

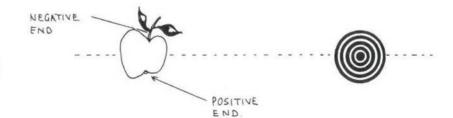
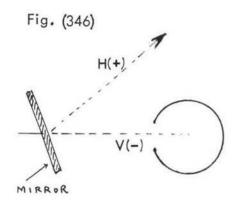


Fig. (345)

If we take a sample of lead which is a positive-horizontal wave-field in respect to its upper surface, we find the polarity beneath the sample is negative-horizontal type. The inventors of Supersensonics instruments take this phase reversal into account because of the wave type inversion. Hence the weak radium salts under the surface of Turenne's atomic circular disc are deliberately placed at the center just below the surface in order to produce this stimulation effect, similar to the radium block placed at zero on the Turenne rule.



Around all circular objects as around a circle drawn on paper all the usual wave-fields associated with a magnet are produced. If we leave 1/4 or 1/5th of the circumference as a gap we notice that a pendulum reveals a horizontal (+) and (-) type wave-field above the drawn circumference, but above the gap itself there will only be a response if the pendulum needles have been aligned vertical negative to select the specific vertical (-) wave-fields. Opposite the gap the pendulum shows the direction of a force passing in the direction of the undrawn radii in a radial wave-field. If we reflect this radial wave-field in a mirror we will detect an opposite polarity and type.

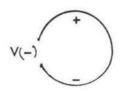


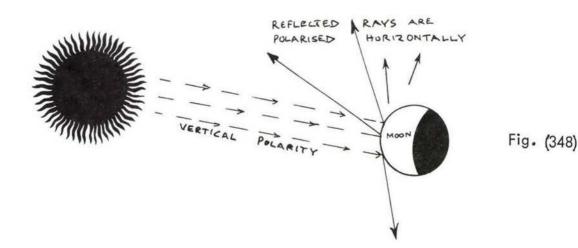


Fig. (347)

POLARITY REVERSAL.

However if we merely detect below the circle on its undersides we find only a reversal of polarity of the same type. Hence placing a radium source just below the surface enhances the sample's own polarity.

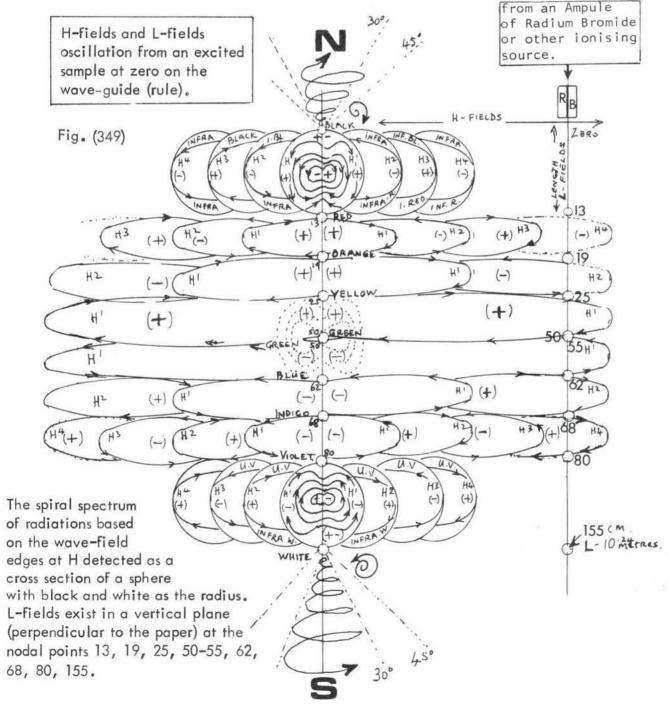
We already mentioned that the random polarized light of the sun's direct rays which were unpolarized from the physic's point of view, are polarized vertically but after reflection from the moon the sun's light (now converted into moonlight) became a horizontal type wave-field. This same phenomenon of the reversal of polarity is noted both with rays of primary radiations of colored light and with the reflected light from colored surfaces.



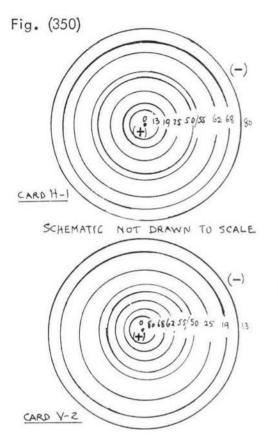
CONCENTRIC CIRCLES.



Many of the mandalas in the Tibetan and Hindu maps of consciousness have intuitively tuned into the polarities of seven concentric circles. The number of concentric circles from 1 to 7 will determine the spectrum radiation of levels of consciousness of a human psycho-physical system being tested. Just as we found there were four concentric influences around a magnet with alternating polarities in the horizontal plane which we called H-fields, so we also found there were seven vertical L-fields crossing at right angles which recorded the "shells" of electrons and were related to the electrical field as shown in the Fig. (349) below:



EXPERIMENTATION WITH CIRCLES & FIELDS OF CONSCIOUSNESS.



With the pendulum or rod magnetic needles "vertical" consider 7 concentric circles drawn on a card with their circumferences measured from the center with radius of 13 units for red and 80 units as the outer ring for violet with the intermediate radii of 19, 25, etc. and label the card No. H 1. Then take a card and measure the 13 units from the outside ring of the same size circle and complete the ratios of 19, 25, 50-55, etc. with violet as the innermost ring. Label this No. V 2.

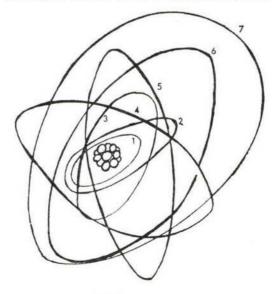
Place the cards flat on the table and detect the horizontal wave-fields and their edges. Card No. 1 with red measuring 13 units as the innermost ring will show as being (+) and the outside violet ring as (-) with the horizontal waves not rising up from the horizontal plane of the table more than 20 cms (8 inches) if your measurements have been in units of 1 cm.

Now detect the wave-field over card No. V 2 with the 13 units measured from the outside ring with violet now being the innermost of the seven rings and find the wave-field of red on the outside to be (—) and violet at the center (+). You will find the color waves have changed to vertical type and rise above the 8 inches. They extend in a vertical plane above the table for 2 meters for the first reaction for red and up to 4 meters for green and 8 meters for violet.

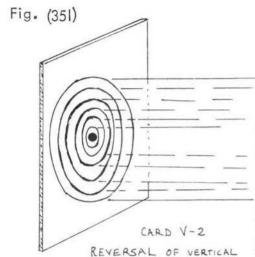
MAPPING THE FIELD OF CONSCIOUSNESS.

Now let us come to one of the amazing proofs of Nuclear Evolution concerning the nature of the thought fields by which we detect and sense the world of matter through the actual structure of the laws of consciousness.

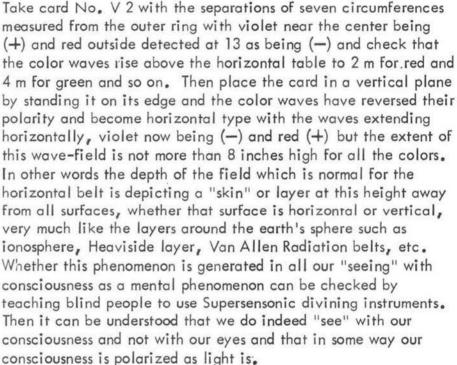




SHELL MODEL with orbits in seven layers around the



PIELD TO HORIZONTAL



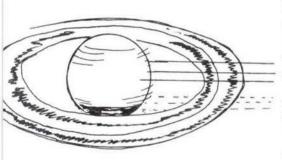


Fig. (352)

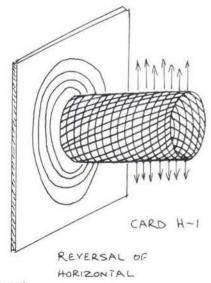


Fig. (353)

To prove this we now take card No. H 1 and check its horizontal waves with red being on the innermost ring as (+) and violet (-) with the extended waves not detected above 8 inches vertically. We then stand card H 1 on its side in a vertical plane to the table and detect that the color waves are in a cylinder tube configuration of vertical type waves with red extending 2 meters, green 4 meters and violet 8 meters for each of the L-field measurements of 13, 50-55 and 80 cms respectively. Note that this polarity reversal has increased the L-field by the power of 10, i.e. the 80 cms field on the concentric circle H 1 has now become vertical and 800 cms long with the red "skin" on the inside of the cylindrical tube configuration thereby creating a wave-guide for consciousness. We can now understand why the early radiesthesia pioneers, who used the centimeter marks on their rules and balances, obtained an amplification of the "thought fields" surrounding a sample of matter.

HUMAN AURA.

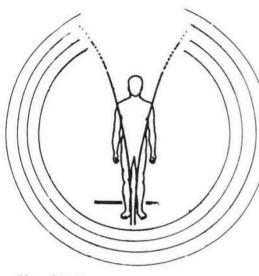


Fig. (354)

THE PHASE REVERSALS OF REALITY.

The emanations of consciousness which radiate from the center of a V 2 person who is highly reactive and has "red" on the outside and violet on the inside can now be explained in terms of radiation and light as a horizontal field which absorbs and reflects those cosmic radiations from outer space which penetrate the "skin" of the earth's atmosphere and ionized layers. Whereas the H 1 person who has "red" on the inside and violet on the outside has the reversed effect of absorbing the consciousness but has the "enhancement effect" of the amplified wave-fields and instead of "reflecting" from the reactive surface red skin immediately takes the light radiations into the center and introverts the consciousness. It can be seen that this phase reversal explains why the human aura can be detected as a skin of subtle biological radiations up to 8 inches from the top of a person's head in a horizontal layer by the magnetic horizontal alignment of a pendulum's selective magnetic needles, but only at the side of a person's body by the pendulum's vertical needles. The two wave types at right angles to each other in the spherical auric field, represented by the two cards H 1 and V 2 are merely geometrical representations of psychically controlled biophysical radiations. Each of these forms is detecting one of two possible wave-field manifestations of ordinary states of consciousness.

It will now be possible to theorize and to test the theory that color, light radiations of the entire electromagnetic spectrum and consciousness, which perceives it through the various senses, are all one and the same manifestation. We can see the difference in perspective between those who view the universe as an aggregate of physical sensations and those who view the universe as a continuum of infinite octaves of pure consciousness is merely the fact that the known 80 octaves of matter are only a phase reversal of consciousness, a reactive viewpoint which does not take the cosmic light of the universe to the center of being, but merely reacts to its energy. This theory can be tested at every level of life from politics to science merely by observing all the creators of human knowledge to be wave-guides, albeit of a complex sort, but simply designed by light itself to be a biological transducer of ONE reality.

Consciousness/light being ONE obviously cannot separate itself from itself and therefore by merely seeing itself 90 degrees out of phase the separation is created within the consciousness. In exactly the same way the randomly polarized light from the stars and sun is polarized by all the "skins" of the earth planet and the psychic skins of the human absorbers imprisoned on the surface of the globe are situated unconsciously within the spherical wavefield of the planetary electromagnetic light trap.



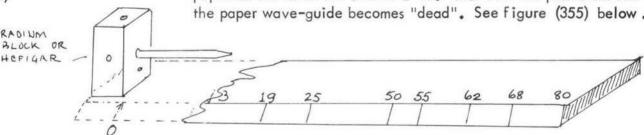
THE TRUTH OF THE SPHERICAL FIELD L-13 TO L-80.

The operator should now experiment with the psycho-physical reactions of his own consciousness. The theory that consciousness operates as a human wave-quide can be easily proved by taking a piece of paper and by putting marks on it at the L-field distances, say in centimeters or units of 1/10 inches. Since these are ratios which only produce answers to our consciousness in exactly the same units in which we decide to measure, we should be careful now of the scientific adage, that you can only get out what you put in, in respect to any energy system in nature.

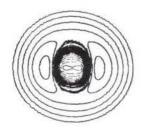
Fig. (355)

RADIUM

Take the paper and having marked it, cut off a portion of the paper on the infra-red side of L-13. Test with the pendulum and the paper wave-guide becomes "dead". See figure (355) below.



Next bring the radium block or a magnetic Hefigar and place it at the point where zero would be if it were not cut off. The rule becomes "active" only when the radium block is at zero on the line. To test this phenomenon do it again, this time not measuring the zero point but dowsing its position by gradually moving the radium block closer to the L-13 mark. When the radium block is over zero the pendulum beats come back and the rule becomes alive over the points 13, 19, 25, 55, 62, 68, and 80 as soon as the radium block's invisible field edges coincide with the marks. In other words drawing of the seven marks is a geometrical "representation" of the atomic rings and the color rings of the rainbow in our own consciousness.



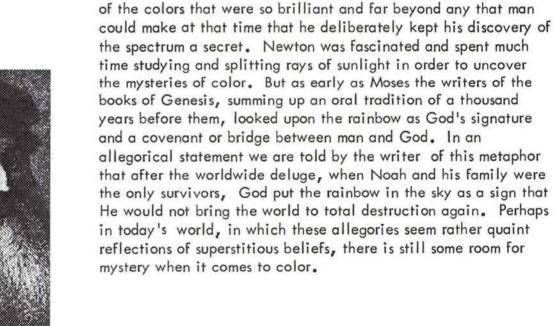
If we take an element, say Z30, and test for the field of zinc we will get a reaction when the sample is laid between 50-55. The amplification of the vertical negative waves of zinc is not present if we move the radium block away from the invisible zero position.

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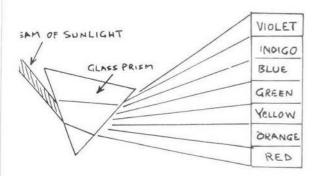
THE SECRET OF COLOR HARMONICS.

From earliest times man has been mystified by color. Even today with all our knowledge of color and our sophisticated control of frequencies of light and use of the spectrum for analysis of matter, science cannot say with any certainty what color is or how it can be defined. There are so many different theories from biologically inspired receptor cells which specialize in certain frequencies of light to the physical theories which merely associate color with wavelength. The psychologists have their own theory of color as a purely subjective phenomenon and the occultists look on color as a cosmic key to the universe. Almost every work on color misses out some element through some bias or through attachment to some theory.

Leonardo da Vinci, several hundred years before Newton discovered the spectrum, wrote in his diary that he had found the secrets of color in a prism and was so moved by theiridescence







THE VISIBLE SPECTRUM

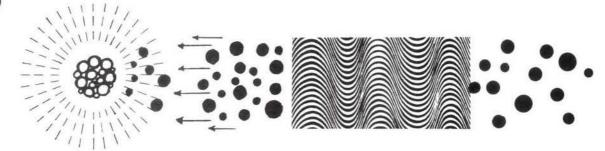
Fig. (356)

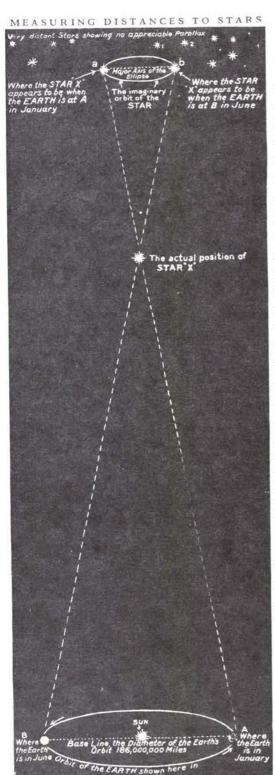
It is a fact that science is no nearer to knowing what color is or how it arises in our consciousness than at the time of the flood. Explanations abound but they are all theories. The mere statement that color is frequency of light or absorption of light or reflection of light or refraction of waves does not explain the experience of the color red or the color violet one bit.

RADIATION & LIGHT.

In early chapters we used many pages on the mechanism of vision because the study of optics and images has led to vast developments in science. The tremendous ideas that vision could be explained by the chemical blanching of rods and cones in the eyes or by assuming that each point of the surface of a luminous body sent out straight rays in all directions has led us to question these naive ideas as merely being a mathematical scheme. Such mathematical representations of vision and color are very simple and useful in science but they do not conform to reality. Straight geometrically perfect lines exist only in the human consciousness as concepts and nature does not know them. It is easy to see that as the retina was stimulated by the concentration of rays, the early researchers conceptualized lumen as light rays of straight lines whose paths could excite the eyes and cause a psychic representation called by some the lux. However around the 1920's the physical world was becoming more important than the psychic one and after several centuries of great debate on the distinction of the lux from the lumen, the psychic representation of light called the lux was swallowed up by the advances in physics whose full attention was on the lumen of radiation. Subsequently and up to this day of writing no distinction is made between light and radiation and they are regarded as interchangeable.

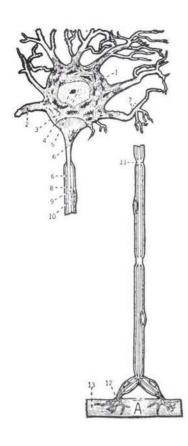
Fig. (357)

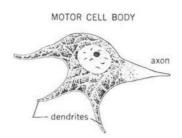




The whole purpose of Supersensonics is to free our consciousness from limitations which thousands of years of false reasons and explanations have brought into our experience of simple reality. For instance, we blithely accept the apparent world as real and this goes unquestioned, because we are so sure we are seeing what we see. If we look at our two hands and even take a photograph of them we can see clearly that neither the human eye nor the camera lens obeys the so-called laws of vision, the laws of perspective, or the physical laws which are used as explanations everyday in schools and laboratories the world over. The inverse square law says that if your hand is twice the distance away from your nose as the other hand, it will actually be half as big. But actual experience proves this to be false. It is not only false for your hands but false for all the senses which localize the reality of physical events around us. The most important of all matters concerning this same visual experience is related to the phenomena we call light or radiation, which is the medium through which all energy interactions in nature occur. Since 90% of all information about the universe comes into the human organism through the organ of vision it becomes of vital importance to understand what goes on inside our consciousness when we "see" an object with the aid of "light" from external sources. Einstein's laws which have been confirmed in so many examples in modern chemistry and physics are not absolute and Einstein himself indicates that they do not apply to accelerated or circulatory movements. Einstein's law postulates a uniform rectilinear motion based on the speed of light. It involves a theoretical constant "c" which is only proved when light comes in a straight line. This constant is cancelled out by his own General theory, which postulates the curvature of space. He says this himself but very few academics have listened to his pleading.

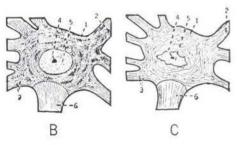
New scientific measurements in Australia indicate that starlight is coherent like Laser light. This means that the observer's Fig. (358) distance away from the source of radiation vastly changes the nature of light or, alternatively, changes our own consciousness which localises it in our experience of perception.

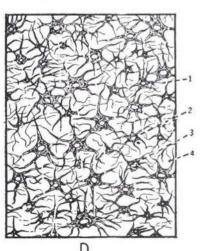




This development where we equate the rectilinear outer radiation of unpolarized star light such as sunlight is, with the polarized psychic circulatory experience of "illumination" is actually a Truth in disauise but we have come to accept it on totally false grounds. We have the right answer for the wrong reason. It is a basic premise of "Nuclear Evolution" and the science of Supersensonics which evolved it, that "light" which we call radiation is one and the same thing as "consciousness". Only the phase differs. However, this is not the same thing as saying what our trained physicist means when he tries to simplify "lux" as the psychic experience of light or illumination within, but does not connect it with the experience of radiation or light.

LIGHT & CONSCIOUSNESS ARE ONE INVISIBLE REALITY.





All physicists know that radiation is invisible and cannot be seen by any eye. They know even visible light is only the electrochemical reaction to certain electromagnetic waves which are themselves invisible and pass through space in the same way and at the same speed linear fashion as radio waves or any other radiating electromagnetic waves. They know also that what we see as "light" or illumination is the nervous interpretation of this invisible energy by our sensors and brain cells. They know these cells and the molecules which they consist of are sensitive only to a narrow slit in the full spectrum of this invisible energy. But what they don't know is the "connection" between the field of consciousness and the experience of "brightness" and color which arises in consciousness whenever certain frequencies of light radiation are impinging on the human living atoms of the cerebrospinal nervous system. To mistake the "connection" of inert matter for a statistical "ground state" of the field of the knower, and then completely ignore the invisible experience of consciousness and its laws, is what modern science has done.

Nerve Cells

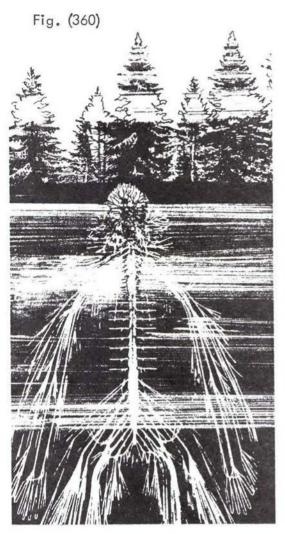
Nerve Cells

A. Nerve cell connected by axon to a muscle fiber.

B. Normal nerve cell with large nucleus and many chromatophile bodies. C. A nerve cell exhausted by fatigue, or stimulants like alcohol. Note shrunken state of nucleus and absence of chromatophile bodies.

D. Diagram illustrating how nerve cells are interrelated in he brain. In A, B and C, 1. Chromatophile bodies (Nissl's granules); 2. Dendron or dendrite; 3. Neurofibrils; 4. Nucleolus; 5. Nucleus; 6. Axon; 7. Gemmules; 8. Medullary sheath; 9. Neurolemma; 10. Nucleus of neurolemma; 11. Node of Ranvier; 12. End arborization of teledendrion; 13. Striate muscle fiber. In D, 1. Axon; 2. Dendrite; 3. Nucleus; 4. Hyaloplasm.

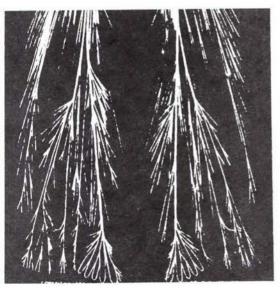
Fig. (359)



By assuming that light as seen by the living eye internally has the same effects as do external radiations on an inert sensor, a contradiction has arisen in the very results of science itself. That contradiction clearly stated is that everyone knows that the physiological process which leads to experience of light is experienced and ultimately interpreted by "consciousness" - the Self, yet that Self, which is the validator of the experience, has been ruled out totally in the objective search for Truth. Therefore the Subjective Self or consciousness plays no part in scientific Truth, which is supposed to be self-evident.

How anything can be self-evident without a "Self" to validate it is perhaps considered a philosophical quibble to those imprisoned only in objective "inert-matter" viewpoints, but it has profound consequences for our understanding of the nature of light as both an external and internal phenomenon. This fundamental question is not going to be resolved over the next few years in a hurry because for many the problem cannot even be seen. It can only be seen by "insight" since it is a matter of being able to see so simply, that which is very complex and difficult.

THE PARAPHYSICAL PRE QUANTUM STATE.



Essentially insight is a matter of "seeing" or experiencing that the "light", which is the invisible radiation coming through space in all directions, is in fact identical to consciousness. That is to say, that the light which is unpolarized and unquantized is identical to "Pure Consciousness" before it sees anything. It is impossible to conceptualize something so pure that there is nothing in it to be conceptualized, or to conceive of something that does not become anything until it makes contact with the experiencer. This "light", being identical to consciousness, becomes quantized on contact. In other words any object which is made up of different patterns of energy vibrating at certain frequencies, on contact with either cosmic radiation (light) or pure consciousness, immediately becomes quantized.





I am conscious that to one who has not had this experience of becoming that light which is invisible and formless as their own consciousness, the above description of quantization and identification of "light" amounts to nothing more than words. The personal realization of this "light synthesizing process" cannot be described in the normal mathematical interactions of radiation with matter. The synthesis has so far only been experienced by mystics because psychic light or illumination has always been confused by ordinary people with physical light or brightness. Actually light cannot be experienced with our senses. The experience we have which we think is light is purely a psychic phenomena. In other words the brightness is only phenomena arising in the consciousness of the observer. To confuse the cosmic radiation, which is the invisible colorless trigger of the phenomena, with the visible phenomena itself, has been the mistake in our human consciousness. This consciousness of experiencing "light" as something external to consciousness, arises solely out of our separateness and dualistic notions that we are somehow made of something different from the light radiations we experience in consciousness. The entire purpose of this Volume III is to provide a universal link between the mystic and the scientist, first by understanding a new system of measurement in terms of the basic laws of consciousness and second by bringing back the bridge between man and God in the understanding of the rainbow.

NEWTON'S GREATNESS.

The refraction theory created by Newton, which is still the basic plank in understanding diffraction and dispersion of light, states that waves or particles which are larger will be deviated more than those which are smaller. This explanation, which we have shown in the chapter on wave-guides is no longer true in all cases, was taken as a basic discovery because not only did it explain refraction through different mediums but also dispersion. The ultimate proliferation of physical theories based upon this foundation plank led to the scientific minimization of the psychical intervention in vision so as to focus more clearly on the agent of vision, until eventually the psychic element was completely forgotten.

The conviction among the consensus of modern scientists is that each of us, if not blind, sees and indicates by the same light a physical phenomenon outside and separate from the observer, constituted of either particles or waves so that if one closes the eyes, the external world would still be full of light (lux) just as when one sees it with the eyes wide open. It was as a consequence of this firm conviction that scientists began to speak of "measuring light" with the physical instruments of optics.

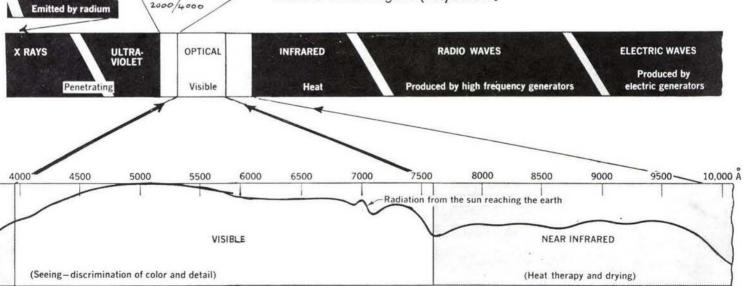
OTHER THEORIES.

SECONDARY

COSMIC RAYS

The first blow to Newton's theory was the achromatic lenses obtained by combination of two lenses of different molecular properties of glass which could correct refraction and dispersion. Later Thomas Young revealed the principle of interference which shows that beams of light may cancel each other and the concept of phase and phase difference was introduced. Later on Fresnel investigated the diffraction phenomena and found that the coloration of thin layers turned out to be a function of interference and polarization. His final answer was the Fresnel wave theory. Then the invisible radiations of infra red and ultra violet were found to lie just outside the wavelengths of 0.4 and 0.8 microns which was the range of visible light.

Since then physical optics has discovered a vast range of invisible radiation whose wave lengths vary in measurement from many kilometers to 10-9 millimeters. This range is depicted over 80 octaves in the figure (361) below.



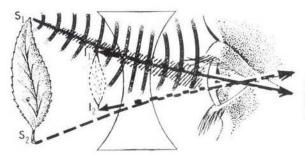
The use of new detectors such as photoelectric cells, photographic emulsions sensitive to invisible light rays and devices which caused electrical currents to move under the action of radiation of all frequencies, brought the conclusion that the wave representations of light radiations were not in agreement with the experiments. This was accounted for by assuming a discontinuous spectrum that only acted in groups of energy. These groups were called "quanta of energy" or just quanta and the particular quanta concerning light radiations were called photons. In the emission and absorption of radiant energy it behaved as if it possessed a structure with quanta levels. In the phenomena of propagation of light such as diffraction, interference and polarization the quanta could be explained in terms of the wave-field model.

MODERN REPRESENTATIONS.

Fig. (362)

A typical mathematical physical representation of localization of a psychic phenomenon of shrinking images which also happens without lenses.

It is now generally accepted in the physical sciences that no visual model of nature or light is needed and that a purely mathematical representation can be accepted, thus giving up any mechanical conceptual model of light propagation. The adoption of wave and particle representations of light radiations is now considered a matter of taste depending on the experimenter. It is also accepted by mathematicians that these symbols and mathematical representations have no reality in themselves but only describe the operational nature of phenomena, the real nature or structure not being available to the subjective or imaginative mind. However, only a few scientists really believe that their geometrical constructions are products of man's imagination and that the tools of mathematics are merely waveguides for thought experiments. These mental constructions arrived at by deductive thinking find their counterparts in the mysterious operations of nature because there is order at every level of consciousness. The laws of atoms are laws of consciousness and can be applied to people and groups of people as well as to particles of light.

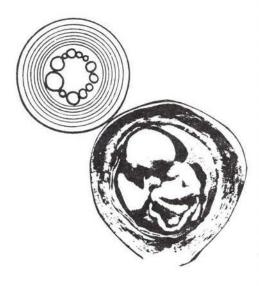


AN ORTHODOX EXPLANATION WHICH IGNORES THE "SEER'S" CONSCIOUS NESS

Here a concave lens acts as a reducing glass. Waves from point S₁ on the leaf are bent as shown (tint and solid 1ay) and enter the eye. The eye "looks back" along the ray, as indicated by the broken black line, and sees point S₁ at I₁, the apparent center of curvature for the waves. Similarly it sees S₂ at I₃.

The image is virtual, erect, and smaller than the object.

COME FULL CIRCLE.



In this sense we have come full circle to the wave-guides of Supersensonics which are nothing more than cylindrical tubes of thought energy caused by polarization and stimulation of the quantum structure of radiations. But the difference is that whereas mathematics fits nature to the theory, the wave-guides of Supersensonics have been designed by nature herself to show the pre-physical shape and form of radiations at the paraphysical level of manifestation. In other words the wave-guide representations of nature in Supersensonics are built in the exact same image of nature because nothing but thought itself is interfering with the phenomena; and even this interference is showing us the pattern of the structure of light. The spectrum of light is not a discontinuous strip of wavelengths, as thought of by physicists, but a continuous spiral form within a spherical space. Not only is this the shape of the atom but of the entire universe which takes place inside the consciousness of man. In other words not only is this a spherical spiral field which can be symbolically represented by the circle or the symbol 0 (zero) but it is also the archetypal image of man himself.

THE RAINBOW AS NATURE'S SIGNATURE.

Sunlight

Fig. (363)

Sunlight

Fig. (363)

Raindrop

Raindrop

Refraction and Dispersion

Sunlight

Sunli

This imposing phenomenon of the rainbow has created so many difficulties for those who have tried to explain it throughout history that until the theory of refraction was developed it was considered a divine mystery. Now it is readily explained by science that the phenomenon is due to light striking small water drops in the atmosphere during or just after a rainfall. In the same way when we position ourself at a certain angle to the sun in respect to a water fall or a spray-hose jet the tiny drops with spherical shapes will act as prisms. Yet this did not explain why at a single point of the eye the rays ordered themselves in finely colored bows with the bands separated in concentric circles. The same phenomenon can be seen on flat surfaces of certain liquid crystals and on thin layers of soap and oil spreading on water. The question where do the colors come from demanded certain classifications of color.

The red ray is reflected at R and the violet ray is reflected at V. When they leave the drop at B, both rays are again refracted. The angle which these refracted rays make with the sunlight coming over the shoulder of the observer to the drop is 40° for the violet and 42° for the red rays. In the actual bow which we see, the red rays come from drops of water at an angle of 42° and the violet rays from those at an angle of 40°.



pigmentation of objects such as we find in paints, ores, flowers, leaves, etc. and the colors found in rainbows, oil slicks and soap bubbles were named apparent colors. Thus in this century we view light as being white light without color, that only divides into different frequencies when emerging from a dense medium or reflected from absorbing bodies. By experiment we can prove that by joining all the seven colors together, we can produce white colorless light. Not only this but the theory, which is still taught in art schools concerning the three primaries of reflected light, which cannot be obtained by mixing, namely red, blue and yellow, is confused with the three primaries of primary light rays of red, green and blue. Scientists who deal with radiation know that all apparent colors can be obtained by mixing the different frequencies of red, green and blue in different intensities except for indigo which requires addition of some black. Black is not regarded as a color because it manifests as the absence of light frequencies by absorbing all the light which strikes it.

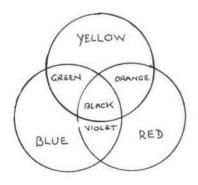
Permanent colors were called those which were contained in the

Because reflected colors of red, blue or yellow are generated by the absorption of light radiations and are revealed to our eye by some pigment which absorbs all the light except that in the frequency range of the color seen, we can say that the source of transparent invisible primary light is also needed to produce all the pigment colors which we call permanent colors. In this respect we will assume that the reader is familiar with color mixing of paints and pigments, which can be learned in any school, and we will go on to more profound aspects of color.

At this point it is interesting to note for future reference that the so-called "permanent" colors are all derived from reflected light and the "apparent" colors are only obtained from direct incident light of primary rays.

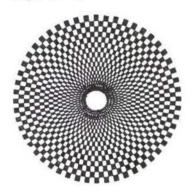
Fig. (365)

Pigment colors are reflected light.



THE DIVINE MODEL OF COLOR.

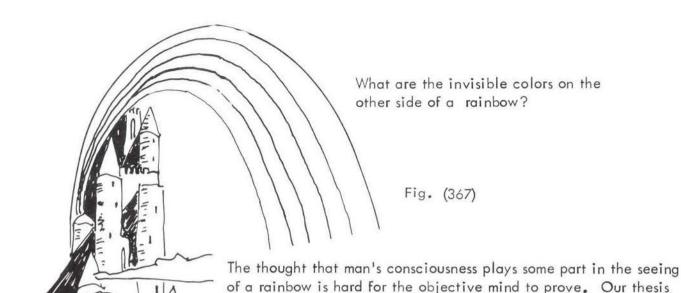
Fig. (366)

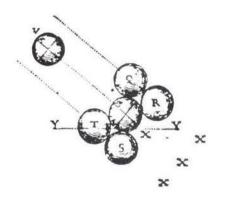


These last chapters before we discuss the relationships between color and numbers in Volume IV elaborate the author's previous book, "Nuclear Evolution". Admittedly a difficult book, its complexity has saved me from countless hours of answering correspondence from smatterers in mathematics and quantum physics who believe their "mathematical representations" have some special insight into reality. This present Volume and chapter may now offer students of consciousness who read the "Nuclear Evolution" book and found it difficult, some insights into the nature of light and consciousness.

From ancient times man has thought that color was inherent, set inside the luminous source of light either as pigments reflecting certain frequencies or, as in today's science, believing that color depends not on the psyche but on the frequencies of the light source. Thus a scientist believed that a star like Sirius with atomic density of 40 times our sun sends light from atoms vibrating with such intensity that its spectrum reveals colors having nothing to do with the consciousness of the observer, but solely reflecting the excitement of its physical state of existence. Thus a flame is red or a leaf is green because of its coefficient of absorption and reflection. Yet in a contradictory way science would say through the mouths of its leading philosophers that nobody can define a color or how a person is seeing color. It says the only way of communicating to another what a color really is like, is by showing one or more samples and by giving a name to what he is seeing. Then by agreement and the consensus of international experts, these colors are called by the same names that the first man used. Hence arose the various color systems for typing of hue, lightness, shade, chroma and saturation such as those of the Ostwald system and Munsell color system, Etc.,

However, in all these standard color schematics there is no proof that guarantees that two or three persons actually see the same color or experience it within their consciousness in the same manner. This international problem has not yet been solved as there is no scientific method of knowing the individual way in which the psyche arrives at the meaning of color of the various luminous bodies.





Descartes' model of his colour theory.

Source: « Les Météores ».

Fig. (368)

As a matter of interest René Descartes considered that radiation consisted of spherical corpuscles of matter travelling at a high velocity which in 1638 had not yet been measured. His thesis at that time states that these corpuscles have a rotation around an axis passing through their center. He speculated that this rotation movement was the subjective representation of color. In this sense he is the forerunner of the present view, because he transfers the experience of color to the radiation, whilst explicitly stating that the radiation itself is not colored, but only appears colored to an observer who discriminates the different frequencies of rotation of the various corpuscles. Descartes does not investigate the phenomenon deeply and his theory did not influence the course of science or the present theories of colors to any extent. However, it is remarkable that he was "right on" nearly 300 years ago and it suggests some Supersensonic insight was at work.

that a person's consciousness is a group of revolving spirals of invisible radiation which we call "light" is going to be difficult for an objective consciousness to perceive without training in the methods of Supersensonic detection. This training is available to all and enables everyone to know that the spectrum of "light" turns

back on itself on the invisible side of the rainbow.

Professor Vasco Ronchi devotes 15 pages to the historical development of color perception up to the present methods of colorimetry (see "New Optics;"* pages 101–115) which challenges the present complacency of science. Since colors are purely a psychical entity Ronchi states it is impossible to measure them by physical means and procedures.

 [&]quot;New Optics", Published by Leo S. Olschki Editore, 1971, Firenze, Italy.

Measurements of physical wavelength and frequency can only be carried out on the light radiations themselves, so how is it possible to determine by physical means the psychic composition of the radiations which makes individual persons see through the psyche a given color? He states that the answer to this question is not possible yet. Ronchi concludes that the physicists believe they have already solved the problem by asserting that color is characteristic of its wavelength, but he does not agree, because there is not always a one-to-one correspondence between the wavelength and the radiant stimulus at the root of the eye or with the tone of color of an effigy. The color of an object seen by the consciousness can change even when the spectral composition of the radiation remains constant. Artists are familiar with this change of color based on change of intensity and other factors.

SUPERSENSONICS & THE NEW OPTICS.

It would be of great importance to quote in detail the conclusions of Professor Ronchi and we do have his permission to quote extensively. However, since these 15 pages will be primarily of interest only to artists and physicists we will make them available on request as a separate 15 page booklet from the publishers. The gist of what he says is that both light and color are psychical entities and that when scientists speak from any other viewpoint they actually produce meaningless sentences, which the scientist who uses them thinks may have some precise meaning. The essence of what Ronchi says about light bears out the whole Supersensonic approach. Briefly this approach says that the mental thought patterns, which are formed at school, tend to be that science can give a physical character to entities which do not have any physical component at all, and that any criticism which could bring the study to another, more insightful way of observation is meticulously avoided by all academic physicists. Ronchi does not embark on a metaphysical discussion but merely contends that the results of science itself question the existence of an external world.



We do not have space here to quote all his detailed analysis and the author is not sure that Ronchi would wish to be linked with the findings of Supersensonics. But on this much we agree, that in order to make light, colors and images objective entities, it has been necessary for science to make them mathematical and therefore provisional treatments of the problem. To ascertain that light, colors and visual effigies from any source only exist in an apparent world, endowed with sounds, noise, heat, cold., odors and flavors is the first step. After this we have to conclude scientifically that each human represents images and experiences and all these sensory stimulations through himself, and that we also represent these when the external stimuli are certainly nonpresent. In all cases of perception of these sensory signals the external stimuli arrive in the brain more or less deformed by our psyche. Therefore the scientist should be wondering more if the external world really exists. From the Supersensonics point of view the many worlds only exist in our consciousness which creates and interprets all experiences of objects.

After having proved with the tools of science and optics that what we see is illusory, Ronchi concludes that science has believed in the existence of an external world for centuries and has faith in the possibility of knowing it at least partially based on its wonderful progress and accelerated discoveries. The face of the world has been changed by science which proves to Ronchi that a faith even in an illusory mirage of an external world is always preferable to man, than a well-reasoned skepticism.

It is important to protect Professor Ronchi's reputation as a scientific spokesman as he is not a Supersensonics operator, nor does he need to know anything about it. I have quoted him only because we are fellow skeptics concerning the validity of science, which makes such arrogant claims. To know reality as distinguished from the illusory world of objects, one must have a better idea of the light which illuminates them. It is not only "faith" which illuminates, as some religions claim, for is it not faith in "scientific Truth" which has elevated modern science to the position of being a religion? To question the presently accepted reality of matter and the external universe is to invite the faithful adherents of the material illusion to destroy the new reasons and their obvious validity in deference to the self-repeating consensus, in order to perpetuate the conventional knowledge.

FAITH & SCIENCE.

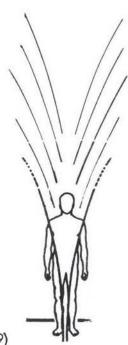


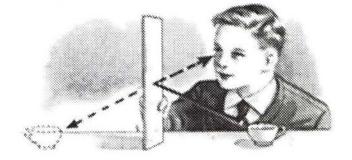
Fig. (369)

The "faith" should not be in any human knowledge nor in conceptual models but in the <u>nature of light</u> to reveal itself to itself. This cannot be based upon anything less than direct experience of what <u>external light</u> is and its connecting link to the internal light of consciousness, i.e. the Self.

It can be argued by some physicists who remain faithful to their vision of an "external world" that I am only a disciple of Ronchi's "New Optics" because it suits my purpose of establishing a scientifically skeptical base for Supersensonics. I am sure Professor Ronchi would agree and I am unabashed by such a judgement nor would I feel qualified to answer it. Because I am not a specialist in optics and would need to achieve the insight into Ronchi's own discipline, I would have to spend at least 50 years in physics and optics. It was the chance reading of one of Ronchi's earlier papers in 1962, long before he formulated his present works, which then triggered something dormant in me while I was investigating the phenomena of Supersensonics. It was entitled, "Do we really see what we see?" and it gave me a physicist's key to the ancient seer's statement, that the world we see is all illusion.

Another orthodox mathematical representation which locates the image reflected where we do not see it in reality, proving that the explanation is incorrect.





AN ORTHODOX EXPLANATION WHICH IGNORES THE FACTS OF SEEING.

Light from the cup strikes the mirror and is reflected to our eyes. But our mind does not allow for reflection from the mirror. We think we see the cup in the location it would have if the light were coming to our eyes directly from the cup. So it seems as far behind the mirror as it actually is in front. It is reversed from front to back.

Einstein in his later writings had shown me adequately through the world of science that the senses revealed an illusion. Ronchi had demonstrated that the elastic waves of electromagnetic phenomena did not apply to the living human eye but only to some dead theoretical eye created by mathematics. Turenne had shown me that matter radiated some influence which had a harmonic relationship with our psycho-biological perception of paraphysical radiations from the nucleus of the atom.

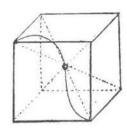
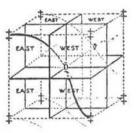
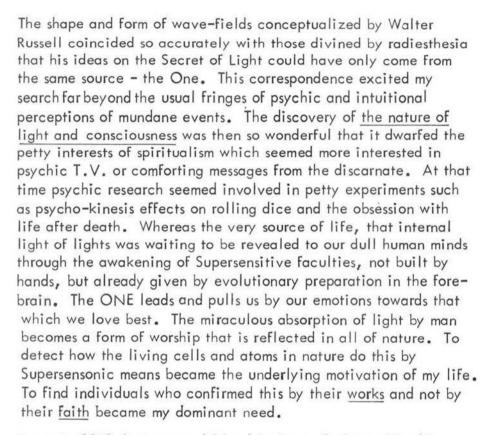


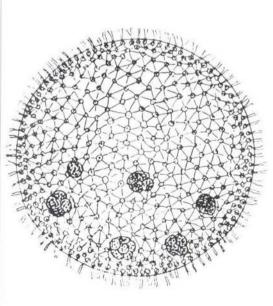
Fig. (371)



The six inner mirrors of radiation



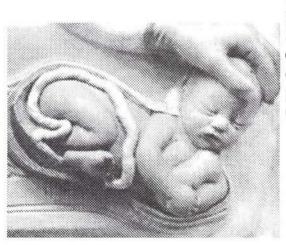
It was in 1963 that my good friend in Japan Professor Hiroshi Nakamura introduced me to the basic link in the light-food chain, the common Algae. We founded the Microalgae International Union together in 1964 with the idea of mining the sun's light and feeding the protein starved world. After twelve years of efforts trying to influence the deadweight of government and political minds we are still only a fraction further on in spite of renewed interest. Light and the cell, absorption and excretion of unwanted cosmic energies became a deep study which could never be written down.



It remained for one more man, Louis Kervran, who sent me a rough English translation of his work on Biological Transmutations, at the suggestion of Dr. Oshawa, to give me a final clue to the process of biological psychic electricity, which I have called proticity, named after the protons in the nucleus. My first impulse in 1959 was to rush off and publish this new work because Kervran was finding it difficult to find anyone in the academic world who would even listen. His work was eventually published in 1962. However, for the testing of Kervran's work by Supersensonics, I found that consciousness itself could do what Kervran said the human body could do by ordinary metabolism. That is, Kervran's assertion that the physical waves of energy from dead inert matter were not applicable to biology was true and that man could in fact transmute the elements and biological radiations through processes which the laws of physics and chemistry could not explain. At the level of the Nuclear center of the atom in living matter, high energy physics was taking place in transmutations which normally require high temperatures or streams of fast neutrons.

Like Einstein himself Kervran gave me another clue to the biochemical transmutations claimed by yogis who could take a poison and convert it through metabolic processes or alternatively excrete it without harm. Kervran also pointed out that the famous experiment which proved $E = Mc^2$ by observing the bending of a ray of light during an eclipse as it passed through the chromosphere of the sun, may only show the refractive index of the medium as the light passes from the "vacuum" of space through the density of the chromosphere. Not being a chemist I could not prove Louis Kervran's result but by using a Supersensonic wave-guide I could determine if these biochemical reactions were true or false.

However, between 1957 and 1960 I was undergoing a spiritual biological transmutation of my whole being in my mountain top laboratory in Jamaica and was too skeptical to discount the concrete world I saw around me as an "effigy", created in my consciousness by my identification with the senses and the phosphorescent mind which interprets them. More proof was needed for personal conviction.

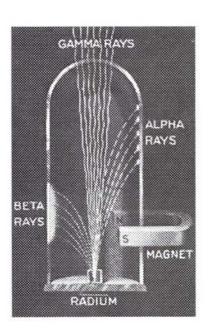






Fertilized ovum at 40 hours





To look at the material objects around me as phantoms in my own consciousness dancing between my ears instead of "out there" in objective space was indeed a hard intellectual conversion. In some way these three men of science bolstered what I knew to be True and I set out to determine whether I was hallucinating or to confirm the powers of consciousness as a real fact in the study of reality. Since then it seems strange to say that the whole universe has been brought into consciousness, i.e. the space between my ears! Consequently my ideas of space and time have undergone radicalization. Hence it came to me in meditation one day all those years ago that if I turned all man's knowledge of the external universe inside out or upside down, I would get a phase reversal which would be the Truth of what man's consciousness really is. I would get a mirror image of the real internal world by taking the effigy and the physical phantoms of man's mind and seeing what had created them, what laws had formed them and how the illusions had become validated knowledge. All these reversals and illusions I found in the following research into color and the rainbow which represented for me the seven levels from which I could stand and view the illusory sensory nature of the environment around me. The difficulty is that people confuse illusion with hallucination.

The definition of illusion is when there is something real in nature which is mistaken for something else. A tree seems to jump out at us on a dark road and we think it is a ghost. Or there is the analogy of Shankarcharya who uses the idea that a coil of rope suddenly becomes a snake in the dim light of his own country where snakes abound. A hallucination is when we see a snake and there is nothing real to trigger it except some image created in our consciousness. In this sense the scientist is seeing an illusion of light by mistaking the reality of the radiation for the internal response of luminescence within our consciousness. As seen on the chart recorders and sensory electronic photometric instruments these signals are the equivalent of the tree or the snake. Something real is there but science has mistaken it for something else.

SORTING OUT RADIOACTIVE RAYS

Here a magnetic field sorts out radioactive rays. Alpha particles (+) and beta particles (-) are deflected oppositely. Gamma rays are not deflected at all.

Fig. (372)

SUPERSENSONICS & COLOR.

N

particles

(+) charged particles are orientated to

North.

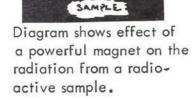
In our study of Supersensonic detection we saw that in some way light or something analogous to transmission of radiation was made to pass along a wave-guide for thought energy and in doing so revealed the spectrum of atomic L-fields in their correct order of the spectrum. We found that a radium block or some other source of radioactive excitation such as the Hefigar provides a beam along the balance rule along which and with whose aid a sample laid on the block at zero produces its atomic L-wave-field according to the nucleus and its protonic atomic number. A Horizontal field (H-field) is produced at these rings of radiation at the union of the L-field points. These L-fields can be accepted as a manifestation of the outer electron shells known to be around an element. The H-rings give pendulum reactions at prescribed distances, each approximately 13, 19, 25, 50-55, 62, 68 and 80 cms away from the center of a sphere represented by the radium block or Hefigar as it lies flat upon the balance rule or wave-guide.

From a radium block standing vertical on end the radiations pass according to the selective pendulum: Alpha (+) towards north, Beta (-) towards south, and Gamma (+ -) towards the west.

In the disintegrative decay of the nucleus of an atom, whether that atom is part of an experiment in a radiation laboratory or any part of our living bodies, we find both are subject to intense cosmic rays colliding with the atoms, which can break up matter at an alarming rate of decay. This explains why the human body is able to decay elements and transmute them into other elements at cool temperatures which could not happen in physical or chemical operations without applying considerable energy or temperature inputs. The 44 elements found in the human body by Supersensonic detection represent transfers of energy which can be easily recorded on a rule or wave-guide using a rod or pendulum as an indicator. The decay of an atom appears to have an Alpha, Beta, Gamma ray orientation whenever the disintegration is detected around a sample undergoing nuclear transformations.

Negative Charged particles orientate towards South in the Earth's strong magnetic field.

Fig. (373)

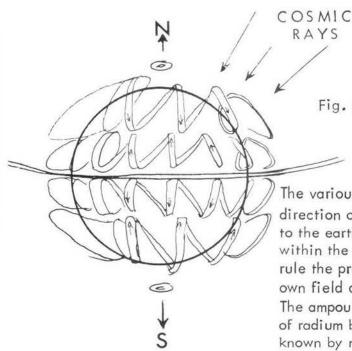


S

Y rays

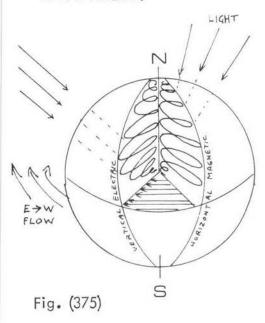
B particles

S



The various oscillations of a pendulum which indicate the direction of the disintegration of matter with a specific orientation to the earth's field are stimulated when radioactivity is present within the auric field of the sample. When placed at zero on the rule the presence of a radium block or Hefigar will produce its own field of L-8 meters, or harmonics of this at 80 centimeters. The ampoule inside the Turenne radium block consists of a tincture of radium bromide potentized by homeopathic methods. It is known by many diviners that the radium block will amplify even if it is near a map or rule but when measuring L-fields the radium block is always placed so that it touches the linear antenna tape or wooden rule of some diamagnetic material. This tape may be made of just cotton or string or a piece of ordinary copper wire. The rays of the sun or use of magnets with a vertical wave-field can make good amplifiers which enhance the diviner's reaction to atomic disintegrations. The use of the Hefigar type stimulator

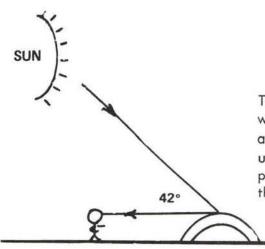
RAINBOWS & SPHERICAL WAVE-FIELDS.



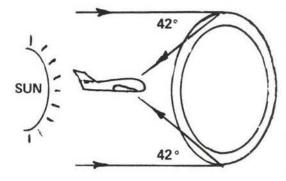
From the use of Supersensonic detectors it is found that fields assume specific dimensions based on the nature of the carrier or stimulator present at zero on a balance rule. Whether the carrier is the vibrating molecules of a gas called air or some other oscillating electromagnetic carrier such as light, or a radium block or Hefigar, it would appear there is a close relationship between the wave-fields of the carrier and the polarization of light radiations. The planes of the horizontal and vertical fields of physical earthly manifestation, being both north and south, pass through the earth's magnetic poles. When looking at the earth, from outside, as a vast electro-dynamo or an atmospheric ionized membrane through which large amounts of energy are transfered from one point on the globe to another, we can see a common link with the propagation of color wave-fields, if we think of them as turning spirals travelling east-west but with the north-south components sucking light or cosmic radiation into electric and magnetic vectors in planes perpendicular to the direction of travel but at right angles to each other. The diagram shows how light from the sun becomes polarized on the surface of the earth depending on its angle of incidence.

has been also described in Chapter 8.

Fig. (374)



To think of primary light colors in terms of a spiral spectrum within the orb of a spherical field and to think of reflected light as secondary spirals around the surface of a sphere, will enable us to see how the amplitudes of the wave-fields may vary with periodic vibration while the wave-fronts are still remaining in the same phase.



If we now think of a rainbow as the edge of a spherical field through which the light is refracted through the raindrop, we can view it as only one side of a spiral with other invisible colors which cannot be seen by the human eye. Because the rays on the opposite side are not polarized at the angle presented to the human eye we would not experience anything there. Furthermore, even if the rays were polarized at the correct angle to our consciousness as it is working through the eye, we still would not see them visibly because most people are not sensitive to the infra colors on either side of a prismatic refraction. Colors such as infra red and ultra violet and infra white and infra black or negative green (sometimes referred to as radiesthesia grey) are all on the other side of a rainbow which we cannot see. The rainbow only exists in our consciousness, even though we can photograph it on emulsions with a camera lens because we stand at a critical orientation in respect to the sun. The half-sphere that we see as a rainbow marks the outer edge of a sphere which has within it other hemispheres which we cannot see unless we are a certain distance away from the rain cloud. A simple test that we can do to prove that the rainbow is not an objective phenomenon is to walk past the spray of a waterfall or fountain until the angle between observer and sun is 40° to 42°. Although the drops are moving and are different shapes and sizes the light is refracted in the same basic way as it passes through any medium acting as a prism. By moving back and forth one can see that only the angle determines the colors while the distance away from the water drops determines the size of the half-sphere along the edge of which the rainbow arch is formed.

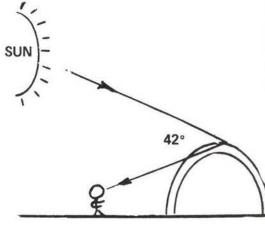
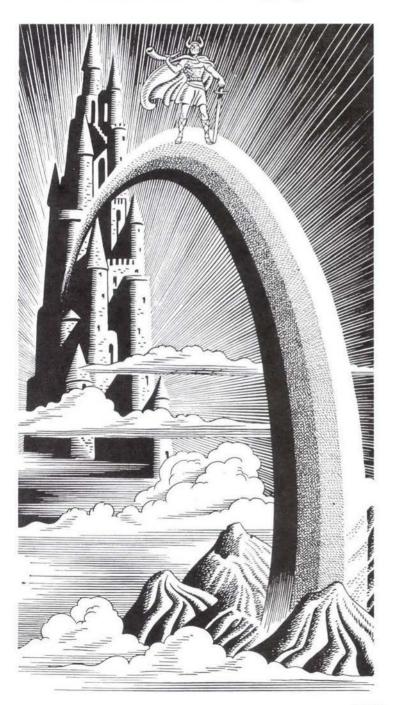


Fig. (376)

ANCIENT MYTHS & MONUMENTS REVEAL THE POTENCY OF CONSCIOUSNESS



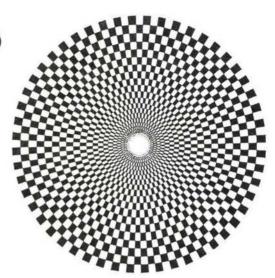
Heimdal, the guard, stands on the rainbow bridge that connects the earth to Asgard, the home of the gods. Over this bridge the gods pass. And over it the Valkyrie maidens carry slain Norse heroes to Valhalla, in Asgard.



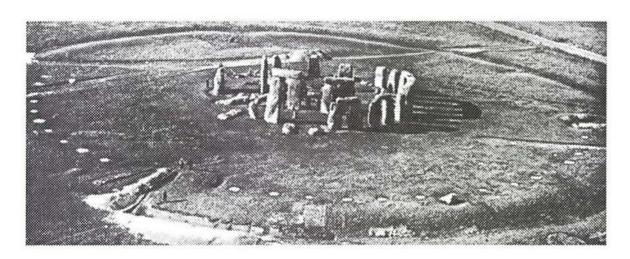
Many of the allegories of ancient times relate to color as man's bridge between intuitional knowledge and the earthly knowledge we call measurement and comparison. The Nordic peoples and the Druids had their 3 grades of practitioners the primitives, bards and ovates. The place of the latter in the healing arts and the science of divination was equivalent to the Egyptian priests and the leaders of the mystery schools of Greece. Much of the Druidic knowledge has been lost, although some famous people have held office of Chief Druid secretly. The ancient temples such as Stonehenge were Supersensonic devices built not as mere ceremonial structures but as cosmic generators. Through testing the stones in the outer ring of red sarsen sandstones by Supersensonic means, the diviner detects a positive reaction while the inner blue stones which came from several hundred miles away in Wales give a negative reaction. Between the two circles of stones and the inner horseshoe of Trilithons there is a static wave-field which could have activated the biological balancing of the nervous system of those suffering from ill health. This structure could well have acted as a Supersensonics stimulator or broadcast unit for crops in the same way that we now stimulate the growth of plants with music and thoughts. With antimony sprinkled upon the floor the interaction between the red rocks circle and the blue stone circle becomes amplified and the static field is ionized with the sun's light. Investigating the astronomical data of Stonehenge with a Supersensonic device reveals a whole book of facts which show that the ancients not only selected their crop seeds and remedies by divination but investigated the higher more subtler energies in man's vehicle. For instance, the wide outer ring of holes containing the ashes of human bones are for containing not only the cremated remains of a long line of Druid Chiefs but also as witnesses of the dead spirits who could participate in the disc's effectiveness as discarnate intelligences.

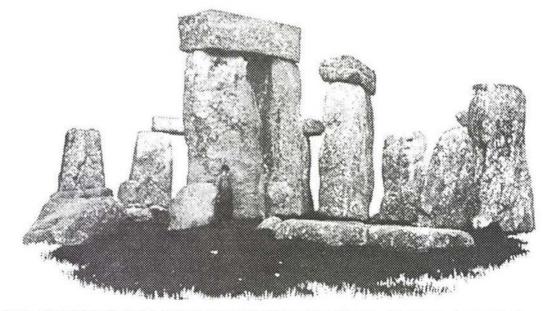
Fig. (377)

Ancient and modern discs for divining the effects of cosmic forces on human consciousness. Top picture is circa 1959 A.D. and bottom disc was constructed around 4500 B.C.



The Symbol of Nuclear Evolution

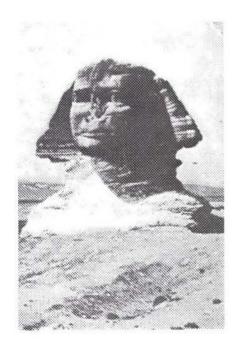




Stonehenge, near Salisbury, England, is an impressive example of Stone-Age architecture. The main structure consists of massive upright stones set in a circle 100 feet across and an inner horseshoe of even larger stones. Stonehenge probably served as a temple for worship and burial, but its arrangement suggests that priests also used it for observing the rising sun at the summer solstice.



Fig. (378)



The student is able to ask any question in his consciousness and get an answer yes or no from this disc.

The old Druidic myths hold much symbolic knowledge which can only be revealed to those who are willing to commit themselves to a proper unfolding of the vehicle of consciousness. Having acted as Presider over the annual ceremony of the Druid Order at Stonehenge at one of the Summer Solstices, and having had the present Chief Druid, a medical doctor, give a three year course in Homeopathy and Druidic healing methods at the author's center in London once every week, he can vouch for the authenticity of the Druid teachings.

The ancient Druids were divided for functional purposes into three principal orders, the duties of which were stated in the Triads. The Primitive Druid works according to Reason, Condition and Necessity, his mission being primarily to instruct in all sciences and religion. This is the equivalent of an adept, therefore working behind the scene.

The Bard, according to the Privileges, Rites, and Voice of the Druid Convention, has the office to supervise, regulate and to lead. The Ovate works according to Nature, Exertion and Incident, whose vocation it is to act on the principles of observation and inventive genius. All grades should enjoy perfect freedom wheresoever they may go.

The Druid's robe is white, the color of Light, Purity, and Knowledge. The Bard's robe is Sky Blue, emblem of Justice and Truth. He should become the symbol of Peace and Goodwill at all times, and be worthy to pass unmolested from place to place. The Ovate's robe is Green, symbol of budding life, the growth and increase of Learning and of Science.

Said to be of non-Celtic, non-Aryan origin, the immigrant Celts were introduced to Druidism by the Megalithic people of Britain, and later, taught the continental Celts who were sent to Britain for training.

The megalithic people were derived from the "Power School" and the first teaching was based upon "power, perfect and supreme, within the laws of the universe". The second settlement people added the teaching of the "Wisdom School" from which they were derived, and it was from this time that Britain became the recognized headquarters of the Druid cult.

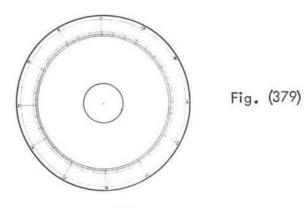
The neophyte of the Druid System is called an Ovate Og which can be translated "young twig or shoot". In the Hermetic system the first ceremony was numbered 0° 0_{\square} which signifies that the candidate will fulfill all obligations to the past (clear his Karma) and is not yet obligated to the future.

Until he achieves this state of real freedom, he is not in a position to begin the Great Work for his next move (which involves him in a series of ten steps). The Great Work is the $1^{\circ}\ 10_{\square}$ signifying that he is working on the first step and is karmically involved in the whole ten. $2^{\circ}\ 9_{\square}$ means he is on the second step; one completed, nine to go.

O.O. also represents Knight of the Orient and Occident - one learning to balance the East and the West.

TIME RECESSION

In the same way that the great pyramid records the position of the stars, so does the position of the sunstone record the sun's position at the spring equinox. The time recessional disc invented by T.C. Garland, an architect and surveyor, for dating archaeological objects and historical research was used by a group of radiesthesia enthusiasts to date temples, pyramids and artifacts. The disc was based on the radiation of an object being transferred to the precession of the equinoxes on the disc. These discs are available from University of the Trees Press in full detail, whereas the illustration below merely shows the reduced picture. The disc is a psychic representation of a total period of 25,800 years.



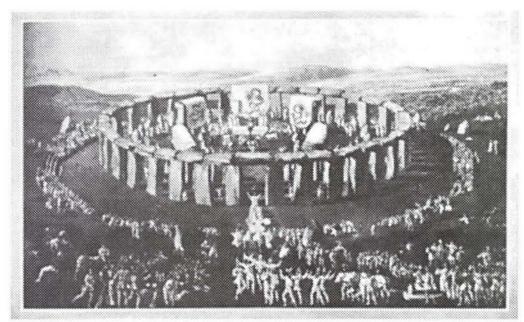
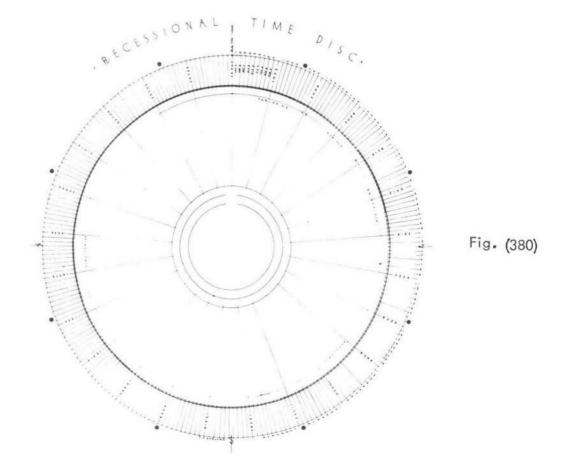


Photo by Rischgitz



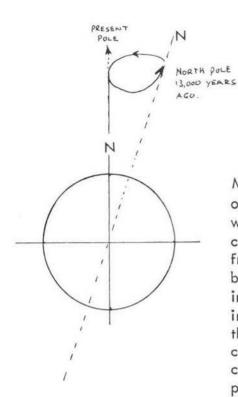


Fig. (381)

Most astrological and astronomy students know that the precession of the poles causes a wobble which describes a cone in space which requires 25,695 years for the conical orbit to be completed. In this present century this polar axis is about 1° from the pole star. In another 13,000 years the earth's axis will be pointing to Vega and then it will return to its present position in 25,695 years from now. These events are written magnetically in the rocks and atoms of the objects when they are formed and they write their story in their radio-magnetic wave-fields which can be read by Supersensonic man. The human nervous system can register a resonance phenomenon upon the disc when the pendulum reacts to the correct angle corresponding to the precession of an object's orbital atoms which were fixed at the time of construction.

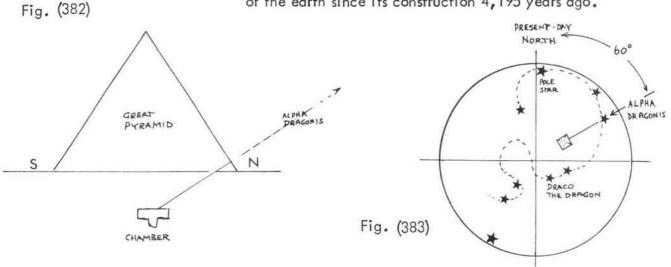
Garland's disc was constructed without regard to the Pyramid which was arrived at by dividing 360 degrees by an angle of 27 degrees and 13.8 minutes (or 27° 14'). This angle then being 1950 years at 50.27 seconds per year for precession. The division of 360° by 27° 14' gives an answer of 13.23 times and when this is multiplied by 1950 the total disc gives a time coverage of 25,798 years for a complete orbital turn. Hence Garland's disc makes it 25,800 years for practical purposes.

Each section of this disc represents the approximate position of the Cosmic North of the object whose age is being measured. The object or even a photo of an object is held as a witness and the pendulum will oscillate following the circle from 0° until it suddenly gives a reaction with a particular Cosmic North of the article being investigated and will then change direction and oscillate across the track radially.



The precession of the equinoxes corresponds to an annual displacement of the axis of the earth by 50.27 seconds of arc backwards from each preceeding equinox. About 26,000 years are needed to return to the same point. To arrive as close to this figure, Garland divided his disc circle into 25,800 years. The diameter of the original disc is 40 cms and is divided into 25 sectors, each sector measures 14.4 degrees and represents 1032 years of equinoxial travel. Each section is then divided further by 10 representing 103.2 years. Baron E. de Dorlodot devised a similar disc around 1947 based on the same principles.

Sir William Herschel, astronomer of England, found that the passage of the Great Pyramid gave a view of the north pole like a telescope which at the time of the 4th dynasty was at "Alpha of the Dragon" and not our present pole star. The line of sight of this passage has continued to point at this pole star direction of the earth since its construction 4,195 years ago.

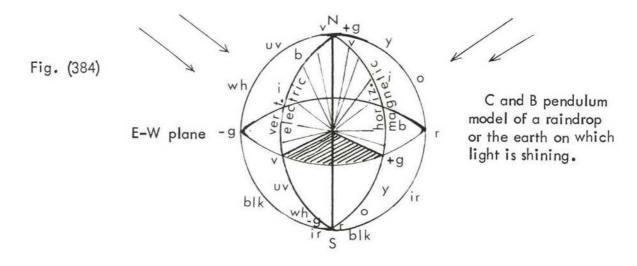


This shows a displacement of approximately 60 degrees which would correspond to 4,170 years on Garland's 1950 disc or 4,195 from this year 1975 A.D. which corresponds to the carefully studied age of this Pyramid.

ANCIENT LINKS WITH COLOR RULES & WAVE-GUIDES

A magnet or radium block or a Hefigar placed at one end of a balance rule creates the field of the excited antenna with 1-3-5 resonant points. A specific sample laid at one end at zero creates another form of interference and produces its own particular L-field, with its nodal points corresponding to specific distances marked on the rule according to its spectral colors.

Each color has a polarity, showing that all color is the result of polarization and therefore indicates a particular angle of manifestation. This explains why diviners can often use colors as witnesses for all kinds of material objects. A given piece of matter produces an L-field of the same dimensions as a specific color because one is a harmonic of the other. There is an angular relationship between waves of unpolarized light and the color force-fields detected by Supersensonic instruments in vertical planes which intersect with the earth's magnetic poles.

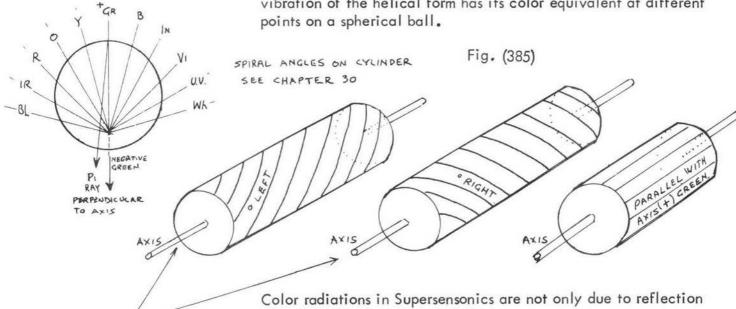


The diagram shows the color L-fields which go over onto the invisible side of the sphere and continue along the electrical meridian which is at 90° to the magnetic meridian. A pendulum constructed by Belizal and Chaumery on this model coincided with the markings on the Turenne rule. Spectral violet being at the

equator on the electrical meridian corresponds with the L-field of 8 m on the Turenne rule, but whether the measurement is found to be linear or angular the various readings could be transposed and correlated with each other. Therefore what we refer to here as "colors" need not be radiations which are visible color. The vibratory field of iron or oxygen which is "red" is not necessarily the same as a red fabric reflecting secondary rays, but both these vibrations give a harmonic response to the diviner's psycho-physical reaction, though they may each be as far as 17 octaves apart in terms of actual vibration periods.

THE WAVE-GUIDE CYLINDRICAL TUBE EFFECT.

Helical lines drawn parallel on a cylinder shape give off color harmonic wave-fields corresponding to the pitch of the spiral and these can be transferred to the surface of a sphere so that the vibration of the helical form has its color equivalent at different points on a spherical ball.



Colour correspondence shows
(+) slope to the right of axis
while (-) colours slope to the
left. Parallel lines are spirals
of 15 degrees between each
colour. (+) Green is in the
plane of the cylinder.
The axis gives the Antenna
I to 5 effect when aligned
North-South.

Color radiations in Supersensonics are not only due to reflection of light energy but are measured as being also due to form and structure of an object. The vibration of a form, even when it is a crystal form, as found in nature's elements, which determines the chemical components of the human cells, still has the harmonic color equivalent of its atomic form represented by the angular rays of its structure.

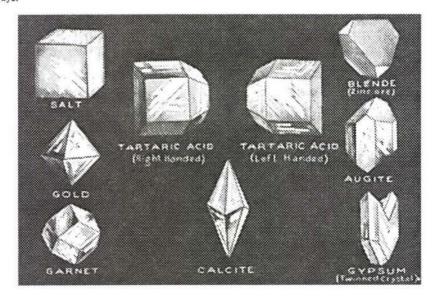








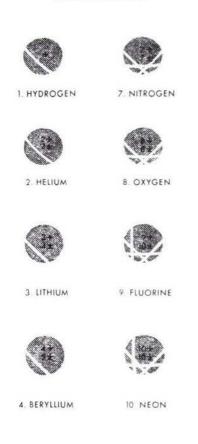
Did you know that the tiny grains of salt you shake on your food are little cubes, and that some of the gold which miners and prospectors find consists of tiny 8-sided figures like the one you see here? But there are even stranger things about crystals. Some of them are "twins," and some are "right-handed" and some are "left-handed." Those two crystals of tartaric acid, for instance, seem exactly alike at first, but a close look will show you that one is the "reverse" of the other, each one being just like the image of the other in a mirror. And the curious thing is that "right-handed" tartaric acid is exactly the same in chemical composition as "left-handed" except for some peculiar internal arrangement, which is responsible for the "reverse" crystals and which makes the two kinds behave differently in many other ways.



With Supersensonic wave-guides we can not only check the molecular structure of crystals and salts produced by nature but those also combined by man. Each compound is made up of so many atoms and it is possible to determine not only how many atoms of each element is present in a complex chemical but also how many electron rings are filled and therefore detecting the excitation level of each atom in the crystalline compound. Such analysis in chemistry is costly and time consuming and furthermore requires knowledge only acquired at a university or scientific institution. To know this directly without any chemical analysis is "impossible" to a scientist and because there are literally thousands of complex combinations the chance of guessing the nature of a rare man-made chemical salt is millions to one.

These diagrams show the arrangement of the electrified particles in the atoms of the 12 lightest elements. The electron shells — are shown compressed toward the nuclei. After the single proton in hydrogen, the nuclear particles are indicated by numbers and signs only—a plus (+) sign and a number for protons, and a plus-and-minus (±) sign and a number for neutrons.

Fig. (386)



Nevertheless there are dangers in assuming that the Supersensonic method is foolproof. Fools unfortunately are everywhere and unless you are a Buddha or Adept there is no proof against them. Hence the general rule that unless three people agree independently on a result in Supersensonics it is better to use the mechanism of scientific doubt in all readings, i.e. get a statistical check by asking three other students to do a double blind reading. Some molecules change the polarity of their wave-field at night time especially those composed of the eight lightest elements with an L-field of 13. Usually a chemical or crystalline compound produces the L-field of its base but there will also be pendulum beats at its other atomic constituents fields. We have given the L-fields of the basic crystals in nature in a previous chapter. Sometimes a product tested for its specific molecular structure produces several H-fields and L-fields. If we place the sample at all the L-field points on a wave-guide in turn, it will belong to that group where it causes all the seven pendulum beats to return again. It ceases to create its own interference waves once it lies at its correct L-field position on the wave-guide. If we then place a radium block on the rule or wave-guide the seven beats due to radium's L-fields will disappear as soon as the sample is correctly placed on the rule. This provides a check on the accuracy of the analysis undertaken when there is no chance of verification from two other practitioners.





11 SODIUM

6. CARBON

5 BORON

12. MAGNESIUM

HOW ATOMS ARE MADE UP

When a sample tested produces several L-fields and H-fields and it is correctly balanced in its place without the seven beats of radium disappearing, they are considered to be due to color harmonics instead of those related to molecular structure of the crystals. Hence color response will also indicate the complex

When one atom of oxygen (O) joins two of hydrogen (H) to form a molecule of water (right), they share some electrons more strongly than do the hydrogen atoms, throwing the electric forces of the molecule off balance. Each oxygen atom has excess negative charge, and the hydrogen atoms have unbalanced positive charge. Thus the molecule is a polar compound.

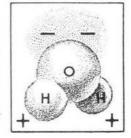
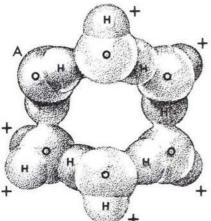


Fig. (387)





nature of a compound which is made up of combined molecules which share common electrons such as sodium chloride which is a combination of sodium and chlorine atoms, both of them most harmful to human tissues in their natural state but harmless when taken together as common salt.

When water molecules lose sufficient heat energy, they move slowly enough to let opposite charges on various dipoles attract each other. Thus they begin forming a crystal of ice. In this diagram, molecule A has satisfied all unbalanced charges. The other molecules, however, still have some excess force free (marked +). These "left-over" forces can attract other dipoles, and bind the other molecules to the crystal.

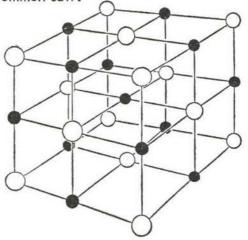


Fig. (388) The cubic lattice of table salt.
Sodium ions (shown black) alternate with chlorine ions (white)

Some further examples of detected responses to color harmonics rather than the molecular structure of the crystals can be given for experimentation as follows:

Zinc Z30	H25					
Zinc sulphide	H25 also orange & green colors					
Zinc oxide	H25 also indigo					
Cadmium acetate	H55 also red & violet					
Strontium carbonate	H50 also red, orange, yellow					
Magnesium Z12	H13 also orange, blue, violet					
Quinine hydrate	H55 also red, indigo, violet					
Zinc fluoride	H25 also green					
•	also another color which varie					

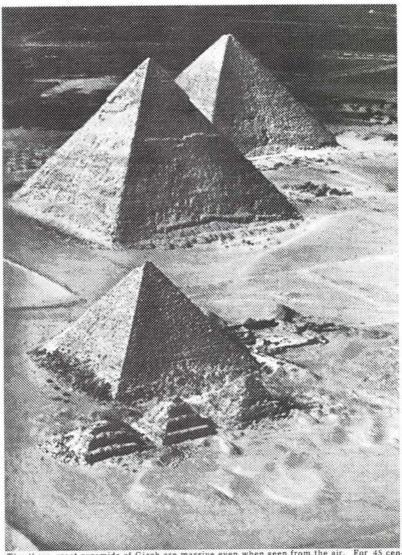


In general the radiation received by the diviner is due to the form of the sample but where complex forms are involved it is wise to be cautious since the human being is also a very complex liquid crystal and is influenced in many subtle ways by resonance effects.



Fig. (389)

As we have shown in Volume II the ancient Egyptians knew about the radiation fields of form and of mass and gravitation and they employed this knowledge in building the pyramids. The ancient Chinese thousands of years ago invented the Yin Yang symbol and the 8 Pa-kua symbols of the trigram, each one corresponding to a specific spectral color. This reveals that all entities both physical and biological, exist in a stable form only when they are in a state of equilibrium, so that a specific color represents a state of integration of matter or disintegration of energy in order to maintain any form of existence as equilibrium. However modern physics merely attributes the color of anything to its emitting of a certain frequency of light.



The three great pyramids of Gizeh are massive even when seen from the air. For 45 centuries they have proclaimed the wealth and power of the kings of ancient Egypt.



TUNING CAPACITATORS & SEMICIRCLES & THE I CHING.

The connection of the wave-guides of Supersensonics with electromagnetic waves is found by the diviners' reaction to all disintegrating nuclear atomic systems irradiated by light. All vertical electrical wave-fields detected with vertical magnet alignment can now be verified with the artificially produced wave-fields such as those of a radio-oscillator. The law of similars works equally well in the vertical plane of a condenser's vertical plates. These plates when aligned in parallel planes, produce the "radioactive" vertical wave-fields, but only if they are interlocking each other. As the plates overlap, the L-field can be measured if stood at the zero of a balance rule.

When you "tune" a radio set you are turning movable plates of a condenser like this. Maximum capacity is obtained when the movable plates are completely interleaved in the fixed ones.

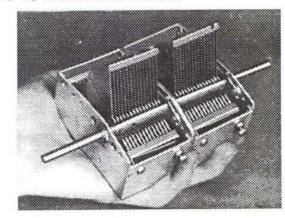


Fig. (391)

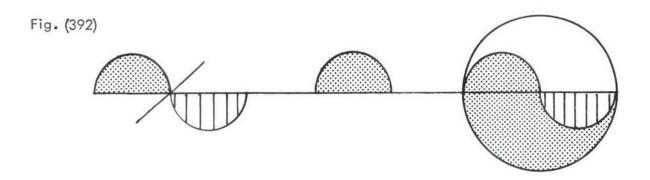
O VARIABLE RESISTANCE

Fig. (390)

Similarly a Supersensonic operator can measure the L-field by using a variable resistance or potentiometer. By marking both these types of tuning device from 1 to 10 we can find the L-fields as follows:

Overlap of condenser plates.	1/10th	1/4th	2/4ths	3/4ths	4/4ths
L-field	L-2	L-3.5	L-5	L-7.5	L-10

It does not matter what size the condenser plates are made, the L-field remains the same for any given proportion of the plates closing. In a similar way the I Ching works with semicircular phases and polarities to produce color harmonics.



It appears from these results that divining phenomena is interactive and responsive to radiomagnetic and electromagnetic vibratory fields and that there is some resonant linking involved between human consciousness, which we call the "field of the knower", and the polarization of these radiations. To discover this linkage and map the way they function together with the personal interpretation of human sensory events is the work of Supersensonics. Obviously there are many ways to do this and much room for innovation in the development of radionic devices and radiesthesia tools. However the purpose of this work is to equip the student of radiational paraphysics with a background enabling him to design any number of Supersensonic aids and implements based on the foundations of the laws of consciousness set forth.



If we refer to the I Ching as translated by Richard Wilhelm we will see that the book itself was in constant change and evolution. It is not something which remains a tradition forever, but its development and images move with the times into modern life. As a diviner's instrument the "Book of Changes" is by far the greatest for research into the "inner world", because it links changes in the outer world to changes in the operator's own state of consciousness. The starting point for the inner world is Chen, the arousing, representing the arousal of the forces of consciousness or kundalini. Here kundalini is defined as the movement of energy in consciousness. Everyone has kundalini but not all know how to use it or arouse it consciously. Without kundalini no one could live, since in various forms it represents "life energy". In ancient China they related the arousing of consciousness to nature's season of spring coupled with the inner bubbling of joyful spirit. The movement of the different trigrams through various angles in relation to the wave-field of consciousness can directly be correlated with the manifestation of the energy of kundalini as spectral colors.

This bubbling of the spirit called Tui in the I Ching was equivalent to the red and violet opposite ends of the spectrum meeting together in the horizontal emotion plane and the vertical thought plane in the equilibrium of the neutral point Ken (standing still). It was as if these two colors met together on the invisible side of the rainbow which was really a spiral and merged into the color black/white, sometimes called radiesthesia grey or "negative green" by the early pioneers of radiational paraphysics.

This same joyful bubble of spirit which comes to young people at springtime is difficult to hold onto whenever there is conflict in the consciousness of a person, and hence the ancient Sanskrit sages recommended the study of consciousness through yoga. This "spirit of life" which emerges out of "standstill" in the inner world was called Rum in Sanskrit and is at the back of "Rumf Roomph Yoga" as developed by the author in a series of taped oral teachings for its cultivation by students.

SUPERSENSONICS & THE I CHING.

As we have stated, a drawn circle emits a vertical field in planes north-south and east-west above the completed circumference. On the north side of the circle the wave-field is different from the south. Inverted vertical magnets give a reaction all over the circumference itself of a positive or negative rotation, but opposite the points east and west there are radial beats towards the center of the circle. If the circle is broken at any point, the radial beats towards the center occur over the gap. (See Chapter 28.)

The construction of the Chinese Pa-kua shows us that ancient knowledge was based on psycho-physical laws not yet fully understood by western science. All the "groups of seven" when placed around an 8 pointed circle give the diviner what is called the "Pakua effect". This effect is the sign of "group unity" or the nuclear force which holds any entity together.

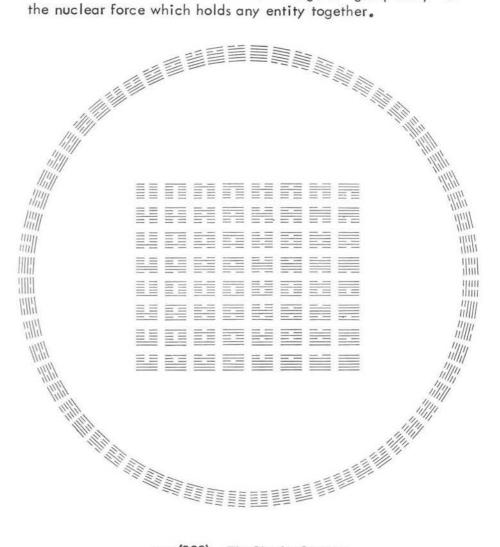
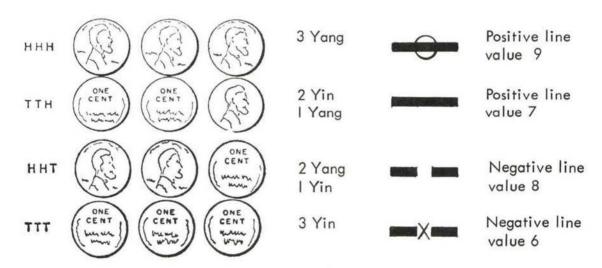


FIG. (393) The Circular Sequence

It is well known that the I Ching is modeled on the laws of probability and that the trigrams can be represented by three coins or by any random system which can generate 64 different combinations of three lines by joining two trigrams and making a hexagram. An example of the coin oracle is given below to show the connection between random numbers and the influence of consciousness upon the free gravitational fall of 3 coins. Over a long period it appears that consciousness can consistently score above chance in the throwing of the coins. The building up of the triarams and hexagrams can be seen to be the ancient equivalent of detecting the relationship between the horizontal energies of the emotional feeling world and the vertical energies of thoughts and consciousness. In other words these random events were used as an elastic wave-quide on which the human consciousness could impress its own positive and negative tensions and bring about detection by divination of the electromagnetic stresses in the environment. By placing the trigrams in certain relationships to nature, amplification of the divining faculty is achieved.

Fig. (394)

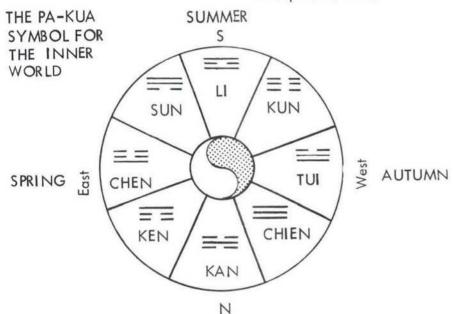


SEVEN GROUPS & THE OCTAVE.

The "Pakua effect" of group unity creates a wave-guide the same for example as placing all witnesses of true spectral colors on a linear antenna at the points 13, 19, 25, 50-55, 62, 68 and 80 which makes the balance rule "come alive" in the same way as the radium block and Hefigar does. The eight-pointed Pa-kua circle shows a southward oscillation outside of the circle with the groups of seven in their correct order. There is also a logarithmic series which produces wave interference at certain numbers and serials which will be dealt with in Volume IV. The following arrangements in Figure (395) will produce "Pakua effects" arranged either anticlockwise from south-west with the receptive or anticlockwise from the north-west with the Creative trigram.

It is clear that the original knowledge of nature contained in the images and words of the I Ching came from divination and then was refined by scientific and mathematical thinkers over at least a thousand years. Much of the written facts in this Volume III can be checked by using the I Ching as a diviners' tool. This is available to anyone without any special training in the methods of Supersensonics.

Fig. (395)



WINTER

Pa-kua means an eight-sided symbol or octagon. Together with a diviner's rod called a Jui sceptre the ancient Chinese used an eight-angled plate design as a supersensonic divining instrument for researching the effects of nature's finer forces upon the "inner-world" of human consciousness. The result was the trigrams of the I Ching.

The Chinese diviners invented the trigrams, which are 3,000 to 5,000 years old, as witnesses of nature's forces long before wave-fields became the terminology of science. The Yin Yang symbol itself is made up of two half spheres shown as meeting each other in different phases with the corresponding spiral tail behind them.

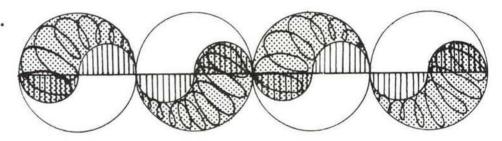
It is extraordinary that Supersensonic methods enable us to unravel the discoveries of the ancient Chinese knowledge of probabilities which is so reminiscent of today's quantum physics. By the arrangement of the 8 nuclear trigrams in all their possible configurations of positive and negative lines symbolized as (+) — and (-) — they were able to evolve the 64 hexagrams which could fall into place by the action and interaction of consciousness.

In other words they created a mathematical wave-guide for thought energy and symbolized it in proportional values, rather than exact numbers. The ancient Pa-kua arrangements of the eight nuclear trigrams obviously inspired Turenne's disc with its eight points drawn across the circle. (A mathematical explanation of the Chinese law of future probabilities is reserved for Vol. IV.)

Each trigram is a geometrical form which has an effect detectable by pendulum reaction as a color wave-field. From these fundamental trigrams arranged at different locations on the 8 pointed Pa-kua board the tensions in a person's consciousness and their proportional relationships to the surrounding environment can be discovered. The changing future can be predicted based on that present condition.

Fig. (396)

Arrays of Pakua Symbols act as End-fire relays in Supersensonic wave-guides.



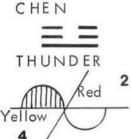
Using the Yin Yang symbols as arrays can also produce similar effects as putting several pyramid forms or half spheres one upon the other which we will explain later. The positive yang force (Shiva, creative, male, sky, sun,) equalling the pingala nerve in the human biological system and the negative yin force (Shakti, receptive, female, earth, moon,) equalling the ida nerve in the nervous system was fully described in ancient Chinese yoga texts showing maps of the Chi flow and its female counterpart in acupuncture meridians.

As will be seen below some of the trigrams can be reversed without changing their wave-field or color. However, when confined in a hexagram, such a reversal becomes important as regards which line is nearest to the diviner or above his horizontal eye beam, as, for example, with the image "mountain". The different images are representations which are outlined here with their horizontal and vertical wave-fields and corresponding numbers:



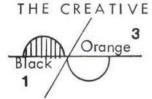
THE NUCLEAR TRIGRAMS.

KEN MOUNTAIN Black Indigo

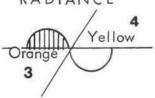


2 Yellow

CHIEN







The equilibrium Neutral Point between positive-negative. Keeping still, inertia and the resting period at the end of each phase of cyclic movement. The guiet heart or stilling of the mind as in Nir (not) vana (flowing). Balance or annihilation.

Horizontal by day -) INDIGO (-) BLACK Vertical field

Electrical tension and lightning. Power. The arousing of energy and consciousness (Kundalini).

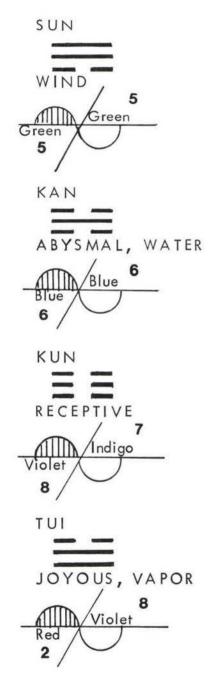
Horizontal by day (+) YELLOW (-) RED Vertical

The positive extreme potentiality of the projective. The Dark principle, the unmanifest light or Akasha which is invisible, creative, action, Heavenly, represented by sky, man, yang, Shiva, primary radiation.

(+ -) BLACK Horizontal by day (+) ORANGE Vertical

The Clinging Fire which radiates after the first bubble of joyful spirit begins to rise from the creative intelligence. The flame of radiation which results from intense concentration clings to its source.

Horizontal by day (+) ORANGE Vertical (+) YELLOW



The gentle penetration, surrenders to the Creative, the faculty of super penetration of the hidden motives of Self and people. The instrument of ceaseless Time. Prepared action.

Horizontal by day (+-) GREEN Vertical (-+) GREEN

The deep center or heart symbolized by the pit or ravine into which the waters gravitate downwards and inwards. Resonates with polarized moonlight.

Horizontal by day (—) BLUE Vertical (+) BLUE

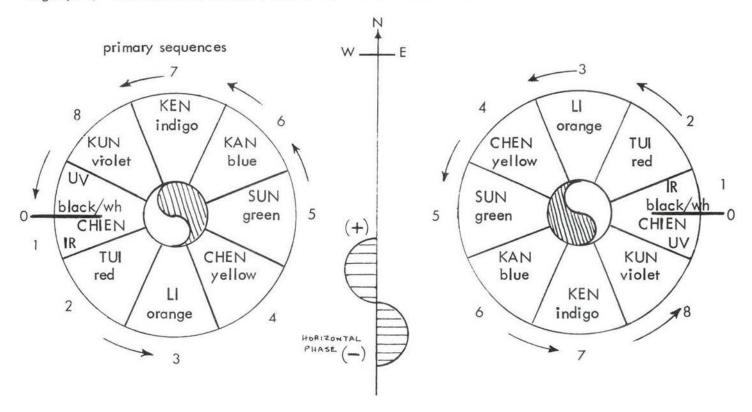
The negative extreme receptive polarity. The Light principle or manifested light which we see as lux or psychic brightness of quantized energy. The primal power of Yin, the female complement of Yang which completes the Creative. Earth, Mother, Shakti, reflected light.

Horizontal by day (—) VIOLET Vertical (+) INDIGO

The joyful bubble of life and spirit. The tone of levity rising upwards after the intense compression of the gravitational force - Kan.

Horizontal by day (+) RED (+) VIOLET

Fig. (397) CHANGING DAILY PHASES OF HORIZONTAL POLARITY OF THE SAME SPIRAL FIELD



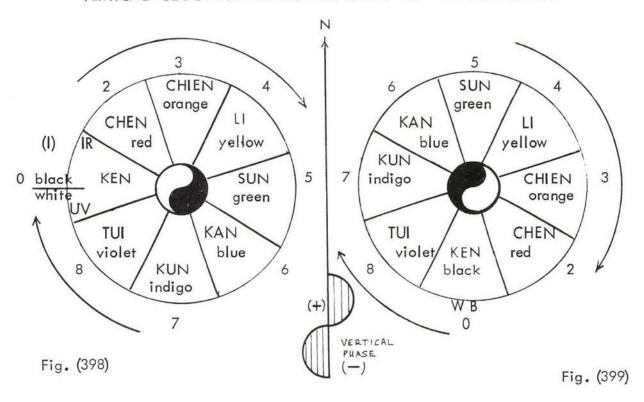


When the Yin Yang symbol is surrounded by the 8 Pa-kua trigrams the Supersensonic equivalent of white light is produced by the pendulum oscillations with all its color harmonies.

GROUPS PRODUCING "PAKUA EFFECTS"

COLOR	RED	ORANGE	YELLOW	GREEN	BLUE	INDIGO	VIOLET
Nodal points	13	19	25	50-55	62	68	80
Serials V-waves	2	3	4	8-9	10	11	13
Lunar light L-fields (H-waves) of Z No. eleme	nts 11	12	14	20	22	31	50
Radioactive resonances	153	31	62	93	124	155	421
Inert gases Z No.	54	36	10	18	10	2	54

VERTICAL CLOCKWISE SPIRAL POLARITIES OF "PA-KUA EFFECT"

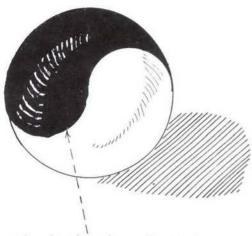


Only when the trigrams are in the proper order do they produce the Pakua effect on a selective pendulum. This effect ignores all the settings of the magnets showing a southward flow of healing energy similar to the force generated by a half-sphere and a pyramid form.

WITNESSES OF COLOR.

Since each of the trigrams shown on the Pakua symbol is a witness then it can be found that it can be excited by laying it on top of a vertical radium block so that it becomes linked, like any other witness, to its distant similar.

Position 0 is a combination of black-white sometimes called by diviners "radiesthesia grey" but in Supersensonics we call it "negative green". Negative green emerges as a ray of disintegration between black and white on the sphere directly opposite to positive spectral green.



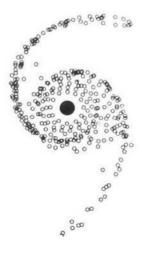
The dividing line of negative green between life and death, light and dark, between infra black and infra white.

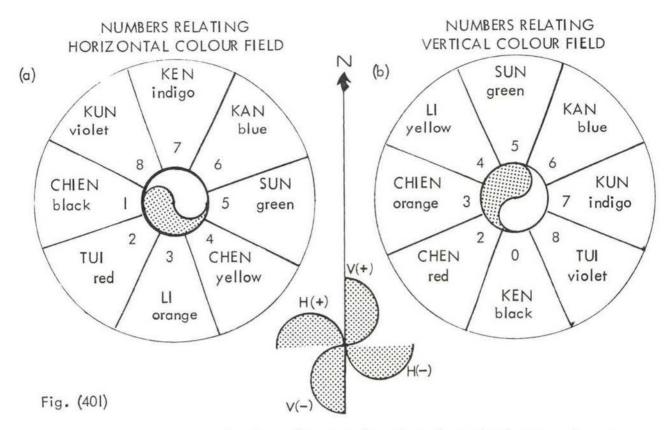
Fig. (400)

Negative green represents the shortest wave-field of the fastest frequency, much shorter than infra white and the longest wave-length of infra red. This negative green is therefore the link and at the same time the separation between the phases of opposing color polarities and shares the characteristics of each wave-field at the center of the zero where balance is maintained. The primal cause of equilibrium is found to be a narrow ray within this band of negative green which we shall explain later in this chapter on the section on the pyramid form.

Enel, a researcher who died from cancer through absorbing the wave-field unwittingly as he healed many hopeless cancer patients prior to 1951, claimed both that the cause of this disease was a patient's being out of resonance with this ray and that cancer cells could be killed by an overdose of their own vibration. It is obvious that life feeds on life and cancer cells have an independent free existence in the human body quite independent of any of the body's normal processes of immunology. They roam freely through all tissue while all living cells have the characteristic ability to adhere to each other. The negative green ray is produced when any system is out of tune with life.

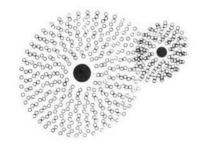
Joyful and fulfilled people never have cancer, it is the people who care too much and whose thought patterns do not accept things as they are, that generate negative green. The "Life Ray" or Pi-ray causes equilibrium through disintegration. Perfect disintegration is perfect health and we may speculate that the ray of Death and Life related to cessation of vibration or mummification for the Egyptian priest initiates who were practitioners of Supersensonic methods.

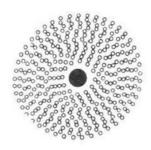




The above diagrams show the relationship between the witnesses of the trigrams used as color in divining the horizontal field which is related to the emotional chemical world of man (a), and (b) the thought world of inner-consciousness which resonates with the vertical field. The world of feeling is not the vertical world of consciousness and thought. Feelings are chemical and endocrine stimulated at the horizontal physical level of being, whereas pure thought is chakra stimulated and vertically polarized. To divine the "inner world" a diviner must not use physical witnesses such as the horizontal secondary spectrum of reflected colors because the numbers 1, 2, 3, 4 change their trigram values by the addition of the concept of the void or zero which represents equilibrium.

Primary light and reflected light are different. One is the excreta of the other after it has been absorbed, because certain of the trigrams change their colors and positions; Chien changes from black (1) to orange (3) and Tui switches places from red (2) to violet (8) and Li switches from orange (3) to yellow (4). The addition of the void modifies the whole of life since it represents the annihilation of energy or the flow of forces caused by radiation. In this respect one could call it the opposite of radiation pressure which causes light to travel outwards from its source at the center of a gravitating system. An atom is a gravitating system with a strong nuclear force pulling its protons and neutrons into the center. Change takes place in the nucleus of an atom when the pressure of radiation disintegrates its stable structure and it decays into another atom.





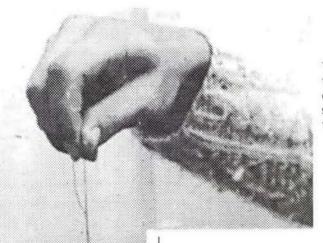
USING THE NUCLEAR EVOLUTIONARY FORCE.

The binding force at the heart of the atom is concentrated over a hundred million times more potently than its disintegrative forces and several hundred million times more than the gravitational forces which bind the solar system together. Yet the same laws governing the radiation of energy apply on a proportional scale. If the solar system were compressed by the weak aravitational force into the same space occupied by the nucleus of an atom, the binding force which holds its parts locked together in union would equal the strong nuclear force. The fact is that they are balanced by some other force which neutralizes these strong nuclear forces and allows matter to remain in equilibrium by effecting gradual changes. This was known to the early Chinese philosopher Wang Fu-chih who was the greatest I Ching scholar of the Ching period. Wang was a great seer to whom number was the phenomenal form of the cosmic law, while the image held in consciousness represented the content; Wang Fu-chih explains it thus:

Between heaven and earth there exists nothing but law and energy. The energy carries the law and the law regulates the energy. Law does not manifest itself (has no form); it is only through energy that the image is formed, and the image yields the number. (Image here equals idea, number is the intelligible aspect of law as embodied in the idea.) If this law becomes blurred the image is not right and the number is not clear. This reveals itself in great things and expresses itself in small things. Thus only a man of the highest integrity can understand this law; basing himself on its revelation he can grasp the symbols, and observing its small expressions, he can understand the auguries. In this way the art of the image and number (that is, consulting the oracle) comes about by itself.

TANTRA & THE I CHING.

The word Tantra in Sanskrit means the interwoven threads of weft and warp in a piece of cloth or a carpet. If we look at the top of a carpet there is an invisible wholeness; yet turn it over and we see clearly it is made of two threads woven at a 90 degrees angle to each other. The word for book is Ching but the word "Ching" earlier in history actually meant the warp of a fabric and the word "wei" was applied to "woof" which showed that the ancient sages who developed the philosophy behind the Tao Te Ching (The way of energy interwovenness) were familiar with the Tantric ideas of



Psychic powers?

This pendulum was also used by Christopher Hills in finding the robbery loot from Johnnie's Market. Sheriff's deputies, with the help of Boulder Creek residents, searched for several hours but couldn't find the loot. Hills found it in five minutes. How he did it is explained.

VALLEY PRESS PHOTO

positive and negative forces of nature, the Yin Yang which when combined is neutralized by the wu-wei often translated as "without action" (or standing still). A more liberal translation would be "nothing woof", or the woof of nothingness (wu) which is interwoven with the warp of all nature's actions (wei).

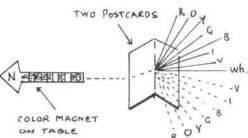
A PICTURE OF THE AURA PENDULUM WITH A BLACK BODY. Used for detection of a persons flow of Prana in the centers of psychicelectricity. It is possible to use the Chinese symbols from the I Ching as amplifiers by arranging them in the form of a linear antenna and they will give pendulum reactions at the same distances as the colors of the spectrum from zero. If they are arranged in a circle or square in the correct order then the trigrams give the same results as a linear antenna. The combination of all the main vibrational modes in one synthetic pattern complements the Tantric philosophy that all the emotions, fears, joys, pains, pleasures, etc. are not only necessary for good growth, but when welded together in detachment create the synthesis of the "rainbow body".



The evolutionary thrust is towards using our rainbow consciousness for the detection not so much of a relative good or bad vibrational field, but more towards the detection of what is good for our growth. Supersensonics is not only concerned with investigating the ancient knowledge of the traditions or uncovering archeological knowledge of the past civilizations but even more importantly, building up a completely new awareness of nature's finer forces and divining the existence of an already perfected universe that happens to surround us everywhere. Beginning with that which is immediately in front of our nose – our consciousness pouring out of our eyes and senses – Supersensonics is the science of the rainbow body, that self-luminous vibrating antenna which this volume represents in the form of wave-guides, rules and mandala discs. These tools are merely aids in discovering the polarization of the seven colors representing the psychic electricity of the life force.

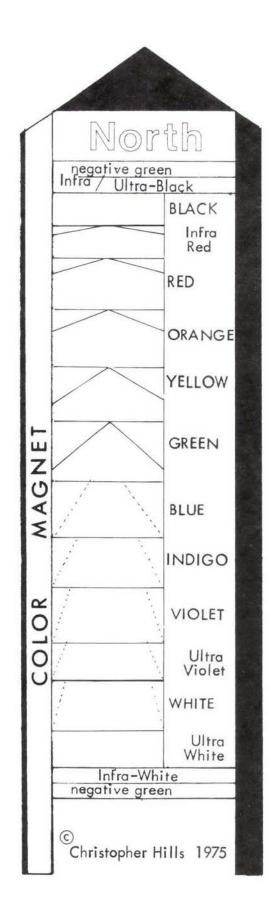
COLOR MAGNET INSTRUCTIONS

This device acts as a carrier waveguide for any substance laid at its South end. It produces the radiesthesic equivalent of a magnetic bar Antenna (+) field around North end and (-) around the Southern end. Lay the magnet on a neutral green table top and your pendulum detects a southward proceeding wave-force composed of all color waves. To test the carrier wave-guide place a'bridge' made of two postcards opened like a house roof top ridge across the southward trajectory, and the carrier's south wave-field will be broken up into its component colors as in the plan below showing



a rainbow pattern. The influence of any test sample placed in this southward flowing Pa-kua effect is travelling away from the sample southwards. If the bridge is kept in position then the sample's wavefield assumes an angular direction on the further side of the bridge, indicating its color group. By these angular diffractions the L-field of a sample can be detected. Remove the bridge and the influence of a remedy or sample is carried to a person in line with its Southward direction.

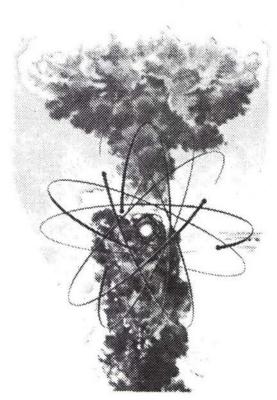
These color magnets make an excellent wave-guide for home treatments. Available in full color from University of the Trees Press, P.O.Box 644, Boulder Creek, Ca. 95006. Price \$1.00 plus 25¢ postage and Sales Tax in California.



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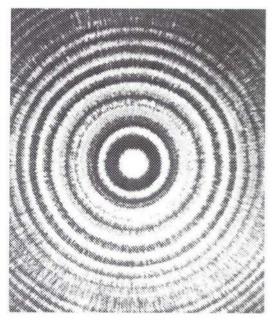
MAKING LIGHT WORK.

So far the student of the Supersensitive Life of Man has been brought through some heavy work in tussling with the ingrained concepts of science and religion which have molded our present form of existence upon the earth. This work was necessary for a hard intelligent look at where man is on the evolutionary spiral and to get some grasp of the creative forces of consciousness at work in his own constitutional make-up. For some students there will be enough work suggested by the concepts in this book to spend the remainder of life investigating the kundalini energies of consciousness which cause the state known as "awareness of awareness". But for others more ambitious to transcend the earthly life and the limitations of being imprisoned in a human body there will be more work to do on more advanced levels of consciousness which can only be talked about when they get there.



It is useless to describe a whole process and expect people to understand it without preparation or without any experience of the levels of Being which precede it. Evolution proceeds in jumps but it never misses out a jump and leaps upwards only from the solid ground of the state before. Hence my book "Nuclear Evolution" which was published in 1968 over 8 years ago deliberately missed out the steps you will find in this Volume III because I felt, or rather something in the cosmic intelligence felt, that the world was not ready to know how I had gained the knowledge of man's psychical relationship to color and light. For over 20 years I had wanted to share these explanations but something held back and pushed me into other areas of manifestation in order to prove and validate my theories in real group situations involving real people. Real people are so different to theoretical people or even people as we expect them to be. It is one thing to invent a philosophy or a religion for man, but it is totally another story getting man to put it into action. Not only does every budding political theorist have this practical problem but even Christs and Krishnas and Buddhas and maybe even higher Beings have this same problem with man - how to get man to carry out the simple instructions on how to get enlightened.

Perhaps we need to change our expectations or our methods of achieving earthly change and instead of beseeching or preaching, we give man the tools to make <u>light work</u> of what has formerly been a very heavy affair. After all, all the great gurus you can name have been through some really heavy scenes in order to know what they know or know what they don't know. The work is heavy so the first thing we need to know is how to make light work.



The way light works then is what Nuclear Evolution is all about. How to get from A to B and possibly go beyond to ABC is what this Volume III is all about. It was written with only one intent, how to understand and duplicate results with scientific tools originated by the student himself. This last chapter is to give the student of light and consciousness a map of the territory in which he will be the explorer. Like Christopher Columbus someone takes a rough survey of the new world and maps out the coastline. But the territory has to be populated and settled and roads built and the fine lines drawn at each local level of the territory by those who live in that new world. Hence Supersensonics gives you the instruments to make new maps, it gives you an idea of the forces you will encounter, their shape and colors. But you must make the journey, walk the territory on your own two feet and make your own map of life. Unless you are a pioneer of the spirit and are prepared to roll your sleeves up and do the work, you will expect someone else to go and build Utopia and then invite you to enjoy it.

Unfortunately the "rainbow body", your own beautiful colored antenna, does not come all boxed up and packaged ready for instant enlightenment. It is like a kit. The parts are all there but you must put it together with the ingredients of life as you are now living it. It is no use expecting a flying saucer to lift you off to the Elysian Fields where all this work on yourself does not have to be done.



This messianic expectation has been common in the human heart and mind for millenia, that we have only to wait and believe and it will all be done for us. But it is a totally naive expectation although understandable. The reason why it is naive is that you have already been given all that you are ever going to get - the priceless jewel of consciousness. You already have a perfected rainbow body in which you can roam all the worlds just like you roam this physical world of matter. But to know how its energies and life forces work requires some dedication not based on mere belief, but on your own ability to synthesize your spiritual life with your physical existence. Religions are useless from this point of view although all religions have had founders who succeeded in transcending the physical life. The study of theory, theology, or sacred documents, however inspiring, will not get you one inch nearer to actually contacting the divine intelligence which lies beyond the mind and its religious concepts, beyond even the imagination with all its preconceived images of what the new territory looks like.

So the tools of Supersensonics are only as good as their users, just as religion is only as good as the people who believe in it. It is necessary to understand devotion and how to use our emotions and compassionate feelings towards others, but this alone is not an evolutionary grasp of the nature of light and how it works. However, in walking through the field of light with our Supersensonic knowledge we became aware that the work need not be heavy and that light itself can be put to work as our servant. In fact our consciousness which is made of light as we have said many times in this book, is always helping. It is our magic Aladdin's lamp and our Genie is willing and waiting to spring out and make all this light work.





SYMBOL FOUND CARVED ON ROCKS AT TINTAGEL CORNWALL ENGLAND FROM PRE-ROMAN TIMES, REPRESENTING CONSCIOUSNESS

In everyday life we cannot afford not to understand how our Genie works for us day and night to give us just what we deserve. By using the tools of Supersensonics on our own thoughts and by divining our own levels of consciousness we can discover that the world with all its faults, which many see as a hopeless place, is not to be abandoned in a flying saucer but is the perfect nursery for Saints. To map our place and direction and discover the beauty of the cosmic intelligence playing through all its many Beings through Supersensonics is to make light work of a very heavy situation. The whole purpose of instruments developed by other civilizations such as the I Ching was to help in the same way. But to shirk the journey or look for an escape will not work the magic power of consciousness. Your own rainbow body of light will only work for you on the highest levels of consciousness when you do not transgress the laws of consciousness. To find out what these laws are and to find out how they work you must invest your entire Being and become single-minded.

In this chapter we show you some of the ways you can put light to work to make light work of what is usually a heavy study. However, you too must decide what you wish to do with this most precious gift of consciousness in order to be fulfilled. Supersensonics can help you to discover not only the natural world around you but all the intricate worlds within you. First you will need to have a wide grasp of what others have done to map the life forces and how they have used certain methods to bring about polarization of consciousness so that the latent kundalini or creative intelligence can rise. Then you can become an innovator yourself once you have achieved mastery of the creative forces within you. You can invent your own way to the Supreme One, based on the same royal route which is inherent in light itself. First we must know how to make light work. Then you will understand all the ancient works without strenuous efforts. You will discover the effortless effort.

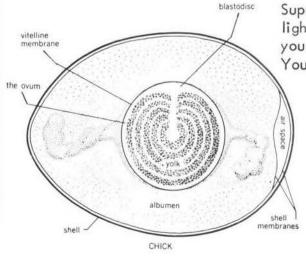


Fig. (403)

YIN YANG POLARIZATION OF CONSCIOUSNESS FIELDS.



Looking through the telescope of his transit (theodolite), a surveyor can measure horizontal and vertical angles and sight accurately in any direction. He sets the transit in a horizontal plane by adjusting the set screws at the base until the bubbles are centered in the two spirit levels above the circle. The tube below the telescope holds another spirit level for use in measuring vertical angles.

THE SURVEYOR'S EYE

The correspondence between the ancient Chinese, Sanskrit and Egyptian concepts, which were so widely differing in their models but produced the same results as Supersensonic wave-guides, reveals that there is another way of knowing the reality of nature's forces which shows the difference between the electric and magnetic vectors. It also reveals an awareness of the fourth dimension not known or even researched by modern science. The Pakua effects go far beyond our present knowledge of physics and its laws of periodic vibrations. For instance these images served also as Supersensonic witnesses for divining the L-fields of elements with fundamental rays corresponding to the sympathies in nature. Hence when held in the hand the symbol == for Thunder helps to detect a source of static electricity and the trigram = for Mountain causes the pendulum or magnet-fitted rod to respond only if the operator is looking at, or pointing at, a level higher than his horizontal eye beam from the place where he is standing. This "witness" was used by Turenne for discovering objectively the point on a mountain side which marked the horizontal level as used by a surveyor. In other words consciousness has within it the polarities which act in the same way as a spirit level or the most expensive theodolite. In fact using this witness a theodolite was designed by Turenne with radium salts as a stimulator in a tube and a telescope eyepiece attached to the tube and the sightings checked by an ordinary theodolite, and the readings were found to be more correct than optical instruments, which usually have some calibration errors.

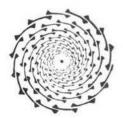
The witness of "female" was Yin or violet or polarized moonlight, represented in the south on Turenne's disc. The "male" witness was Yang or orange/red of the Shiva masculine energy and unpolarized sunlight. These witnesses were linked with the known elements of 3,000 years ago and the gathering together of all these relationships was done over long periods in the evolution of the I Ching and Tantra. It is very unlikely that anyone can really understand this book of wisdom or its origin completely without first becoming a proficient diviner. Notwithstanding the arrogance of some who think they can understand its wisdom by

acquiring it secondhand, the complete understanding will always elude the mind of those who will not discipline their faculties of intuition by proper training, as did the inventors of the proportional relationships in the I Ching. Its mystery cannot be probed deeply without the understanding of the Supersensonic structure of consciousness itself. The use of the trigrams and hexagrams as witnesses of wave-fields in our consciousness reveals that the lines of the trigrams merely marked on paper act as wave-guides for the spectrum. Placed on a single line the effect produced is the same as when they are arranged in the 8-pointed Pa-kua form.

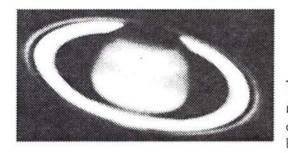
Fig. (404)

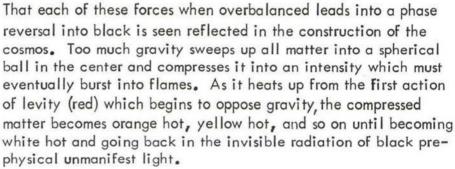
HORIZONTAL FIELD. The outer world, i.e. chemical, physical, emotional nature of reality.

VERTICAL FIELD.
The inner world
sequence of thought.



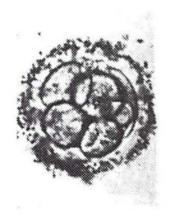
It should be noticed that the bottom line of each trigram shown in the previous Pa-kua designs is the one nearest to an observer looking at the octagonal Pa-kua from the outside. To illustrate this compare the symbol Ken with number 7 indicating the mountain, which can only be polarized one way, but the one next to it number 6 representing the heart center can be experienced the same way from outside or inside. In other words it is a witness of the center and the gravitational forces flowing towards it, just as its opposite reversal Li, number 3, representing radiance, is a witness of radiation pressure flowing outwards from the center of all systems.

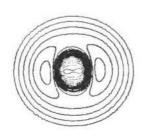




Now a strange reaction will take place if we detect or look at these images from the inside instead of the outside. If we place our consciousness outside the Pa-kua system it is as if we separated our mind from our own consciousness and then created with our consciousness an external reality with ourself as the outside observer. But if we test the trigrams from the center within the system there is a phase reversal and violet female polarity comes to the south and the dark principle goes to the north. It is as if the observer has changed his total reality; we discover that by observing any of nature's systems from the center within, the diviner becomes a wave-guide for the energies of that system in his experience of consciousness!

This is the most important discovery of Supersensonics: that egocentric man cannot experience the I Ching completely, nor the universe, nor his real self, until he stops trying to experience objects, knowledge, his fellowmen and the whole of Nature as separate from himself – his own consciousness. Until a person can identify everything which happens good or bad, light or dark, as a disturbance in his own consciousness at the center of Being, he cannot experience it as it really is, but only as an "onlooker". Furthermore he cannot experience another person either except by looking out from the center of that person. This is what the American Indian meant in his prayer, "Before I condemn my enemy, let me walk a mile in his moccassins."





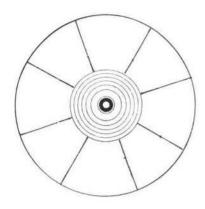


Fig. (405)

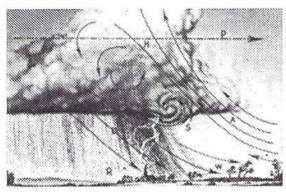
This 8-sided Pa-kua symbol made up of trigrams acts as a wave-guide in the same way that the concentric circles of color drawn on paper with the radii of 13, 19, 25, 50-55, 62, 68, 80 act; this in turn gives a Supersensonic detector the same result as the 8 nuclear trigrams lined up as a single line of an end-fire array for the full spectrum of radiation. The conclusion is that all these rules, wave-guides, I Ching symbols, geometric representations are merely One thing in different disguises - the spectrum of human consciousness reflected in the models of physics and the interference lines of the spectrum as much as in the diviner's Supersensonic antenna of the biological electrical nerve-brain chakra system.

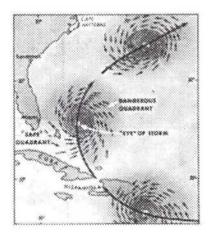
In some way the Pa-kua symbol owes its wave-field properties to the collecting of a particular wave-form from the atmosphere and total environment and re-emitting it to a person who is conscious of its significance. If there is no consciousness of the existence of something, it is not experienced by the individual. This is not an obvious statement because many times I have demonstrated all sorts of sensations to physicists who did not know they existed in their hands until they were told. Sound vibrations can be felt in the hands from several miles away provided there is sender/receiver consciousness tuned to the incoming signals. Walking through a noisy government plant manufacturing secret lasers, I was able to demonstrate above all the din that these signals could be perceived from the other side of the plant 1/3 mile away.

SERIALS.

A fuller treatment of serials will be given in Volume IV but as a matter of interest concerning the I Ching we can detect the "Pakua Effect" in its serials. The taking of a serial was explained in the early chapters as allowing the pendulum to rotate a given number of times until it became saturated and went "dead". Let it be tested that the Pa-kua 8-pointed octagon gives a serial of 13 for living life and 5 for light. It will be recalled from Chapter 5 & 6 that a compass needle when its magnetic field is examined with the magnet-fitted pendulum or rod, produces a fixed number of oscillations before altering its movement and this is known as the diviner's serial number. Over the compass is found, first the serial 13 observable over all living organisms, and then the serial 5, representing radiation. The effect over a Pa-kua produces the same serials.

TELLING THE WEATHER BY TRIGRAM.





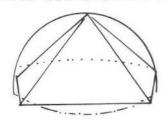
By placing certain symbols on a vertical radium block it is possible to do map dowsing and determine the weather over any particular part of the map by using the trigrams as witnesses. For instance, the trigram number 2 for "vapor" stood on any point on the map with the pendulum magnets aligned horizontal would give a negative reaction to clouds. The depth of cloud cover can be determined while the rotation is (—) negative horizontal and the depth of space between the earth and the cloud, or between one layer of clouds and another, could be determined while the rotation is horizontal positive (+)

To experiment with this a meteorologist places the radium block on the end of the map at a place which is in the observer's own sight beam, with clouds being over the spot in the sky above. Move the pendulum so as to be over the radium block and count the number of clockwise rotations. At a given moment, after so many seconds, the pendulum reverses its motion and assumes an anti-clockwise rotation. If there is another cloud above the first cloud seen, then the number of positive rotations represents the space between them and then more negative rotations represent the depth of the upper cloud. Several clouds one above the other will produce alternate periods of negative and positive, with a continual positive when the last cloud layer has been passed. By counting the number of rotations per second one can get a relative depth of each cloud.

After practicing with the visible clouds over a map, the next step is to use the witness of "vapor" to find unseen distant clouds of different heights over different places on the map. Similarly the witness of "wind" can be used to obtain the direction of the wind and gradually to build up an isometric map of the weather. For finding the precipitation level of the water in the cloud one uses the witness of "water". If it is raining at any place the pendulum immediately produces negative rotation. Another peculiar feature that can be detected selectively by the operator over a Pa-kua symbol is the southward pendulum oscillation when testing from the center to the outside of the figure (398) in our consciousness. This radiation persists even when the pendulum magnets are adjusted to select east-west flow - i.e. aligned horizontal but with poles of the negative inverted to the positive. Under all normal conditions there would be a masking of all oscillations except those of east to west. This southward emitting of a wave-field is what we term the "Pakua effect".

CHECKING THE RESULTS YOURSELF.

PA-KUA EFFECT GIVES THE SAME RESULTS AS PYRAMID



HALF SPHERE ACTS AS

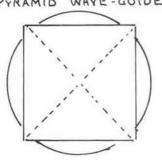


Fig. (406)

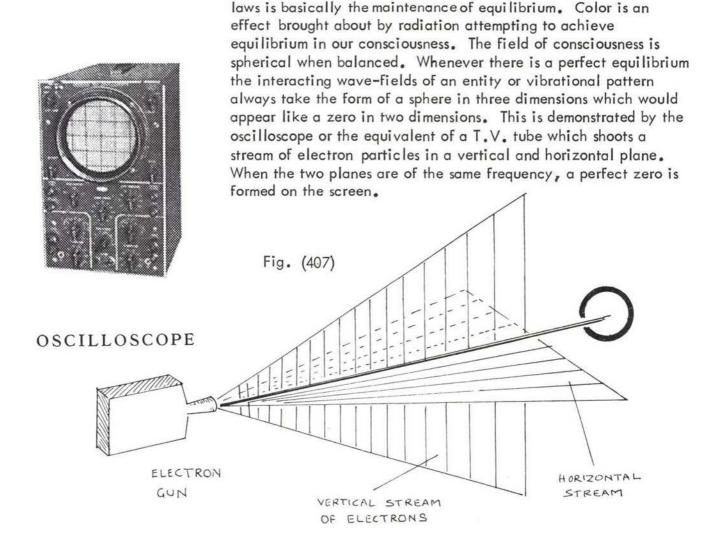


Now let the diviner set the pendulum magnets for east-west flow with inverted horizontal poles and test the 8 trigrams drawn in a single line as in figure (404). The pendulum still oscillates from the center of the line to the south. Now turn the paper around so that the lowest number is pointing south. The operator can trace with his detector an invisible semi-circle or hemisphere to the south of trigram number 4 where the field rises to a half-sphere of 20 cms height where there are nodal points with negative rotation. The south oscillation from the center however still remains from the trigram number 4 but there is no reaction of any wave-field to the north. If we check the vertical field with the magnets vertical with the poles in inverted position we still find a southward oscillation indicating a primal wave-field which is unpolarized. This Pakua effect, like the pyramid effect and the half-sphere which lie invisible at the back of all wave-guides, can be explained in terms of color harmonics which is nature's way of achieving balance.

It can be summed up in the law which applies to consciousness as much as anything else. "Everything which absorbs re-emits at frequencies proportional to those absorbed. Perfect disintegration is important to perfect integration." It is reflected in the human biological system as much as in the wave-guides of Supersensonics. It is this law of balance which lies at the back of perfect health or perfect mind. We express it thus: perfect elimination is essential to perfect inaestion; inaestion of physical nutrients or mental nourishment is not as important as their elimination or re-emittance. The whole process of ingestion, whether of light energy, of cosmic radiation or of food, is dependent on digestion. This is also important to assimilation but without proper elimination the process of assimilation is not possible. The words of Christ should ring in the ears of those who believe good health depends entirely on good food and good nourishment. "Pay no attention to the food you eat or the clothes you wear, but pay attention to what consciousness is doing. Pay no attention to what goes into the body but pay attention to what comes out."

It cannot be repeated enough that proper mental and physical elimination, like proper disintegration of all the material elements, is the essence of stability and balance. The forces of nature are all present in our consciousness because each human being is a wave-guide of seven concentric rings of polarized light ingesting consciousness as life. Light of the cosmos, i.e. radiation and consciousness are ONE and the same thing. To discover one is to discover the secret of the other. To discover it by reading or philosophy is not possible; we must experience it directly. Hence these tools of Supersensonics must be used to achieve perfect elimination and perfect balance of the Yin-Yang Shakti-Shiva or, in Supersensonic terms, void-light. In the center of the perfectly balanced system there is the annihilation of the Self-sense - the void. All things are in resonance with that zero wave-field.

The principle of resonance which is at the back of all harmonic



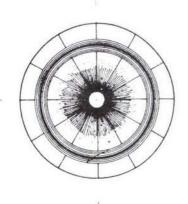


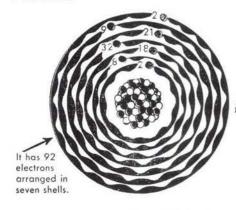
Fig. (408)

THE SECRET OF HEALTH.

This resonance between the two planes of polarization creates equilibrium and any surplus energy is soaked up or thrown off in order to achieve balance. The circle seen on the screen is just a cross-section of a sphere which has found balance.

Illness and disease have their imbalance shown in color harmonics as do the health and balance of a normal human being. Each organism, whether bacteria or virus, has its own spectral harmonic and can be destroyed by overdosing them with their own resonant color radiation. To destroy a microbe one only has to upset its normal vibrational field related to its health pattern. The positive wave-field, the negative wave-field and the balancing principle of resonance are reflected in our modern knowledge of nuclear forces represented by protons, electrons and neutrons, the neutronic charge being the force of inertia related to gravitation which holds all forms together at a center. However, science has not yet discovered the full meaning of the principle of proticity and is more familiar with electricity. Proticity is related to levity and light and is the cause of radiation of the L-fields detected by the diviner's reaction. Modern science has learnt that in nuclear fission a great deal of this proticity is released by annihilation of the stability caused by bombardment with the inertial neutronic forces. In Supersensonics we are able to measure all these forces in proportional numbers on a wave-guide because pure consciousness can interact with these radiations as they are found in nature without disturbing them from their balanced state of existence. It is this pre-physical consciousness we must investigate with the tools of Supersensonics.

Nucleus of uranium-238 has 92 protons and 146 neutrons.

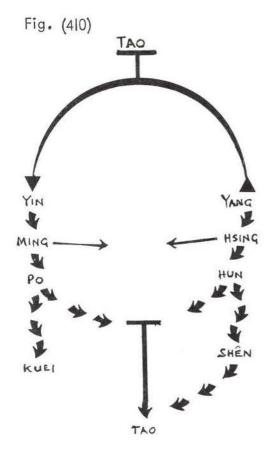


THE MOST COMPLEX ATOM FOUND IN NATURE IS URANIUM



Fig. (409)

NOU OR NOUS OR AKASHA.

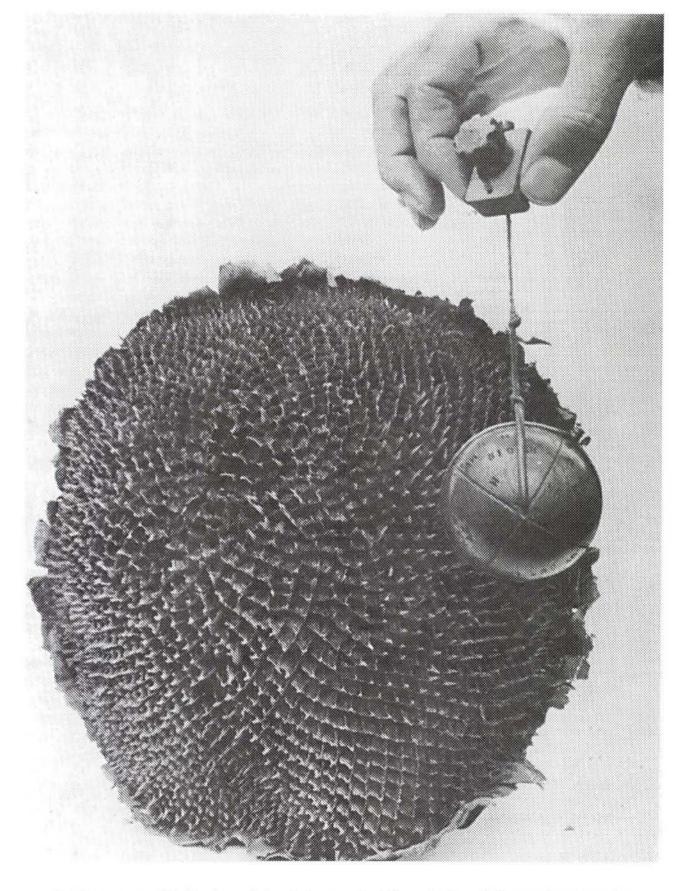




The ancient Egyptians had a word for pre-physical matter which was NOU, existing before the creation of the patterns and forms in nature. The symbol for this in the hieroglyph was a spiral, a representation of "vitality". The Greek word NOUS represents the same primordial consciousness or intelligence. The word nous has been used in some parts of England for centuries since the Crusaders came back from their 100 years of fighting for possession of the Holy Land, and it is used as "intelligence" of the fundamental sort. In Webster's dictionary it is defined as an intelligent purposive principle in the world. It is this "intelligence" which was regarded by the ancients as always seeking a state of balance. In Sanskrit it is called Akasha, which means the "unshining light". The Hebrew teaching gives the name of the creator as YOD-HE-VAU, YOD the positive principle and HE the negative principle balanced by the letter VAU representing the functions of union-separation, integrationdisintegration. The same principle is found in the graphic Chinese representation of two interrelated spirals of black and white symbolizing the union of the opposites in the Yin Yang symbol. All these ancient cultures arrived at that knowledge of nature's balancing forces by Supersensonic methods and now it is all being borne out by modern materialist scientific evidence which is slowly confirming what man has known already for millenia.

Supersensonic measurements sometimes show different results from those expected by science. Ordinary observation by physics would say that infra red was a color harmonic of heat vibrations, yet the Supersensonic measurement by para-physical means shows an infra red harmonic for cold water and an ultra violet one for warm water. Hence we may be obtaining complementary readings shifted in phase 90° when detecting color harmonics. This phase reversal is connected in the case of an atomic balance rule by the addition of a stimulation field such as the radium block or magnetic compass.

Fig. (411)

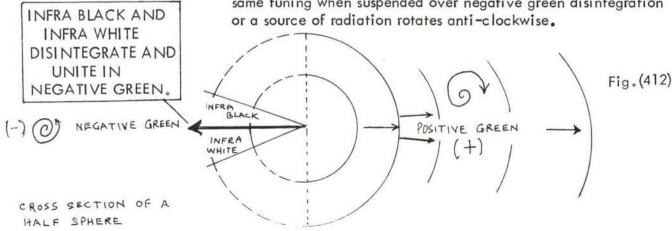


A Chaumery and Belizal pendulum taken against the spiral seed dispersal center of a sunflower showing left-hand and right-hand spirals in nature. The symbol of Nuclear Evolution, copyrighted in 1959, is taken from this common cosmic design in nature and acts as a diviner's "representation" or "witness" for "life force".

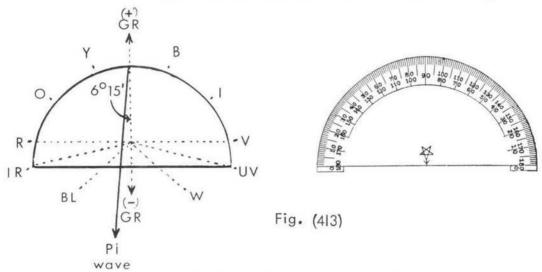
If we check, for instance, fresh rain water we find that it responds to all color harmonics at all L-fields showing it is "alive" whereas tap water loses some vitality. However, this can be counteracted by swiftly rotating a bottle of water to produce a spiral vortex or by shaking it up and down. The test on a balance rule shows that the tap water by this oscillation has changed its properties. It is obvious then that the wave-fields of Supersensonic detectors are guite different from those of ordinary physicists as they will travel along non-conductive materials. Also the ordinary electronic electrical radiations often falsify the wave-field results, by masking the readings of the true L-field, and thereby act as an insulator of the east-west flux. Therefore an electrical conductor of polarized physical forces manifesting at right angles to the paraphysical east-west plane may be acting as a filter or inhibitor of a Supersensonic waveauide. It is also obvious that the wave-fields detected by Supersensonic means are thought fields, which are associated with the electrical magnetic fields, but are not the same thing. In the same way light and color are associated with both the electromagnetic field and the thought fields detected by Supersensonic instruments.

NEGATIVE GREEN.

The identification of a mysterious property of a sphere by Chaumery and Belizal was called "negative green" because it was detected on the surface of a sphere at a point diametrically opposed to the position of "visible green" which Chaumery and Belizal called "positive green". This negative green was also discovered by the earlier radiesthetists as "radiesthesia grey" which was the position on the Fundamental Ray Rosette test between the positions of black and white. Therefore it was the ray of perfect disintegration on the Turenne disc. The pendulum rotates clockwise over visible green and the pendulum with the same tuning when suspended over negative green disintegration or a source of radiation rotates anti-clockwise.



The same investigators found that a half-sphere placed upon a support with the curved side uppermost produced points upon the surface which modified the effect of the color angles. This resulted in the position of a negative green band being sandwiched between the colors black and white.



On the flat undersurface of the half sphere the colors of the invisible spectrum were detected whilst the harmonics of visible colors were detected on the upper curved surface. This meant that at the center of the half-sphere a much purer wave-field of "negative green" was obtained. Next came the discovery that a pyramid form produces exactly the same results as a half-sphere, with positive green at the apex and negative green isolated at the center of the base.

SYMBOL CONSCIOUS NESS

SYMBOL CONSCIOUS NESS

SYMBOL OF CONSCIOUS NESS

CEREMONIAL

REPRESENTATIONS OF DIVINER'S ART

SERPENT

Fig. (414)

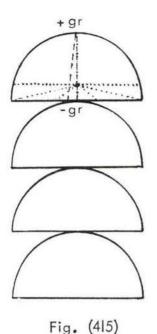
ANKH"

DIVINING

ROD

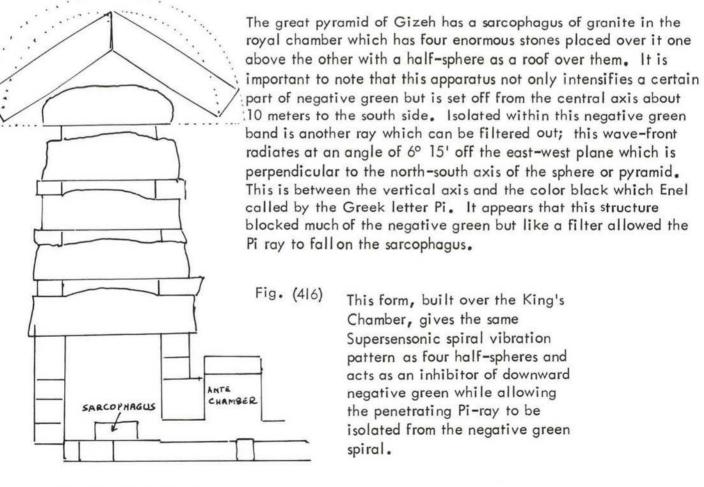
By testing various other objects used by ancient civilizations for religious purposes, Chaumery and Belizal found that not only the pyramid but many other objects of antiquity from cultures separated by many thousands of years, emitted strong radiations of negative green wave-fields. Particularly objects used for religious purposes such as the statues in the Easter Islands, the statuettes and ritual objects of ancient Egypt and the Yin Yang symbol, all showed that mankind had known how to employ this force for specific purposes. By multiplying the number of forms producing this force a wave-guide increases the intensity of the radiations by producing end-fire arrays.

I-S ANTENNA
WAVE-GUIDE RULE
USED IN CONJUNCTION
WITH ANKH ROD



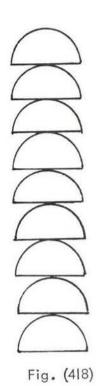
Prior to 1950 in France Enel used this energy for treatment of cancer. He assembled a battery of four half-spheres which he said was the limit for employment of this force without danger to a patient. An increase in the number of battery arrays produces a harmful radiation for a human being although Enel employed up to 9 hemispheres of about 10 cm diameter as limited shock treatment. He claimed that this number could mummify a piece of meat or fish in a few hours. Increasing the number of arrays still further results in a shorter time for the negative green to produce mummification.

There are literally hundreds of pyramids in Egypt all being royal resting places for the dead. The word itself PR-MS means to "arise at birth" and its energies represented the earth planet rising out of the cosmic ocean at the time of creation, thus the pyramid is a form or pattern of energy symbolizing rebirth resurrection. However, the Cheops Pyramid was constructed as more than a burial chamber.

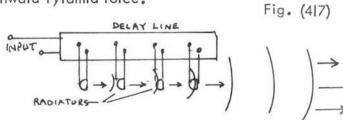


This form, built over the King's Chamber, gives the same Supersensonic spiral vibration pattern as four half-spheres and acts as an inhibitor of downward negative green while allowing the penetrating Pi-ray to be isolated from the negative green spiral.

AN ANCIENT WAVE-GUIDE

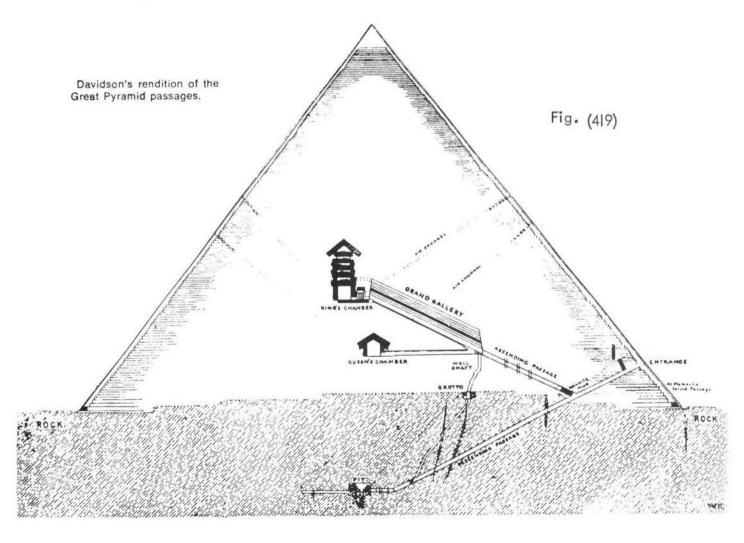


Enel, a pseudonym for a French researcher, used this battery of nine hemispheres to simulate the downward Pyramid force.



END-FIRE ARRAY ANALOGY
WITH MODERN MICROWAVE QUIDE

The pendulum reveals that the whole of the king's chamber sarcophagus is not only irradiated by negative green rays produced by the form of the pyramid but also with a Pi ray concentration derived from this strange array of four identical elements superimposed on each other to form a battery of endfire arrays.



PYRAMID ENERGY.

Much interest has been shown in using the pyramid energy as an aid to meditation, mostly by people who know nothing about meditation or radiesthesia and are better at promoting commercial sales than research. The fact is that beginners when sitting under the apex of a pyramid do "feel" something happening inside their head and in their spine. Usually these are people who either have never practiced meditation properly under the direction of a master or who have never experienced any concentrated feelings before from sitting down to meditate. All these effects are dangerous, not only from the psychological viewpoint which is that a self-suggestion of increased spirituality by these means is of negative value and merely feeds self-righteousness, but they are also psycho-physically harmful, because of the downward rays of negative green energy.

Fig. (420)

Negative green is a powerful energy which flows in the opposite direction to positive green. It is negative green which is the cause of most sickness and mental disturbance because it resonates with the flow of downward psychic electricity. This downward flow is the opposite of the flow which reaches up to the magnetic part of the mind. The object of all yoga is to get the magnetic force of the mind to unite with the magnetic force of the cosmic manas. The upward flow is called Radha and the cosmic magnetic force is called Krishna and these forces have been symbolized as "Gods" by the credulous in the same way that Christians have personalized Christ as God. However, the intelligent yogis and researchers have always stated that such gods are creations of the magnetic power of the mind and have no real existence except as cosmic forces. To get Radha to flow upwards to Krishna requires Pratyahara which is the upward withdrawal of psychic electricity from the lower sensory vehicles of the nervous system, channeling of it to the heart and then sending it on to the brain. In this way it is sublimated for higher purposes.

This downward flow which can eventually lead to obsessive desires and abnormal sexuality or reversal of sex drive is present in everyone who allows it to function or does not attempt to eradicate it. This downward flow is known in yoga systems by the Sanskrit word "Apana" and it is the psychic centrifugal force which moves through every system of material particles, disintegrating it in the process of decay while the opposite force integrates, synthesizes and completes the unity of the system.

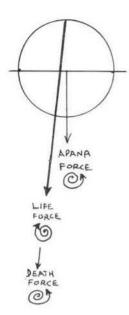
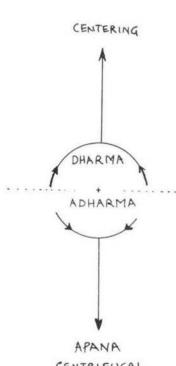


Fig. (421)



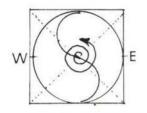
CENTRIFUGAL FORCE IS DISINTEGRATING

Fig. (422)

When applied to the forces of consciousness in meditation the Apana is the opposite of synthesis and leads to restlessness and lack of concentration. Those who feel a resonance with this force and mistake it for meditation are those who find it difficult to concentrate or meditate and need the help of gimmicks. But they could, with the same energy and desire and power of selfsuggestion, sit down and give themselves a much more powerful feeling of energy moving inside their beings, which would lead to peace and stillness at the center, rather than restless expansion of centrifugal energies. Ask any person to put one of their hands over the top of your head, over the crown chakra, and the other at the back of your neck and then change over hands and alternate them in the two positions over a period of a few minutes, and you will feel much more than any pyramid meditating tent will give you. It will also mean less karma for the ignoramus who buys and markets these devices. There is nothing wrong with self-hypnosis which is a branch of yogic knowledge dealing with identification of the mind and the power of self-suggestion, but there is something wrong in dabbling with mental forces before we understand them. It is the psychic equivalent of a nuclear power station being run without any knowledge of nuclear wastes or nuclear physics. Many spiritual adepts fall into this downward current and become sexual aberrants because it is intensified by halfunderstood occult practices.

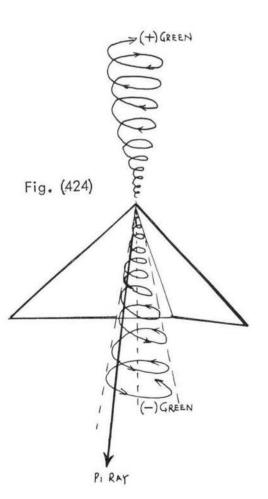
Anyone who takes a proper course of instruction in concentration and meditation and studies the nature of consciousness and ego formation would know instantly that you cannot get "high" meditations from some gimmick which merely hypnotizes you. It will wear off as soon as you stop doing it. Through your self-desire for shortcuts you can believe that this "feeling" is meditation or that you are actually getting much higher when in fact you are actually getting lower through self-deception and "negative green" energy. The positive green energy coming from the top of the pyramid is good life-force flowing upwards and if you sat on top of the pyramid it would be healthier. But experienced meditators would be able to give themselves a much stronger "feeling" merely by sitting down and doing a proper concentration exercise instead of doing some harm to their health.

The fact is that every person has the same "pyramid force" flowing through them at all times; it is either enhanced by concentration or frittered away by psychic disintegration. The results are according



CURRENT OF PYRAMID

Fig. (423)



to the quality of our consciousness, which either identifies with the "form" or allows the form itself to affect our consciousness. It is possible for the skilled consciousness to negate the effects of form, but for the unsuspecting individual all material life is presenting itself to us and affecting us through its form.

Another way of saying this is that <u>form</u> affects consciousness in the way that consciousness responds to it, rather than having an absolute effect on everyone alike. A pyramid to one person will give preservation of life-force and to another, whose consciousness is always being pulled down into the sensational world, it will give stimulation, excitement and disintegration which increases the ageing process and quickens the running down of the system. It is a matter of how we resonate with the <u>form</u> and the energies absorbed by it which determines the benefits. The form is both centrifugal and centripetal and it is our consciousness which determines the results.

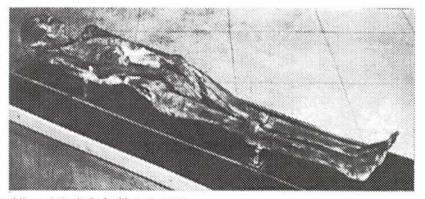
Sitting under the apex of a pyramid is one way to dehydrate yourself through elimination of the life-giving forces. A test of this is to take two cultures of bacteria and put one under the pyramid a little bit to the right of the vertical, say 10 degrees, and leave the other outside the pyramid or over its apex. This test will show that negative green arrests life-force.

The reason for this off center orientation is that negative green is not all bad. There is within it at an angle of 6° 15' a narrow band in its composition, a strange life-giving and life-taking force that we call in Supersensonics the "Pi-ray". We are safe from its effects if we resonate with the Pi-ray and understand that all our faults as well as our graces will be enhanced. It is a doubleedged sword because it is both the cause and cure of cancer cells. The reason why a cancer cell moves freely through a living body is because it is out of tune with this life ray we call the Pi-ray and does not adhere to any of the normal cells. In other words if you are already good and whole and healthy physically and spiritually then you will get better by tuning to this ray. However if you are weak-minded and stupid enough to believe all the claims made by people who sell pyramids for meditation and who know nothing of meditation, then you will get more stupid, more self-righteous. By understanding how to isolate the Pi-ray both cancer of the imagination as well as cancer of the body can be avoided.

POSITIVE PYRAMID

When the Egyptian initiates discovered that they could isolate the Pi-ray from the negative green battery and it was equivalent to the life-force and consciousness, they spent several thousand years developing different uses for it, through the metaphysical schools. Their knowledge developed in the same way that modern knowledge will expand as people find new uses for atomic energy for millenia to come. Unless there is some selfish misuse of this knowledge, it will also be so with the powers of our consciousness revealed so scantily in this book of Supersensonics.

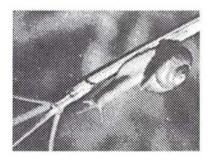
The first practical use the Egyptian priests thought of was how to preserve the soul against death. They knew that the human body is mortal and that it will inevitably die, but they found this strange force of life and death we call the Pi-ray could help to prevent decay. By giving the energy of the life-force to the physical they believed it would act as a witness and broadcast the energy to the soul. The negative green energy promotes the cessation of cell life and activates what is called the mummification process. If the dead body is encased in pitch and bandages to stop evaporation of water, then the dessication is halted, but the Pi-ray does not allow bacterial decay. After pickling the body in salt peter and spices they found that the Pi-ray would keep the cell structure fresh by preventing further organic life. The moisture-proof bandages prevented dessication or drying out of the flesh and the Pi-ray arrested the normal disintegration which follows as soon as consciousness leaves the body. Between 1960 and 1965 the writer visited all the major museums in the world which possessed an Egyptian mummy, to find out if the theories of their chemical treatment advanced by various scholars who had scientifically examined the mummy wrappings and flesh, had ever been tested by carrying out the mummification process as they explained it. Not one had any more than the explanation, and the facts were that not one of them could prove by any duplication that any such actual tests of mummification had been done.



Inside the case lies the mummy. Endless strips of linen cloth, daubed with gum, were wrapped around the body. The body itself was first treated so that it would not decay. Embalmers emptied and washed out the body cavities and then but the corpse into a bath of saltpeter for 70 days.



Fig. (425)





This led to the writer's carrying out his own experiments with negative green energy based on some observations by M.A. Bovis who found the dessicated remains of several animals such as a dead cat and some mummified rats which had strayed into the King's Chamber and dried up. Another fact which mystified the writer until he stayed overnight in the Pyramid and became familiar with Supersensonic methods, was the curious practice of the ancient initiate priests of deliberately sprinkling antimony powder on the floor of all their sarcophagus chambers. It was not until the writer discovered a diviner's reaction of antimony in the presence of light and bismuth that he realized that the ancients knew its properties, not only as we do today in the use of thermocouples, but also as a generator of a static field force for creating ionization of air molecules. This led on to the far greater discovery that any human being has the capacity to arrest life or give life through the Pi-ray. At one point the author was told in 1960 in France that by using the Chaumery and Belizal pendulum, Enel had been able to rotate the life energy of the Pi-ray in a counter-clockwise direction and thereby withdraw the life-force from several snails until they either died or went into suspended animation. By rotating the pendulum clockwise, those snails whose life-force was suspended, were restored to life. Experiments showed that humans were also capable of suspended animation in deep trance and this led on to the author's research into yoga.

Experimenting further with this knowledge, the writer found that not only snails but most cell life responded to these powerful energies when correctly tuned on a C and B (Chaumery and Belizal) pendulum. Once in 1968 three specialist doctors examined a fibroid tumor growth several times before deciding on a hysterectomy operation and the writer was able to completely dissolve it within three weeks, so that the hospital bed that had been booked by the three specialists had to be cancelled because the growth had completely disappeared. The Pi-ray had not only arrested the growth but eliminated the cells of the tumor from material existence by withdrawing life from them. The tumor had taken four years to grow and had been seen and examined during that period by six doctors who all stated there was no medical alternative to its complete removal.

NON BIOLOGICAL USES.

The ancient Egyptians found, however, that for the purpose of navigation the forces set up by the large mass of the pyramid generated an intensity of the Pi-ray which could be detected over several thousand miles. By pointing their divining rods in the direction of the pyramid they could always get a bearing as a fix in the same way that we use "Loran" or radio direction—finding equipment today. The pyramid of Gizeh we call the great pyramid is constructed differently from all other pyramids in Egypt for this reason.

There are over 400 pyramids in Egypt, all containing royal resting places in accordance with the Egyptian philosophy that not only the soul was born again but that it could maintain contact with the energies of creation until its resurrection. The Py-ramid was a representation of the first form of life which rose out of the waters at the time of creation and hence the meaning of the hieroglyph PR-MS is "to go towards rebirth". All these pyramids and those of South America are constructed as funeral chambers except the Great Pyramid of Cheops at Gizeh. The ceremonial rites celebrated in this particular pyramid of Khufu consisted of the last initiation, when the neophyte became an adept by being placed in the King's Chamber in the sarcophagus and there being subjected to the radiation of the Pi-ray. After many years of training and spiritual tests, the ray of Life and Death was used to test the initiate's detachment from worldly vibrations. The earth's rays reflected from soils and water tables and some forms of crystals produce the harmful effects of negative green caused by the decay of cosmic rays in the earth's crust, but the pyramid generates this downward flow of negative green much more intensely, hence the length of time one could withstand the effects of Telluric rays was an indication of purity of consciousness. The religious symbol for this ceremony is the weighing of the heart on a balance with a feather on the other end.

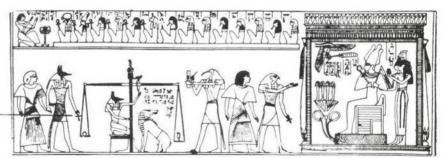
Fig. (426)

NOTE THE ANKH &

DIVINING ROD

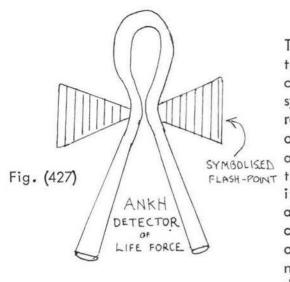
SYMBOL OF CONTACT

WITH THE LIFE FORCE



Bettmann Archive

Portion of Egyptian Book of the Dead. To the left a soul is being weighed, one of the tests to be passed before the soul entered into fellowship with Osiris and the other gods



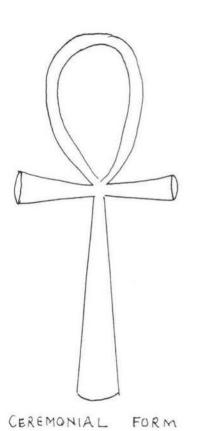


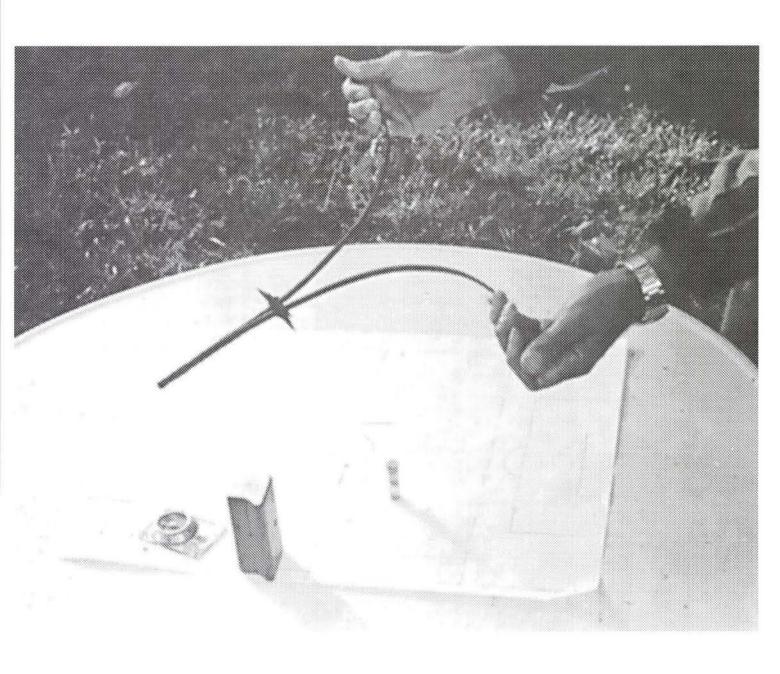
Fig. (428)

These "earth-rays" of negative green can be overcome by the tuning to the life ray of continuous creation which gives birth to consciousness itself. This philosophy of the "life ray" again is symbolized by the ANKH, a ceremonial form of an early divining rod. It is obvious that Christ was an initiate of this school, not only because of his philosophy of life which pointed in all his allegories to the "life force", but because of his powers of transferring this life force to others and in his ability to withdraw it from the fig tree. Again his ability to determine the direction and location of an object or even a person or a thought was a common practice of this school of adepts. Thus, in the expansion of the Egyptian empire it came to be used as a navigational aid, not only for location of the royal ships at sea but also for the detection of desert caravans and as a source of direction finding. It is possible for the student to construct a divining rod with two cylinders attached with helical lines drawn at certain angles which will duplicate the "pointing" ability of some dogs. The sense of smell of the hunting dog is often coupled with a directionfinding ability which explains why the dog was used in Egypt as a representation of this aspect of divining ability. Holding a witness of a rabbit with this divining rod, tuned to parallel helicoidal lines on two cylinders, enables us to point directly at the rabbit in the same way that the dog's nostrils, with the spoor as witness, point straight at its quarry rather than follow the trail.

To construct such cylindrical shapes as amplifying aids, we can take a cardboard roll or a broom handle and cut off about 4 to 5 inches. Ruling black ink lines on paper stuck on parallel to the cylinder's length we find that the axis radiates out positive green which is the visible green we see all around us in nature and in the spectrum. Parallel lines drawn as circles at right-angles to the cylinder's axis create the radiation of negative green which is the invisible radiation of disintegration. The remaining colors can be harmonically produced by ruling parallel lines differing from each other by 15 degrees inclination from the axis. Thus these cylinders can act as representations of visible or invisible portions of the spectrum.

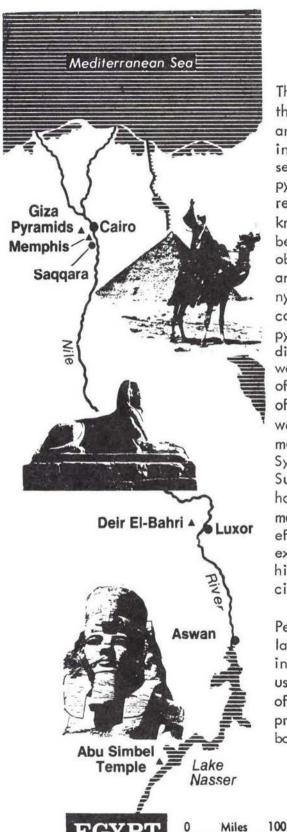
This is custom made 19"long in low density 3/8ths polyethylene rod at \$12 plus \$1.75 for each cylinder. Lines can be ruled for any angle but are supplied for (+) green if unspecified colors are ordered.





This map is activated by the presence of a Turenne Radium Block orientated vertically over the plan.

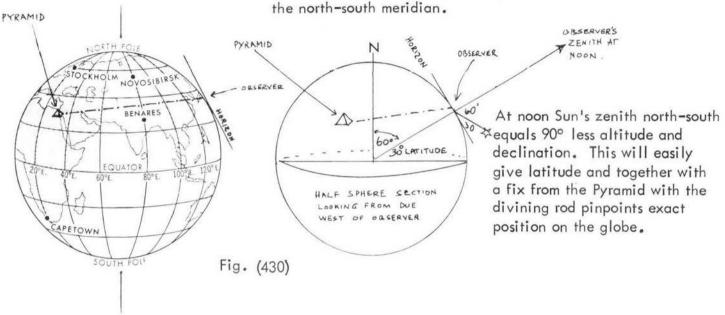
The map represents a scale drawing of a territory where a mineral substance is buried underground. The phial with a witness of the mineral is placed on the map with the Hefigar or Radium Block in order to establish resonance between the location of the mineral and its wave-field and the diviner's reaction on the divining rod. Sometimes the spot can be exactly pinpointed under research conditions and sometimes there is interference of unconscious thought fields which give only random results. Map dowsing is considered intuitive, either telepathic if the location of the object is known to some mind, or clairvoyant if unknown to any living mind as in the double blind experiment.

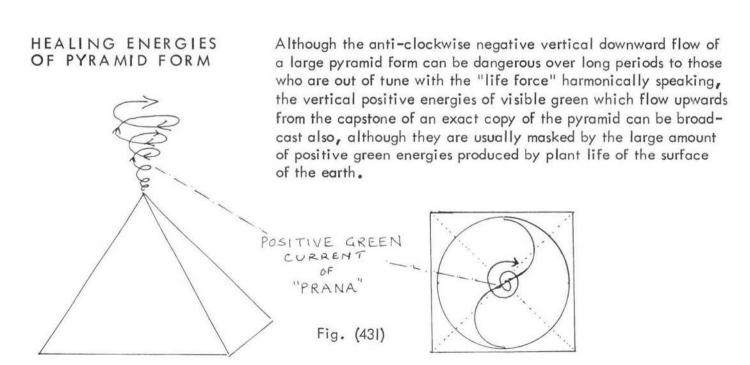


The ancient Egyptians having created one spot upon earth where the negative green radiations were many times as intense as anything found in nature were able to use it by tuning to these invisible radiations between white and black and applying this selective cylinder or rod for scanning the direction of the pyramid. This enabled their navigators to pick up the diviner's reaction well known as a "radiesthesia tingle" or in radionics known as a "stick". Both reactions occur when there is resonance between the thought of an object or its witness and the actual object sought at a distance. This phenomenon can be even more amplified by using a rod of pure carbon or a dieletric rod of nylon and holding a magnet with it. The rod of power is a common symbol on the hieroglyphic pictures taken from the pyramids and temples of Egypt. It was invariably used as a divining cylinder accompanied by the divining ANKH rod which would dip or rise when the direction of the pyramid was in line of sight, even though the actual physical pyramid was thousands of miles away below the curvature of the horizon. This instrument was also used for divining the intentions of enemies, their troop movements, and as the direct equivalent of the "Early Warning" Systems" developed by electromagnetic man. It is amazing that Supersensonic Man with all his gifts died out of existence and has now been replaced by the new magicians armed with mathematical representations instead of divining rods. The effort required in personal training and purification of intervening extraneous thoughts is perhaps the reason why mankind lost a highly developed art employed in the building of a superior civilization.

Perhaps the decay of the Supersensonic man came because the later periods became obsessed with death and began to believe in the divining instruments as external objects and powers to be used for selfish purposes. The pyramids gradually over thousands of years reverted back to being used merely as burial places to preserve the body of the king so that he could personally come back and claim it when he reincarnated again upon earth.

This spiritualist philosophy, although not a factor in the building of the Great Pyramid, eventually outlived the practical uses for initiation and maritime radiational broadcast of direction when the Empire declined. However, this form of broadcast coming through the central chamber of this giant generator at its center of gravity, with the king's chamber placed directly in the path of its Pi-ray, was used and still can be used to produce the psychophysiological diviner's reaction of the rod over maps. The Egyptian navigators travelled all over the known world as far as the American continent and even today this ancient monument can be used to get a cross bearing with the sun when it crosses the north-south meridian.





THE SPECTRUM PENDULUM

Contains a phial of Radio-active salts in a harmless solution such as Tritium or Radium. The Aura pendulum looks the same but does not contain any source of stimulation and is a radio-magnetic detector not radio-active.

Fig. (432)

1.13.

BL I.R

R

0

4

B

VI

U.V

W

A photograph of a sick person positioned above the capstone of a pyramid form will subtly broadcast positive green energy to that person irrespective of distance. If one uses the healing power of the Pi-ray, it must be filtered out of the negative green band by means of a skillful tuning device such as a color pendulum which employs a spectrum marked with radiesthesia arey (or negative green which is invisible color) which lies in between infra black and infra white. To create these infras requires a deeper study of the principles which are merely outlined in this book, but which are available in the much more detailed oral and taped teachings of Supersensonics available from the University of the Trees. However, the type of simplified pendulum designed by the author is available from Centre Community Publications in England or the University of the Trees Press in California and this pendulum has the advantage of being less expensive and more simple to operate than a C and B pendulum. The student is warned not to play around with negative green pyramid energy as if it were some ordinary color. Even ordinary colors can be quite poisonous if they are not in harmonic resonance with the individual's radiation. Colors beneficial to one person are harmful to another person if they are reflecting or being absorbed at a greater intensity than the individual's own capacitance. Harmful effects of injecting color rays, by tuning a pendulum used for treatment and curative purposes, will follow as soon as the radiation selected has restored the patient's equilibrium. Once saturation point has been reached what was previously curative has then become harmful. There is an alternation of effect which must also be dowsed so that overbalance does not result. Life and death are forces of integration and disintegration; perfect disintegration and elimination of the unwanted energies are just as important to perfect health as ingestion.

INFRA BLACK
AND
INFRA WHITE
DISINTEGRATE
AND UNITE
IN NEGATIVE GREEN

The type of color pendulum which selects negative green, with a ring/circle tuning device as an open circuit. The pendulum generates the Pakua effect and can be used in conjunction with the color magnet shown on page (561). Both are available from University of the Trees Press. (See back page)

PYRAMID ELECTRICITY.

The writer and some doctors who were investigating brain waves at a yogic ashram near Poona in 1961 became interested in the effects of electrical currents induced by coils of copper wire running along the edges of a pyramid form orientated north and south. Some French researchers in radiesthesia had claimed that there was a difference in potential between one end of the wire and the other of 2 millivolts. We tested this claim and found it to be true with a difference of 0.2 millivolts for reduction in the earth's field strength at the latitude of Poona compared to France. However, we found that the copper coils did not have to be on a pyramid form to induce this current but only needed to be orientated north-south. The current had nothing to do with the pyramid form but more to do with geophysical orientation of the coil. We got the "linear antenna" results of electrical induction whenever the coil was turned from the east-west axis to the magnetic north-south.

Fig. (433)

BATTERY CELL

RESISTANCE

OHMS

Dehydration experiment of Pierre Bories in 1949/50. Base 17cms per side. No material sides. Height through centre 11cms. Wire used: copper 4/10mm diameter, Nylon covered. 400 turns around 3/10 cms tube. The whole pyramid varnished with shellac.

(+) to A straight wire, A to B coil.
B to C " ", C to D "
D to E " ", E to F "
F to G " ", G to H "
H to (-) of battery through 100 ohms

This shows that people can mistake energies which have nothing to do with pyramids for what is now called "pyramid energy" and the same applies to the energies of meditation. The forces of a positive and dynamic meditation are stronger sitting in the sun than they are sitting under a plastic meditation tent, but if you "believe" strongly they are more and better from a pyramid, it is probable that you have never really meditated properly just sitting in the swn. However, this does not mean that the Pi-ray is not very powerful and not effective in curing cancer. But merely used in the pyramid tent fashion without isolating the ray from negative green in which it is embedded is to take risks born out of ignorance of our own Self. To become familiar with the methods of detection and to use the tools of the diviner for establishing our own correct resonance with the Pi-ray through Supersensonics can lead to nothing but good healthy bodies and increased psychic electricity.

SUPERSENSONIC EXPLANATIONS FOR SIX OF CHRIST'S MIRACLES

"The works that I do shall he do also; and greater than these shall he do....."



In considering the miracles of Christ we have to allow for the human tendency to create myths and personality cult heroes in order to give their teachings more credibility. Having made this allowance we find that the miracles can be divided into two categories. There are the Supersensitive phenomena that cannot be explained by ordinary means, that is, miracles like the changing of water into wine, the feeding of the multitudes and materializations. Then there are a number of miracles which can be explained by the techniques in this book simply as divining phenomena. We will list some of them with a short explanation, not to dismiss them as insignificant, but to prove even more thoroughly what a wonderful piece of work "Supersensitive Man" is. Christ himself discounts the value of the miracles as nothing more than a means of getting people to believe in his real message of Pure Consciousness. At one point he actually expresses his disappointment that men believe in him because of the miracles (John ch. 4 v48). The following miracles are simple Supersensonics.

The Miraculous Draft of Fishes

Nowadays the same thing is done by echo sounder. The shoal of fish is followed by bouncing sound signals off the fish underwater. In Christ's day this would have been considered a miracle. In our day any man who can put his hand over the edge of a boat and locate a shoal of fish would be considered a psychic. Yet most people can do it with the methods of Supersensonics. The beginner uses a divining rod and the expert uses his bare hand.



Centurion's Son Healed

Telepathically it is possible to broadcast healing in a number of ways by Supersensonic means. Either a grid or a radionic set or an image of the person can be used. Many radiesthetists only need the name of the person to send the healing powers of a herb or remedy to a distant person or to find out what is wrong with him by asking questions of the pendulum. The use of the color magnet described elsewhere in this book can be used as a carrier for healing powers.

Devils Cast Out

By Supersensonic methods it is possible to generate a pattern or vibration of energy which will make it quite uncomfortable for any obsessing entity to remain in the mind of a person. To a master such as Christ these vibrational energies were well known.

Issue of Blood Stopped

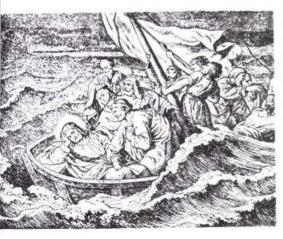
It is not generally known that the mind has power over the flow of blood in the veins and arteries and even over the capillary flow. In deep states of trance, the flow can be stopped entirely and the results recorded in a physiology laboratory. On being challenged by a professor of physiology on this statement, in 1959 I was subjected to a series of tests at the University of the West Indies. The chart recorders all showed that I could stop the arteries or close them off from my hand whenever requested by the professor. I myself have arrived on the scene of a car accident and even stopped a spirting blood vessel from a distance of 20 feet away when I shouted for the blood to stop pumping. Normally I merely request the person to stop it themselves but on this occasion the person was only partially conscious. Supersensonic energies can travel along the eye beam as easily as along a line of ink on paper. It is no more miraculous that a thought can be channelled along a tape or wave-quide.

The Tribute Money

Some diviners can locate gold and also attract fish to the shore. Christ may have telepathically seen that a fish had swallowed a gold coin and sent out a thought beam to attract it to the lakeside spot so that it could be caught. The writer was challenged by the author Robin Moore, at the 1960 fishing tournament for the Blue Marlin Championship Cup, to bring the first fish to his hook telepathically as I drove home from Port Antonio in Jamaica. That night I got a telephone call to say not only had the fish been attracted to Robin Moore's hook but the first two fish were caught by him. Afterwards I regretted it because I had done it to prove something at the expense of the fish, in order to convince a doubter. However, I rationalized that Christ had done the same thing with the Tribute money since the fish was caught only to show the disciples the power of conviction.

The Tempest Stilled

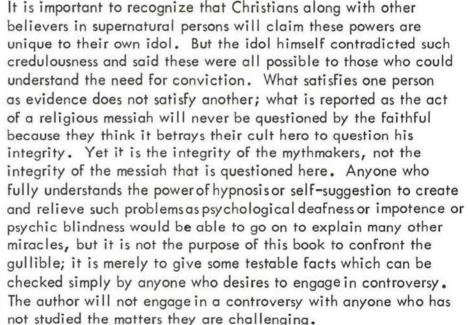
There are two possibilities for the sudden calming of the storm. One is that the storm may have been about to blow out anyway and since Supersensonics can divine the weather over any part of the world with a map it would be easy for a master to do without the map, to wait for the right moment and then to tell the disciples that it would die down. The second possibility is that

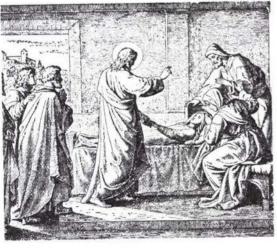


there are moments when the human consciousness makes direct contact with the Pure Consciousness when there is a sudden rushing of wind and then complete stillness. The account of Elijah in the cave in Kings 1 Ch. 19, v.12 is an example. The second possibility requires high states of consciousness not available to all, but the first type of divining can be done with training by almost 80% of those who complete the entire course of training in divining.

OBJECTIONS

It is always thought that certain persons who become leaders of religious groups have supernatural powers. The author has seen these powers demonstrated by people without any spirituality or knowledge of themselves or others. These people have the ability to tell you things about yourself that you did not even know, like there is a brown mole on your bottom or your son will have three lines on his face at age nineteen. Yet they know nothing about your real self. They can tell you psychically that your wife had a hair cut 2 weeks ago on a Friday, but so what? They cannot tell you anything about your spiritual nature unless they themselves are spiritually evolved. I have known good psychics who drink a bottle of whisky before a sitting or who think of nothing but sex, money and booze and might even take your wallet if you left it around. So so-called supernatural powers are not indicators of greatness. When they come together with high spirituality in one person like Christ they tend to reinforce the Being, but when they come in ordinary people they are mostly ignored or explained away.

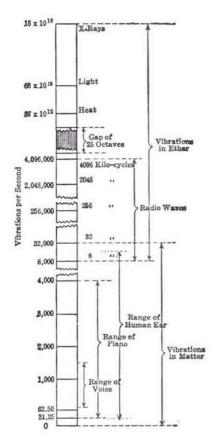




SPECTROSCOPY BY SUPERSENSONIC METHODS.

Much could be said about the effects of negative green and the Pi ray. The number Pi is a representation of the Tao and its ceaseless folding back into itself but these are deep profound matters which take years to understand and even more years to put into action on the world scene of everyday life. But colors can be put into action in our internal life instantly, because this is the only domain where we can truly become master this very day.

Ever since the earliest pioneers of ancient China, India and Egypt, the initiates have known that the divining faculty aided by witnesses of color vibration as part of the selective capacity of a rod or pendulum, could determine the color harmonic relationships between objects. In the allegory of Joseph and his coat of many colors we recall that he was skilled in the science of divination and it was this Supersensonic power that raised him from slavery to King's Chancellor. In the same story is the accout of how he deliberately hid his divining cups in the bags of grain sent back by him to his father (Genesis 44: 5 and 15).



It was Professor Bossat of Lausanne who was perhaps the first European to experiment with separately colored pendulum bobs. Later researchers found that a piece of colored ribbon touching the top of a green sphere gave such a pendulum the selective power of that particular color-wave. Next it became generally known that if lines were drawn on a strip of wood in the exact same places as the spectral lines of spectroscopy, then the test sample lying at the black end of such a rule or wave-guide produced its own color influence over the L-field or color line corresponding to the chemical composition of the sample. Then the great number of people who became interested found that the influence detected was not the result of any visible color but a harmonic which represented the atomic structure of the dominant chemical in the sample.

Vibrations in matter give us sound. Vibrations in the ether give us heat, light, ultra-violet rays, the x-rays and radio.

Fig. (434)

THE SPECTRUM PENDULUM

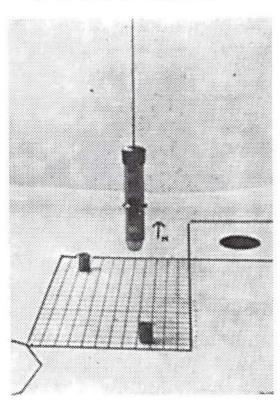


Fig. (435)

Later, from the 1920's, this led to the establishment of testing methods developed by Lesourds and Turenne who used the 92 point rule with color harmonics ranging between black and white with the intermediate range of frequencies of visible light. The same relationships were found by Bovis who invented the Biometric rule and Mager who originated the color disc. Extensive historical details of all these instruments are available from the author but this Volume is more concerned with modern practice and our own consciousness.

One of the drawbacks with Professor Bossat's method of detecting color harmonics was the need for many different colored pendulums. This disadvantage has been now removed by the manufacture of the color pendulum which is a short, wooden cylinder with the spectral band of colors including "radiesthesia grey" (or negative green) painted down one side. A metal ring is slid along Vernier fashion to coincide with a particular color harmonic, then the pendulum becomes selective of that color in the vertical plane. It can be used as the diviner's only pendulum for tuning over a specific sample to detect its harmonic color or as an extra aid in checking the results obtained over a waveguide. It is sometimes called the "Aura Pendulum" because it can also detect the emanations of human bio-energy. (The Aura Pendulum is available from the publishers.) However the Aura type pendulum is Black and contains no radio-active stimulator inside it.

The use of color harmonics sympathies has been found of practical use for the analysis of chemical structures in spectrography and interrelating minerals, organic chemicals and agricultural analysis of soils. The grouping by color harmonics has been found to apply to samples of disease organisms and to detecting those drugs which destroy bacteria and virus. A growing number of doctors, pharmacists and professional people are realizing the value of identifying the vibrational qualities of matter and relating it to light frequencies through color harmonics. The author has many papers and details available of research already done in these fields (available through the publishers.)

MAP DOWSING.

Not only can the student of radiational paraphysics use
Supersensonic methods for telling the weather over a certain part
of the map but he can also find missing objects and people by
getting a reaction from a map or territory thousands of miles
away. By using one of the various amplifiers such as a magnetic
compass or radium block as a stimulator of the "thought field", an
operator can detect criminals or kidnapped people or find the
location of stolen property.

When radio telegraphy was still at its beginning the Abbé Mermet in Switzerland found it possible to locate the position of a water well in the grounds of a monastery from a map as far away as Columbia, South America. In advancing reasons for his success, Mermet suggested that "thought transmission" took place and that every person can send out a "capital ray" or "head ray" from between the eyes which was capable of bouncing back a reflection off any object of which the operator could make a mental picture.

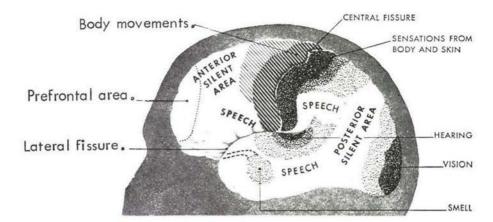
Views such as this prevail among a great many radionic operators, some of whom are scholars with scientific degrees teaching at universities. Antoine Luzy, technical lecturer at the Arts et Metriers School at Paris University, was lecturing on electricity and got into many arguments as a "mental radiesthetist". Along with M. Emile Christophe of Orleans, Luzy claimed around the 1930's that a "mentalist" pendulum user can get an answer to any question. The diviner merely asks himself, "I wish to be told what is true about _____, "and later he asks, "Is the answer obtained really true?" Wave-field theories are usually given no standing in the arguments from the supporters of the intuitive branches of radiesthesia.

Colls
ARE
TUNED
ON THE
GRID.

Servranx grid for tuning biological wave-fields.

This local broadcast waveguide works by making two coils of copper wire, wound around a pencil. One is coiled left hand and the other right hand with 9 turns each. Servranx brothers of Paris meant it for healing, but it can be used for finding the positive/negative balance of any individual or even a group of individuals working together. A sample of the person's blood or hair is put on the black spot. Available from University of the Trees Press.

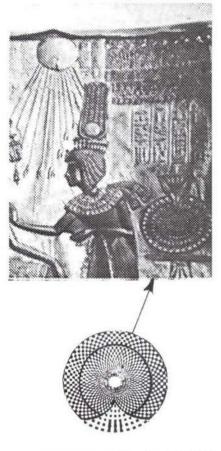
Fig. (437)



However, most diviners believe that there is more than just clairvoyance or telepathy at work and that radiational paraphysics results have some links with the earth's magnetic field alignments. As Abbé Mermet showed there is a relation between a strong light suspended above a map and the success with map dowsing. There is also a good reason to speculate that wave-fields in the electromagnetic spectrum are related to the divining mechanisms. It can be pointed out that even the brain, with millions of cells acting as vibrating units, becomes an oscillating open circuit and when these are amplified by magnetism, by light energy and radioactive salts, then some kind of human radar results. An explanation of the resonance existing between harmonic vibrations along the linear antenna 1-5 will provide the operator with a rationale for the linking of every pair of like vibrations. By taking a map of the human brain a Supersensonic operator can follow the pathways through the medulla and detect the path of the sensory signals into the various brain centers which regulate the chemical and emotional balance.

MAPPING CONSCIOUSNESS.

The mapping of the fields of consciousness around the human being and within the brain is not possible by electromagnetic means simply because it is not possible to separate the various functions in living people without harming them. Hence man's brain is largely a black box without any real knowledge of what it can or cannot do. The author has been tested many times since 1960 not only for proving that auto control of physical functions over the involuntary system is possible, but to demonstrate that the human brain can develop thousands of microvolts of electricity. Each time when the doctors have said certain things were impossible or immeasurable, the contrary has been proved. The rationalizations which follow such an about face are as interesting as the experiment. Because these forces are measured on their own equipment, which at first is considered to be faulty because the results are said to be impossible or unscientific, there is no escape once the equipment has been checked several times.

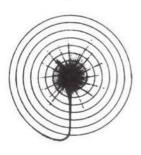


A SYMBOLIC REPRESENTATION OF CONSCIOUSNESS FIELDS.

Fig. (438)

MAPPING THE HUMAN LIMITATIONS.

Fig. (439)

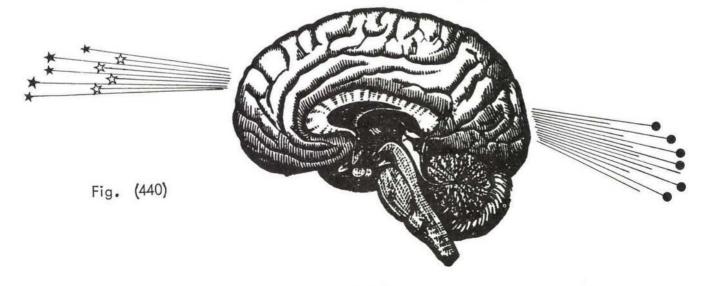


The dogmatism of scientists generally has been found to equal any religious dogmatism. The rationalizations which prevent a scientist from proceeding further into the study of the extended brain fields, which can be easily mapped by Supersensonics, could take up a whole book. The purpose here is not to denigrate science as a discipline but to show that a true scientist is one who does not study methodology alone but brings in ontology and transcendental reasoning. It is this further discipline which is able to validate its own results according to the level of consciousness from which the observer is viewing. It is the failure of most scientists to map the levels of their own limitations and degrees of awareness before embarking upon a search for "Truth" which has driven science into an arrogant posture. To make claims about causes from the limited evidence available is totally myopic. It is quite unconsciously naive to knock religion for believing in a God who originated the first matter and then to erect a supposedly scientific system which explains the cosmic process in terms of hydrogen particles or cosmic dust, without saying how the cosmic dust got there. It is just switching one God for another, because dust logically seems more plausible than some abstraction. But dust which gets there without a cause, without explanation, is just as much a physical abstraction as "God" is a mental one.

If God is regarded as "consciousness" or the knower of the field of knowledge, these abstractions which must exist prior to knowing them, can be dispersed with entirely for something more "Absolute" - our own Self. It does not demean God to be regarded as "Pure Consciousness" since all ideas of "science", or "God", must arise in that consciousness. The study of God is basically the study of consciousness and there is no doubt that He or It exists at every level. Hence the mapping of each individual field of consciousness and the way it views the spatial environment is essential to the correct understanding of all phenomena. The patterns in nature which we see as changing phenomena and call "cause-effect sequences" are regarded by relativity physics as arbitrary unique physical structures based on the arbitrary constant set by the exact velocity of light. If the maximum speed for

transmission of energy from one physical system to another is arbitrarily set by the speed of light, there can in reality be no unique cause-effect sequence of events in the evolution of matter. This philosophical problem of knowing that any particular causal sequence is arbitrary, simply because the selected physical relations are merely contingent upon the limitations set by the human consciousness, is dealt with by the author in another methodology in a three-year course of instruction in the nature of consciousness. Without any method of mapping the effects on the consciousness of interlocking human wave-fields, the determination of the <u>causes</u> behind the phenomenal world will continue to be mere speculation. The statistical certainty of certain physical sequences in the atomic world now available to quantum physics gives us no clear exact image of nature's processes and leaves us only with a mathematical representation.

The vibratory phenomenon of the brain field, as amplified by the methods of Supersensonics, creates resonance images which correspond to field-structured cortical action patterns which we call thoughts. The biological energies which are radiated out of the human psycho-physical absorption of light energies, which the ancients called kundalini, have been mapped in the author's book, "Nuclear Evolution". In the Nuclear Evolution theory the point is made that the electrical polarity of the cell is correlated with the psychic electricity released by cell oxidation. Thus the bioelectric currents which sustain consciousness result from the action of light upon oxidation-reduction which in turn causes a difference in potential at two points at a given time between the nucleus and its shell. This manifestation of a biochemical battery, with the brain and its nervous "antenna 1-5" acting as an amplifed wave-guide, causes the neurons to become excited and act as transistors like tiny vibrating crystals.

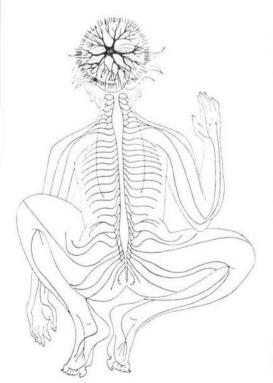


The connection of yogic breathing techniques with the generation of oxygen supply for cortical sensitivity is linked with the exceptionally high metabolism required for enhanced nervous activity.

A PSYCHO-PHYSIOLOGICAL THEORY FOR KUNDALINI ENERGY

The mapping of the flow of kundalini energy is dependent upon

Fig. (441)



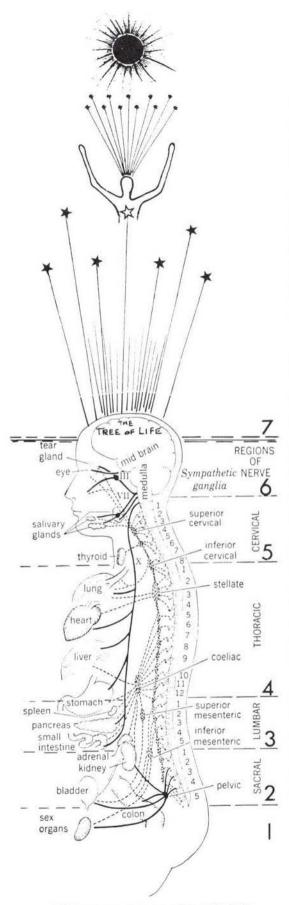
THE ULTIMATE DIVINING INSTRUMENT

identifications within the mind-stuff, that is the Self image in the field of consciousness which controls the polarity of all psychophysiological events in the chakra system which in turn acts as a wave-guide for radiation and color harmonics. The functions of the local bioelectrical currents are determined solely by an allinclusive brain field which we called at the beginning of this Volume "subtle matter". This subtle matter, analogous to the human mind, is molded and polarized into resonant thought images by the "universal field" which we have called consciousness. In other words kundalini is the flow of consciousness unobstructed by limitations in the mind-stuff controlling the chakra system. This flow of psychic electricity runs through the human organism and guides its evolution of the Nuclear Self, quite independent of the actual cells and organs which absorb the psycho-physiological energy from the cosmic light radiation which is always present in all biological activity.

The ability of Supersensonics to map the behavior of these energies on all physical and spiritual levels of consciousness by using witnesses of color harmonics will give us the power to raise ourselves up by our own bootstraps. From the fall of electromagnetic man to the full spiritual height of Supersensonic man is an enormous leap in consciousness. To measure this leap we must now develop a new capability.

To measure the weak magnetic effects of the brain encephalogram requires super-sensitive equipment that is not drowned out by the earth's magnetic noise which surrounds every object in the atmosphere. Only a well-shielded environment allows us to measure such signals emitted from the human body by electromagnetic instrumentation.

This line drawing is intended to show the essential ramifications of the nervous system. A diagram on this scale can not indicate the many numerous and fine nerves radiating from the spinal cord. The nervous system as a whole is the Kundalinī Path.



THE TREE OF KNOWLEDGE

The fact that the evolutionary intelligence has already given mankind this Supersensitive equipment in the frontal lobes from ancient times is the basic "leaping off" ground for Nuclear Evolution.

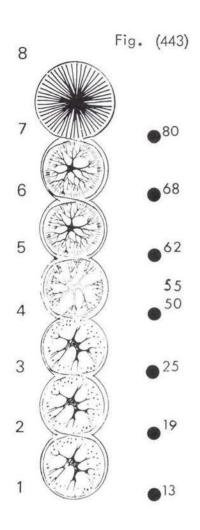
It is through the study of fields of consciousness and their color harmonics that we can discover what a priceless gift our consciousness really is. It is truly the gift of a God, for there is no drug or elixir of life more powerful than pure consciousness. It can be stated quite absolutely that not only is there nothing higher than pure consciousness, but it is God's gift of Himself to Himself.

To realize this fact is not easy, nor is this gift of the King of Heaven automatically bestowed on those who carry it around inside them. No doubt like servants we must often carry it around for the King until we are prepared to give up all else to get it for ourself; and when we respect what has been taken all along for granted, we are then made worthy. "Worthiness" can be researched through Supersensonic methods in the investigation of the filters and lenses which are hidden in the wave-guide we call a human body.

It is not incidental that the word "worth" comes from the old English word "wearth" and the maker of wearth was a "shipper" (or shaper). The real meaning of worship is a contraction of "wearthscipe" which means one who shapes or conditions his own worthiness. It is with this purpose that Volume III has been written, that the student may be given the instruments for divining his own worth and in this sense the work itself may become worship.

Undoubtedly those who worship "light" and can look at the beauty of God's signature in the Rainbow colors will be pulled towards the pot of gold buried at the end of it. I never understood this old wive's tale until I found the pot of gold myself by seeking beyond and behind the ends of the spectral colors on the other side of the Rainbow.

Fig.(442) The autonomic nervous system of man and its connections with the central nervous system and the internal organs; diagrammatic and simplified. Sympathetic trunk and main ganglia (cochac, etc.), heavy stipple; sympathetic nerves, broken lines; parasympathetic nerves, heavy solid lines; crimial nerves, III, VII, (IX), X; spinal nerves numbered for each region of spinal cord.



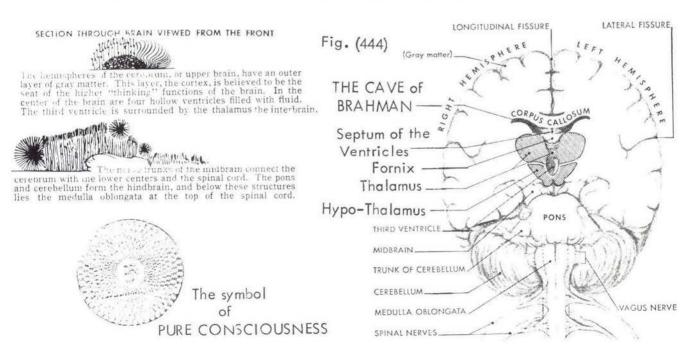
Supersensonics can help you to find not only gold pots and the pearl of high price, but also the oldest science of Consciousness. Our most brilliant scientists are still ogling the spectrum with an eye too wise in its own conceit, while I assure you that the humble old wive's tale is completely true.

The next volume will be mostly devoted to that pot of gold in the form of relationships between color, number and light. Devotion is as much needed in science as in religion and those who truly worship at the altar of consciousness will find themselves in a holy temple with a roof as big as the sky.

An ancient rishi came back as Einstein to roam the universe on the back of an old envelope and try to manifest that worship of the ONE Supreme intelligence. You too have come back to become a master of all the worlds through the oldest science of consciousness. The founder of that science is none other than the ONE who gave you all that you have or ever will have. You can roam the Universal One without going outside your door by shaping your own worth.

THE TREE OF LIFE

Supersensonics is only a tool for shaping the awareness of light and the Divinization of man. It is no greater than its user, who is none other than the ONE.



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