Very Diverse Perspectives on Kirlian Photography

Abstracted from the book *Psychic Discoveries Behind the Iron Curtain* by Sheila Ostrander and Lynn Schroeder Bantam 1970

Chapter 16: Kirlian Photography-Pictures of the Aura?

...These extraordinary accounts of an amazing new world of pulsating lights... ...[was not from] a group of psychics viewing this phenomenon in Russia, however. It was scientists – Russia's foremost learned men from the prestigious Presidium of the Academy of Sciences of the USSR, scientists and researchers from some of the leading institutes and universities across the entire Soviet Union. P. 200.

One day the chairman of a major scientific research institute arrived. He had with him two identical leaves for the Kirlians to photograph with their new process. The Kirlian team (Semyon and his wife Valenina) worked all night, but found the Kirlian patterns for the two leaves were different. The chairman was pleased, explaining that one of the leaves had come from a plant which had been contaminated with a serious plant disease. P. 205 f.

In anticipation of providing a demonstration to two famous scientists from a Moscow Institute...For some unknown reason the "temperamental" optical devise would not work. No matrer how Semon tried to focus t, the picture would not show clearly through the lens... Semyon then had an episode of a vascular system illness, and had to stop and rest. Valentina proceeded to demonstrate the process for the two scientists. Later, Semyon reasoned that what he had earlier thought as a flaw of the system was actually his energy pattern just prior to the onset of illness. P. 207f.

In the early 1960s, Soviet journalists published a number of hard hitting exposes on the plight of the Kirlian invention. [9-10] ... The outraged writer continues "All the scientists who have seen the Kirlian work agree research is urgent and that the Kirlian discovery can bring great benefits to man. *Twenty-five years have passed* since the Kirlians made their discovery. Yet the Ministries in charge still haven't released any funds either to the Kirlians or any scientific research institute to carry out this work. "

At last in the 1960s it happened! Suddenly the Kirlian invention emerged from a bureaucratic abyss. Suddenly the Kirlians ere given a pension, a ne apartment in a pleaant new district in Krasnodar and a specially equipped lab. Suddenly, full scale scientific research began in Kirlian photography in institutes, labs and universities all over the USSR. In 1962, Soviet Union Magazine [98] reported that the entire scientific research establishments had been set working on the Kirlan phenomenon.

Dr. Wilder Penfield f McGill University in Montreal had done numerous operations in which he removed massive segments of patient's brains. Still, the "mind" seemed to carry on as before without any disturbance in consciousness. "Perhaps we will always be forced to visualize a spiritual element ... a spiritual essence that is capable of controlling the mechanism. The machine will never fully explain man, nor mechanisms the nature of the spirit.," says Dr. Penfield. [400]

A highly reputable English medium, Geraldine Cummins, reported [284] "Mind does not work directly on the brain. There is an etheric body which is the link between mind and the cells of the brain..." P. 215

. . .

"In Russia, a young soviet scientist, a student of Kirlian photography, sat down at a table with us. From a brimming briefcase he pulled out a sheath of photographs. "Look at this," he said, as he spread out a large photograph of a plant leaf which had been tremendously magnified. The picture had been produced the Kirlian method in a high frequency electrical field. It was a kind of leaf picture we'd become familiar with- a mass of sparkling lights all over the leaf; here and there brilliant flares ad around the edges a precise aura of luminescence. He handed us a second picture. It looked the same as the first except There seemed to be a line down the middle of the right side of the leaf. Beyond that line the sparkling outline and veins seemed airier, the background fluffier.

"This *is* the same leaf as the first picture," the young scientist explained. "The actual leaf itself has been cut. One third of it has been removed. But the energy pattern of the *whole* leaf is still there!"

In other words, we were actually seeing the "ghost" of part o the leaf- a phantom counterpart of pure energy.

"What is this substance?" we asked, pointing to the cut off part of the leaf that shouldn't have been there.

"It's a form of energy," said the scientist. "This energy may have its origin in electrical activity or electromagnetic fields, but the nature of this energy is entirely different. We consider it to be a kind of plasma." (In physics, plasma is the fourth state of matter-streams of masses of ionized particles. p. 216 f.

At the highly respected Kirov State University of Kazakhstan in Alma-Ata, a group of biologists, biochemists, and biophysicists clustered around a huge electron microscope. ... The scientists, peering through the eyepiece of the electron microscope, saw in he silent high frequency discharge something once reserved only for clairvoyants. They saw the living "double" of a living organism in motion.

Scores of experiments were done on live plants, animals, and humans with the Kirlian effect. What is this "double"? "Some sort of elementary plasma - like constellation made of ionized, excited electrons, protons, and possibly other particles they said. "But at the same time, this energy body is not just particles. It is not a chaotic system. It's a

whole unified organism in itself." It acts as a unit, they said, and as a unit the energy body gives of its own electromagnetic fields and is the basis of biological fields.

In 1968, Doctors V. Inyushin, V. Grishchenko, N. Vorobev, N. Shouiski, N. Feddorova and F. Gibadulin announced their discovery: All living things-plants, animals, and humans, - not only have a physical body ade of atoms and molecules, but also a counterpart body of energy: They called It "The Biological Plasma Body" [57-60, 198]

In a book long scientific paper published by the State University of Kazakhstan, "The Biological Essence of the Kirilian Effect, (Alma Ata 1968), they described their research... "The bio-luminescence visible in the Kirlian pictures is caused by bioplasma, not the electrical state of the organism..."It has a specific spatial organization." Inside the energy body say the scientists, processes have th4eir own labyrinthine motion absolutely unlike the pattern of energy in the physical body. The bio-plasmic body is also polarized. "The biological plasma of the energy body is specific for every organism, tissue, and possibly bio-molecule."

What generates this bioplasmic energy? How do we replenish our energy body? The Kazakh scientists discovered it's the oxygen we breathe that converts some of its surplus electrons and a certain quantum of energy into the energy body. In the silent high-frequency discharge, they could actually see this process as it occurred. Breathing, it seems, charges the entire bioplasmic body and renews our reserves of vital energy and helps to equalize disturbed energy patterns. Of course the Indian philosophy of Yoga has always maintained that breathing charges the whole body with "vital force" or "Prana"... p. 217 f.

[9] Belov, I., "The Borders of the Unknown" *Inventor*, No. 6, 1964 "Flares Illuminating the Unknown" No source [98] Leonidov, I., "Signals-Of What?" Soviet Union No. 145 1962. Reprinted as "Russians Photograph Life and Death" Fate Sept 1962. [400] Smith, Susy, Out of Body Travel. New York. Garrett Publications, 1965. [284] Cummins, Geraldine, Beyond Human Personality. London, Ivor Nicholson & Watson, Ltd 1935 [57] Inyushin, V.M., Three Papers on Basic Research in Biology, *Questions of* Theoretical and Applied Biology. Alma-Ata: Science Publishing, Kazak, SSR, 1967. "Possibilities of Studying Tissues in High Frequency Discharge" (Kirlian effect), Biological Influences of Red Monochromatic Light. Alma-Ata:Kirov University, 1967. [59] "Biological Plasma of Human Organism with Animals" *Telepathy*, Telegnosis, Dowsing, Psychokinesis. Prague: Svboda, 1970. [60] Inyushin, V. M., Grishchenko, V.S., et al., On the Biological Essence of the Kirlian Effect, (Concept of Biological Plasma). Alma Ata: Kazak State Kirov University, 1968. [198] "Invisible Fire" Telepathy, Telegnosis, Dowsing, Psychokinesis. Prague: Svboda, 1970.

Kirlian photography refers to a form of <u>photogram</u> made with a high <u>voltage</u>. It is named after <u>Semyon Kirlian</u>, who in 1939 accidentally discovered that if an object on a <u>photographic plate</u> is connected to a source of high voltage, small <u>corona discharges</u> (created by the strong <u>electric field</u> at the edges of the object) create an image on the photographic plate. [1]

Kirlian's work, from 1939 onward, involved an independent rediscovery of a phenomenon and technique variously called "electrography," "electrophotography," and "corona discharge photography." The Kirlian technique is contact photography, in which the subject is in direct contact with a film placed upon a metal plate charged with high voltage, high frequency electricity.

The underlying physics (which makes <u>xerographic</u> copying possible) was explored as early as 1777 by <u>Georg Christoph Lichtenberg</u> (see <u>Lichtenberg figures</u>). Later workers in the field included <u>Nikola Tesla</u>; various other individuals explored the effect in the later 19th and early 20th centuries.

Kirlian made controversial claims that the image he was studying might be compared with the human <u>aura</u>. An experiment advanced as evidence of energy fields generated by living entities involves taking Kirlian contact photographs of a picked leaf at set periods, its gradual withering being said to correspond with a decline in the strength of the *aura*. However it may simply be that the leaf loses moisture and becomes less electrically conductive, causing a gradual weakening of the electric field at the drier edges of the leaf. In some experiments, if a section of a leaf was torn away after the first photograph, a faint image of the missing section would remain when a second photograph was taken. The Journal of the Smithsonian Institute published a leading article with reproductions of images of this phenomenon. [citation needed] It has been suggested that this effect was due to contamination of the glass plates, which were reused for both the "before" and "after" photographs. [2] The effect was not reproduced in better-controlled experiments.

Research

In addition to living material, inanimate objects such as coins will also produce images on the film in a Kirlian photograph setup. In the <u>United States</u>, Dr. <u>Thelma Moss</u> of <u>UCLA</u> devoted much time and energy to the study of Kirlian photography when she led the <u>parapsychology</u> laboratory there in the 1970s. Much of her time was devoted to efforts to avoid factors proposed by skeptical peer-review. [3]

Also, in the 1970's psychologist Joe H. Slate Ph.D. led research at <u>Athens State</u> <u>University</u> under the <u>United States Army Aviation and Missile Command</u> as project, "Kirlian Photography". (Featured in the History Channel's <u>Vampire Secrets</u>)

Current research continues by Dr. Konstantin Korotkov in the Russian University, St.Petersburg State Technical University of Informational Technologies, Mechanics and Optics. [4] Dr. Korotkov has published several books. [4] He uses GDV (Gas Discharge Visualization) based on the Kirlian Effect. GDV instruments use glass electrodes to create a pulsed electrical field excitation (called "perturbation technique") to measure electro-photonic glow. [5]

The Korotkov methods are used in some hospitals and athletic training programs in Russia and elsewhere as preventative measurements for detecting stress. The Russian Academy of Science has approved the GDV techniques and equipment in 1999 for general clinical use, [6] though it should be noted that the "approval", according to the certificates Dr. Korotkov himself is showing in his various web sites, only covers conformity with general electrical safety (standards 61010 and 61326). [5]

There has been some published research in peer-reviewed scientific journals regarding GDV and related material, including several articles in the <u>Journal of Applied Physics</u> and in <u>IEEE</u> articles [7].

Explanations

The accepted physical explanation is that the images produced are those typically caused by a high voltage <u>corona effect</u>, similar to those seen from other high voltage sources such as the <u>Van de Graaff generator</u> or <u>Tesla coil</u>. In a darkened room, this is visible as a faint glow but, because of the high voltages, the film is affected in a slightly different way from the usual. Color photographic film is calibrated to faithfully produce colors when exposed to normal light. The corona discharge has a somewhat different effect on the different layers of dye used to accomplish this result, resulting in various colors depending on the local intensity of the discharge. [6]

[edit] Comparison with aura photography

Kirlian photography is completely different from <u>aura photography</u>, in which a colorful image is produced of a person's face and upper torso by interpreting galvanic skin responses and adding color to the photograph using a printer. The images made with an Aura camera do not result from coronal discharge. In aura photography, no high voltage is involved as with the Kirlian technique, and no direct contact with the film is made.

[edit] References

- <u>^</u> Julie McCarron-Benson in Skeptical a Handbook of Pseudoscience and the Paranormal, ed <u>Donald Laycock</u>, <u>David Vernon</u>, <u>Colin Groves</u>, <u>Simon Brown</u>, Imagecraft, Canberra, 1989, <u>ISBN 0-7316-5794-2</u>, p11
- 2. <u>^ "Kirlian photography"</u>. An Encyclopedia of Claims, Frauds, and Hoaxes of the Occult and Supernatural. James Randi Educational Foundation. http://www.randi.org/encyclopedia/Kirlian%20photography.html. Retrieved on 2008-10-

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- *Randi, James (1997). *An Encyclopedia of Claims, Frauds, and Hoaxes of the Occult and Supernatural.* St. Martin's Griffin. <u>ISBN 0312151195</u>.
- 3. ^ Thelma Moss, *The Body Electric*, New York: Jeremy P. Tarcher Inc., 1979.
- 4. Including "Human Energy Field: study with GDV bioelectrography" 2002, NY, Backbone Publishing Co. and "Light After Life: Experiments and Ideas on After-Death Changes of Kirlian Pictures" 1998, NY, Backbone Publishing Co.
- 5. <u>^</u> See Russian certificates [1], and European certificate [2]. (The European certificate may be purchased at Berlin CERT [3] with no formal requirements of actual testing.
- 6. <u>^</u> David G. Boyers and William A. Tiller (1973). "Corona discharge photography". *Journal of Applied Physics* **44**: 3102–3112. <u>doi:10.1063/1.1662715</u>.

Retrieved from "http://en.wikipedia.org/wiki/Kirlian_photography"

http://skepdic.com/kirlian.html

In 1939, Semyon Kirlian discovered by accident that if an object on a

photographic plate is subjected to a high-voltage electric field, an image is created on the plate. The image looks like a colored halo or coronal discharge. This image is said to be a physical manifestation of the spiritual aura or "life force" which allegedly surrounds each living thing.

Allegedly, this special method of "photographing" objects is a gateway to the paranormal world of <u>auras</u>. Actually, what is recorded is due to quite natural phenomena such as pressure, electrical grounding, humidity and temperature. Changes in moisture (which may reflect changes in emotions), barometric pressure, and voltage, among other things, will produce different 'auras'.

Living things...are moist. When the electricity enters the living object, it produces an area of gas ionization around the photographed object, assuming moisture is present on the object. This moisture is transferred from the subject to the emulsion surface of the photographic film and causes an alternation of the electric charge pattern on the film. If a photograph is taken in a vacuum, where no ionized gas is present, no Kirlian image appears. If the Kirlian image were due to some paranormal fundamental living energy field, it should not disappear in a simple vacuum (Hines 2003).

There have even been claims of Kirlian photography being able to capture "phantom limbs," e.g., when a leaf is placed on the plate and then torn in half and

"photographed," the whole leaf shows up in the picture. This is not due to paranormal forces, however, but to fraud or to residues left from the initial impression of the whole leaf.

Parapsychologist <u>Thelma Moss</u> popularized Kirlian photography as a diagnostic medical tool with her books *The Body Electric* (1979) and *The Probability of the Impossible* (1983). She was convinced that the Kirlian process was an open door to the "bioenergy" of the <u>astral body</u>. Moss came to UCLA in mid-life and earned a doctorate in psychology. She experimented with and praised the effects of LSD and was in and out of therapy for a variety of psychological problems, but managed to overcome her personal travails and become a professor at UCLA's Neuropsychiatric Institute. Her studies focused on paranormal topics, such as <u>auras</u>, <u>levitation</u> and <u>ghosts</u>. One of her favorite subjects at UCLA was <u>Uri Geller</u>, whom she "photographed" several times. She even made several trips to the Soviet Union to consult with her paranormal colleagues. Moss died in 1997 at the age of 78.

Moss paved the way for other parapsychologists to speculate that Kirlian "photography" was parapsychology's Rosetta stone. They would now be able to understand such things as <u>acupuncture</u>, <u>chi</u>, <u>orgone energy</u>, <u>telepathy</u>, etc., as well as diagnose and cure whatever ails us. For example, <u>Bio-Electrography</u> claims to be

...a method of investigation for biological objects, based on the interpretation of the corona-discharge image obtained during exposure to a high-frequency, high-voltage electromagnetic field which is recorded either on photopaper or by modern video recording equipment. Its main use is as a fast, inexpensive and relatively non-invasive means for the diagnostic evaluation of physiological and psychological states. [from the now-defunct http://www.psy.aau.dk/bioelec/]

The reliability of diagnosing illnesses by photographing auras is not very high, however. Bio-Electrography should not be confused with <u>Esogetic Colorpuncture</u>, <u>Peter Mandel's</u> therapy, which unites <u>acupuncture</u> and Kirlian photography "to detect energy imbalances."

None of these Kirlian methods of diagnosis should be confused with other types of medical photography, e.g., <u>roentgen-ray computed tomography</u>, <u>magnetic resonance imaging</u>, <u>single photon/positron emission computed tomography</u> and other useful types of medical imaging, none of which have anything to do with auras.

Chiropractic and Kirlian Photography -

Dynamic Chiropractic, January 27, 1997, page 8 (Reprinted pursuant to Title 17 of the United States Code, Section 107.)

Chiropractic philosophy teaches that correction of vertebral subluxation reduces nerve interference and promotes health. Nearly a century of clinical correlation with our patients shows the efficacy of our methods. It has been further taught that the chiropractic adjustment liberates life force (innate) when such subluxation ta reduced, thereby allowing the body's own self-regulatory mechanisms to achieve normality. Life force has been described by innumerable technology such as qi, prana, innate, vital force, etc., depending on healing, tradition and culture.

Kirlian photography (aka corona discharge photography or spark electrography has been shown to demonstrate an

electrochemical image of pre- and post adjustment with definite change in image. Past research in this field, correlating **homeopathic and acupuncture** response has been documented. Terry Tobin, Ph.D. who was director of research at the former Pasadena College of Chiropractic, did direct some early chiropractic investigation of "The Effect of Spinal Manipulation on Energy Fields in the Fingers as Assessed by Kirlian Photography" as reported in Chiropractic USA, April, 1983. Further research evaluating chiropractic response with this modality needs to be done. The potential of Kirlian photographic assessment in chiropractic could be phenomenal. It may be possible to image living tissue with this modality and show post-treatment response of life force before and after the chiropractic adjustment.

Research has been conducted m the former USSR, and in Germany, China, the U.S., among other countries, which supports the use of Kirlian photography to measure or assess vital force in living systems, and to evaluate treatment methodology. Kirlian photography is a technique of photographing the electrical discharge from an object when impressed with a high voltage field, was discovered by Semyon Kirlian in Russia in 1939. The Russians have performed scores of experiments on live plants, animals, and humans with the Kirlian effect. Kirov State University of Kazakhstan has studied Kirlian effect with electron micmscope. Supposedly the Kirov scientists saw the "living double" of a living organism in motion. Kirlian photography is best remembered for a photograph of a leaf ihat had a portion cut off, yet fhe complete aura was seen. This is described as the phantom leaf effect. The Russians observed this the high-frequency discharge seerns to imply the esistence of an elementary plasma-like constellation made of ionized excited electrons, protons, and perhaps other particles and giving off its own electroemagnetic fields and the basis of biological fields. In 1968, Drs. lnyushin, Grishchenko, Vorobey, Shouiski and

Gibadulin announced that all living things-- plants, animals and humans not only have a physical body made of atoms and molecules but also a counterpart body of energy which they termed the Biological Plasma body.

Life force can be conceptualized through the energetic body model. The Germans have been doing research into this and have shown the treatment effect of homeopathy with pre- and post-treatment photography demonstrating that before treatment the image is aberrant; after treatment, the Kirlian studies demonstrate nomality. Dr. M. K. Gaikin, a Leningrad surgeon who studied acupuncture in China, was the first to propose Kirlian photography as a means of demonstrating vital energetics.

Thelma Moss and John Hubacher did research with Kirlian photography in 1973 at UCLA. The intent of the UCLA research was to add to the understanding of energy flow and help to confirm the existence of acupuncture points. In 1986. Knapp/Ludwig from Germany presented a lecture at the World Research Foundation Congress of Bioenergetic Medicine dealing with colorplate Kirlian photography and its correlation to disease in humans. Some osteopathic investigation has been noted by John Upledger while at Michigan State University School of osteopathic Medicine. Chiropractic use of this technology is such that where there is a subluxation there is theorized a decrease or increase of nerve function. This technology may be an aveaue to record that nervous aberretion at distal areas of the body, i.e., hands and feet. If before the adjustment there is poor or aberrant visualization of a toe or finger and after correction by an adjustment there is a normal image without any aberration, then there has been a change made in this electrochemical image. The life force, being liberated and the body's homeostasis normalizing the abnormal state through chiropractic can be photographed for all the world to appreciate.

Chiropractic may potentially have a new tool which is not symptom-based but based on an energy model, a life force model, and a model which is supportive of our philosophy. A study performed in 1981 at the California Acupuncture College Clinic showed pre-acupuncture and post-acupuncture effects with Kirlian photography. Pre-chiropractic adjustment and post-adjustment changes have been observed by this writer.

Research with Kirlian pbctography has been performed by very reputable scientists. It's application to clinical sciences is still very much in in infancy. In the book High Voltage Photography, author H.S. Dakin concluded: ".... in special cases there are apparent correlations betweem the shapes and intensity of high voltage photographic images and physiological conditions." An article by Leonard Konikiewicz in The Journal of Biological Photographic Association stated: "... now that we have identified the driving force behind corona modulation, the application of Kirlian techniques may become a valuable diagnostic dimension in some clinical applications."

Kirlian photography has been researched for application to diagnostics in cancer. Human bresat tumor biopsies performed by Glen Rhine, Phd, at St Bartholomew's Hospital--in London in 1985 showed that there is a difference between malignant breast tissue and normal biopsy tissue. In Greece, Kirlian color photography has been shown to be a useful tool in diagnosis of psychopathology. Omura's research published in 1978 in the International Journal of Accupuncture and Electrotherapeutics Research related to a "snowflake" appearance pattern which was disease related to gout and rheumatoid

arthritis. The article, "An Image Intensification Technique of Motion Picture Kirlian Photography," authored by Gary Pooke and Paul Sparks is fascinating. These gentlemen were researchers at the U S Naval postgraduate school in the Man/Machine Systems Design Lab in Monterey, California. Their conclusion on Kirlian photography was "It is the author's belief that the technique described here is another step for that verification, in addition, to it's possible uses in Psychology, medicine, agriculture, art and industry"

My findings show that the chiropractic adjustment affects the body and change can be demonstrated by Kirlian photography far distal from the spine. Changes noted in the fingertips and toes after cervical and lumbar spinal adjustment, re spectively, have been recorded. The mechanism of this action is probably mediated through the autonomic nervous system. Electrochemical imaging of skin physiology is one hypothesis.

Kirlian photographs taken at my office to date have employed only black - and - white film, not color imaging yet. Black - and white print paper can be developed through an autonornic processor, whereas color film must be hand developed.

Kirlian photography is considered safe but should not be used on people with pacemakers, heart disease, or during pregancy.

Proper written patient consent is obtained forst. Kirlian photography is performed in my office in the x-ray lab and is performed with darkroom conditions. The lab is carpeted, and both doctor (or technician) and patient do not touch any metal, and are not near any conductibte surfaces. Factors are set on the Kirlian imager and the patient's body/appendage is positioned on the copper insulated surface. Fingers, hands, toes and feet can be imaged well with the Kirlian Imager. Exposures can be variable in time; i.e., one second and intensity of energy can be modulated too.

The above discussion is to show that other healing arts and scientists have researched this technology. It is appropriate at this time that our profession look into this technology for future chiropractic utilization Further serious study of this subject with research design methodology is encouraged.

http://www.themystica.com/mystica/articles/k/kirlian photography.html

Kirlian photography

A photographic process that captures the auras or biofields of persons or objects within the photograph. The technique involves the photographing of subjects in the pressence of a high-frequency, high-voltage, low-amperage-electrical field, which display glowing, multicolored emanations known as auras or biofields.

The process of Kirlian photography is named after Seymon Kirlian, an amateur inventor

and electrician of Krasnodar, Russia, who pioneered the first efforts on the process in the early 1940s. Even thought the process has produced results it still is controversial.

There seems to be no evidence that Kirlian photography is a paranormal phenomenon. Some experimenters think it reveals a physical form of psychic energy. Another theory is that it reveals the etheric body, one of the layers of the aura thought to permeate all animate objects. The understanding of this latter aspect of the process gives rise to the prospects of beneficial benefits of gaining significant insights in medicine, psychology, psychic healing, psi, and dowsing. Critics repudiate the process by saying that it shows nothing more that than electricity being discharged which can be produced under certain conditions.

Experiments in photographing objects in electrical fields, prior to Kirlian, was called "electrography" or "electrographic photography." Little value was seen in the process, so scant attention was given to it. Electrographic photographs were exhibited as early as 1898 by the Russian Yakov Narkevich Yokdo (also given as Todko. Research in the fields was published by a Czech, B. Narvratil, also in the early 1900s. The published evidence of photographs of leaves coronas was presents by two Czechs, S. Pratt and J. Schlemmer, in 1939.

The initial Kirlian experiments were simple. In his first experiment Kirlian just photographed his hand, noting a strange orange glow radiating from the fingertips. His wife Valentina was a biologist, and together they photographed both animate and inanimate objects. Over the years, they refined their equipment and graduated from back and white to colored photography.

The principle of Kirlian photography, as well as all electrography, is the corona discharge phenomenon, that takes place when an electrically grounded object discharges sparks between itself and an electrode generating the electrical field. When these sparks are captured on film they give the appearance of coronas of light. These discharges can be affected by temperature, moisture, pressure, or other environmental factors. Several Kirlian techniques have been developed, but the basic ones generally employ a Tesla coil connected to a metal plate. The process is similar to the one which occurs in nature, when electrical conditions in the atmosphere produce luminescences, auras, such as St. Elmo's fire.

Kirlian's work mainly gained attention in the west during the 1960. Its reception was mixed. However, scientist met on the process at Alma Ata in 1966. Biophysicist Viktor Adamenko theorized that the energy field was the "cold emission of electrons," and the patterns they formed might suggest new information concerning the life processes od animate objects. One finding of Adamenko and other Soviet scientists was that the biological energies of human beings were brightest at 700 points on the body which concurs with Chinese acupuncture.

There is evidence that Kirlan photographs do give indications of the health and emotional changes in living things by changes in the brightness, color, and patterns of light. At the

University of California Center for Health Sciences, a plant's leaf showed changes when being approached by a human hand and pricked. Even when part of the leaf was cut off, the glowing portion of the amputated portion still appeared on film.

Other researchers have found that changes in the emotional conditions of humans can be detected by changes in the brightness, color and formation patterns in the photographs. When psychic healers and the psychokinetic metal-bender Uri Geller were photographed flares of light were seen streaming from their fingertips as they performed their respective activities.

Many Kirlain enthusiasts declare that the leaf phenomenon is evidence for the existence of an etheric body. But, critics state the phenomenon completely disproves Kirlin photography. The latter contention is that "If the method truly photographed a biofield, then the aura should disappear when an organism dies. The effect is produced solely by a high-voltage electric field breakdown of air molecules between two condenser plates."

Supporters of Kirlain photography do, however, foresee its applications in diagnostic medicine. It has been used in the detection of cancer with only a sporadic success rate. Some envision that it will eventually be connected to computerized tomography (CT) scanners (advanced versions of axial tomography or CAT scanners, which utilize a thin beam of X-rays to photograph an object from 360 degrees) and magnetic resonance imaging(MRI). This latter method uses no X-rays, but employs magnetic fields to produce images of body cells and water in tissues.

Kirlain photography has been used by the Soviets in sports psychology to access an athlete's metabolic process and fitness. *A.G.H.*

http://www.answers.com/topic/kirlian-photography

Definition

Kirlian photography creates a photographic image by placing the object or body part to be photographed on film or photographic paper and exposing it to an electro-magnetic field.

Origins

Although experiments with photographing objects exposed to an electrical field are known to have been carried out as early as the 1890s, Kirlian photography is generally said to have originated with the work of a pair of Soviet scientists, <u>Semyon</u> and Valentina Kirlian, beginning around 1939. Over the next several decades at Kazakh State University, the Kirlians developed <u>electrophotographic</u> techniques that used neither a lens nor a camera. By the 1960s, their work had attracted public attention in the <u>Soviet Union</u>.

Interest in Kirlian photography spread to the West during the 1970s, where attempts were made to replicate effects achieved in the photographs of Alexei Krivorotov, a well-known psychic healer in the U.S.S.R. In the United States, studies were carried out with psychic healers at the Jersey Society for Parapsychology and the UCLA Neuropsychiatric Institute.

Benefits

The most common therapeutic use of Kirlian photography is as a diagnostic tool. Variations in the shapes, colors, and intensity of the images produced are said to provide clues to the patient's overall health and energy level and to indicate the presence or absence of disease, specific emotional states, and other physiological or psychological conditions.

Description

Practitioners most often photograph the patient's hand (or, less frequently, the foot), which rests on a photographic medium placed over an electrically charged metal plate. During the approximately one-minute exposure, the patient may feel tingling in the exposed surface. After developing the image, the practitioner interprets its significance and if necessary, refers the patient to a healthcare provider for treatment. Kirlian photography is also sometimes used to assess the effectiveness of treatments (such as acupuncture) by comparing before and after photographs of the patient.

Research & General Acceptance

Although some have speculated that Kirlian photography actually records the aura long said by some mystics and psychic healers to exist around human beings, this is not a generally accepted viewpoint. A scientific explanation of these dramatic images is that they result from interactions between charged particles created by the <u>electromagnetic</u> field used to form the images. A 1976 *Science* article concluded that moisture is a principal determinant of the form and color of human Kirlian photographs.

It has also been noted that variations in a variety of factors, including the amount of pressure on the plate, the voltage and frequency, and the exposure time, moisture, and temperature, can all influence the images produced.

For these reasons, as well as claims of unreliability and a lack of research data supporting its use, Kirlian photography is not recognized as a legitimate diagnostic tool by the mainstream medical community.

Nevertheless, individual practitioners and researchers continue to experiment with Kirlian photography for diagnosis, especially in <u>Russia</u> and Eastern Europe. It has also been used for such nonmedical purposes as detecting flaws in metal and determining the viability of seeds.

Resources

Books

http://www.kirlian.com/

Crop Circle Kirlian:

Update 2000: Kirlian.Net selected as Crop Circle research partner! On-site UK kirlian analysis planned for summer 2000!

http://www.crystalinks.com/kirlian.html

Kirlian photography refers to a form of contact print photography, theoretically associated with high-voltage. It is named after Semyon Kirlian, who in 1939 accidentally discovered that if an object on a photographic plate is subjected to a strong electric field, an image is created on the plate.

In controversial metaphysical contexts, Kirlian photography, Kirlian energy, and so on, are sometimes referred to as just 'Kirlian'. Kirlian made controversial claims that his method showed proof of supernatural auras, said to resemble a rough outline of the object like a colorful halo.

Kirlian proposed and promoted the idea that the resulting images of living objects were a physical proof of the life force or aura which allegedly surrounds all living beings. This claim was said to be supported by experiments by the Kirlians that involved cutting part of a leaf off - the Kirlian images of such leaves, it was said, still showed the leaves as whole, as though the cutting had never happened.

Researchers at Drexel University, however, have claimed that they were unable to reproduce the effect when the glass used to capture the original leaf was replaced with new glass before the freshly cut leaf was photographed, leading them to conclude that the "cut leaf" phenomenon was caused by microscopic etching in the surface of the glass which occurred during preparing the images of the uncut leaf. They also reported on a number of demonstrable causes such as surface moisture and pressure which can account for much of the variations in color, shape, and size of the resulting image.

In addition to living material, inanimate objects such as coins will also produce images on the film in a Kirlian photograph setup. In the 1980s, Polish scientist K. Wrona applied Kirlian photography in forensics, specifically dactyloscopy.

ExplanationsThe accepted explanation amongst scientists is that the images produced are those typically caused by a high voltage corona effect, similar to those seen from other

high voltage sources such as the Van de Graaff generator or Tesla coil. In a darkened room, this is visible as a faint glow; but because of the high voltages, the film is affected in a slightly different way than usual.

Color photographic film is calibrated to faithfully produce colors when exposed to normal light. The corona discharge has a somewhat different effect on the different layers of dye used to accomplish this result, resulting in various colors depending on the local intensity of the discharge.

Skeptics of the paranormal have long disputed the claims made concerning auras and Kirlian photography.

http://www.springerlink.com/content/t27tm424q1181703/

The phantom leaf effect and its implications for near death and out of body experiences

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✓

Journal of Near Death Studies June 1992

springer Netherlands

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Abstract The phantom leaf effect seen in Kirlian photography may help researchers better understand near-death and out-of-body experience. While the process responsible for the phantom leaf effect is unknown, variations of Rupert Sheldrake's morphogenetic field theory offer three explanations for this phenomenon. Each of these variations has different implications for near-death and out-of-body experiences.

The phantom leaf effect and its implications for near-death and out-of-body experiences

http://www.rialian.com/rnboyd/dna-phantom.htm

TWM

The DNA PHANTOM EFFECT: Direct Measurement of A New Field in the Vacuum Substructure

by Dr. Vladimir Poponin

INTRODUCTION

In this contribution I am going to describe some observations and interpretations of a recently discovered anomalous phenomenon which we are calling the DNA Phantom Effect in Vitro or the DNA Phantom for short. **We believe this discovery has tremendous significance for the**

explanation and deeper understandings of the mechanisms underlying subtle energy phenomena including many of the observed alternative healing phenomena [1,2]. This data also supports the heart intelligence concept and model developed by Doc Lew Childre [3,4]. (See also contributions by Rollin McCraty and Glen Rein in this volume).

This new phenomenon -- the DNA phantom effect -- was first observed in Moscow at the Russian Academy of Sciences as a surprise effect during experiments measuring the vibrational modes of DNA in solution using a sophisticated and expensive "MALVERN" laser photon correlation spectrometer (LPCS) [5]. These effects were analyzed and interpreted by Gariaev and Poponin [6].

The new feature that makes this discovery distinctly different from many other previously undertaken attempts to measure and identify subtle energy fields [1] is that the field of the DNA phantom has the ability to be coupled to conventional electromagnetic fields of laser radiation and as a consequence, it can be reliably detected and positively identified using standard optical techniques.

Furthermore, it seems very plausible that the DNA phantom effect is an example of subtle energy manifestation in which direct human influence is not involved. These experimental data provide us not only quantitative data concerning the coupling constant between the DNA phantom field and the electromagnetic field of the laser light but also provides qualitative and quantitative information about the nonlinear dynamics of the phantom DNA fields. **Note that both types of data are crucial for the development of a new unified nonlinear quantum field theory which must include the physical theory of consciousness** and should be based on a precise quantitative background.

RESULTS

The background leading to the discovery of the DNA phantom and a description of the experimental set up and conditions will be helpful. A block diagram of the laser photon correlation spectrometer used in these experiments is presented in Figure 1. In each set of experimental measurements with DNA samples, several double control measurements are performed. These measurements are performed prior to the DNA being placed in the scattering chamber. When the scattering chamber of the LPCS is void of physical DNA, and neither are there are any phantom DNA fields present, the autocorrelation function of scattered light looks like the one shown in Figure 2a. This typical control plot represents only background random noise counts of the photomultiplier. Note that the intensity of the background noise counts is very small and the distribution of the number of counts per channel is close to random. Figure 2b demonstrates a typical time autocorrelation function when a physical DNA sample is placed in the scattering chamber, and typically has the shape of an oscillatory and slowly exponentially decaying function. When the DNA is removed from the scattering chamber, one anticipates that the autocorrelation function will be the same as before the DNA was placed in the scattering chamber. Surprisingly and counter-intuitively it turns out that the autocorrelation function measured just after the removal of the DNA from the scattering chamber looks distinctly different from the one obtained before the DNA was placed in the chamber. Two examples of the autocorrelation functions measured just after the removal of the physical DNA are shown in Figures 2c and d. After duplicating this many times and checking the equipment in every conceivable way, we were forced to accept the working hypothesis that some new field structure is being excited from the physical vacuum. We termed this the DNA phantom in order to emphasize that its origin is related with the physical DNA. We have not yet observed this effect with other substances in the chamber. After the discovery of this effect we began a more rigorous and continuous study of this phenomena. We have found that, as long as the space in the scattering chamber is not disturbed, we are able to measure this effect for long periods of time. In several cases we have observed it for up to a month. It is important to emphasize that two conditions are necessary in order to observe the DNA phantoms. The first is the presence of the DNA molecule and the second is the exposure of the DNA to weak coherent laser radiation. This last condition has been shown to work with two different frequencies of laser radiation.

Perhaps the most important finding of these experiments is that they provide an opportunity to study

the vacuum substructure on strictly scientific and quantitative grounds. This is possible due to the phantom field's intrinsic ability to couple with conventional electromagnetic fields. The value of the coupling constant between the DNA phantom field and the electromagnetic field of the laser radiation can be estimated from the intensity of scattered light. The first preliminary set of experiments carried out in Moscow and Stanford have allowed us to reliably detect the phantom effect; however, more measurements of the light scattering from the DNA phantom fields are necessary for a more precise determination of the value of the EMF-DNA phantom field coupling constant.

THEORY

It is fortunate that the experimental data provides us with qualitative and quantitative information about the nonlinear dynamical properties of the phantom DNA fields. Namely, these experimental data suggest that localized excitations of DNA phantom fields are long living and can exist in non-moving and slowly propagating states. This type of behavior is distinctly different from the behavior demonstrated by other well known nonlinear localized excitations such as solitons which are currently considered to be the best explanation of how vibrational energy propagates through the DNA.

It is a remarkable and striking coincidence that a new class of localized solutions to anharmonic Fermi-Pasta-Ulam lattice (FPU) - nonlinear localized excitations (NLE), which have been recently obtained [7], demonstrate very similar dynamical features to those of the DNA phantom. Nonlinear localized excitations predicted by the FPU model also have unusually long life-times. Furthermore, they can exist in both stationary or slowly propagating forms. In Figure 3, one example of a NLE is shown which illustrates three stationary localized excitations generated by numerical simulation using the FPU model [7]. It is worthy to note that this NLE has a surprisingly long life-time. Here, we present only one of the many possible examples of the patterns for stationary excitations which are theoretically predicted. Slowly propagating and long lived NLE are also predicted by this theory. Note that the FPU model can successfully explain the diversity and main features of the DNA phantom dynamical patterns. This model is suggested as the basis for a more general nonlinear quantum theory which may explain many of the observed subtle energy phenomena and eventually could provide a physical theory of consciousness.

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

Furthermore, one can suggest that the DNA phantom effect is a specific example of a more general category of electromagnetic phantom effects [8]. This suggests that the electromagnetic phantom effect is a more fundamental phenomenon which can be used to explain other observed phantom effects including the phantom leaf effect and the phantom limb [9].

Dr. Poponin is a quantum physicist who is recognized world wide as a leading expert in quantum biology, including the nonlinear dynamics of DNA and the interactions of weak electromagnetic fields with biological systems. He is the Senior Research Scientist at the Institute of Biochemical Physics of the Russian Academy of Sciences and is currently working with the Institute of HeartMath in a collaborative research project between IHM and the RAS. He can be contacted at Institute of HeartMath, Research Division, 14700 West Park Ave. Boulder Creek, CA 95006. Phone 408-338-8700, Fax 408-338-1182.

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http://users.panola.com/lindgren/aura.html

SOCIAL SCIENTIST LOOKS AT AURA MYTHOLOGY

By Prof. Carl Edwin Lindgren

"A potential set of stories, traditions, or beliefs associated with a particular group or the history of an event, arising naturally or deliberately fostered"

A copy of CAPTURING THE AURA, a \$19.95 value, is available from Blue Dolphin Publishing. You may also contact me at celindgren@panola for a on-line copy (only \$6.50/Paypal). Also feel free to contact me about the various biofeedback applications of the Progen Aura Imaging camera. Learn how to receive a free copy of the book.

Known over the centuries by many names, *ch=i*, *prana*, *karnaeem*, and *Illiaster*, auric energy or bioplasmic fields have been documented for over 5,000 years. Astral lights alluded to by ancient Eastern Indians, Chinese, and Jewish mystics, are attributed to a universal energy that permeates all matter. In early esoteric writings and later in those of the Rosicrucians, American Indians, Zen Buddhists, and Christian mystics, these fields have been described as glowing clouds of light diffuse by diverse colors. Christian mystics feel that auric activity consists of two interconnecting energy patterns, i.e. the aureole, surrounding the entire being, and the nimbus or halo encircling the head. Many Eastern and Western esoteric writings, strongly suggest that auric field intensity correlates to Chinese acupuncture locations of subtle energy. The Greek writer Plutarch expressed the notion that auras revealed the desires and vices of man through their color variation, and movements. Gina Allan, author of a best seller, *Gifts of Spirit* believes that,

aura's are like a signature, each as individual as the person they surround. There are two separate aura's that are with all individuals. The physical aura's colors change with the moods/emotions of the moment. The spiritual aura has colors reflecting the evolution of the person. Both auras are changing constantly. In a survey (1987) at a private school in Singapore, 85% of the students, ages ranging from six years to twenty two, could see the physical aura. Those people with the ability to truly see the physical aura can also diagnose medical problems. The spiritual aura is even more rarely seen as it requires a deep sense of integrity. This aura shows past lives and the potential for spiritual growth in this and future lives (Allan 1996).

If the aura exists, as attested to by countless mystics and psychics, then it certainly manifests itself in the ultraviolet light spectrum¹ Though imperceptible to most individuals, this radiation is visible only to a select few? According to some scientists, this ability is part of man's evolutional development, and, that in time all will be afforded this precious gift. This theory is advanced in Steve Richards' book, *Invisibility: Mastering the Art of Vanishing* (1992). According to Patrick Alessandra, author of *Seeing Auras*:

these images are the testimony of those who see the world of energy around us and who seek to understand how we can all become more aware of these realities. Today, in the last decade of the twentieth century, there are far more people alive than ever before who can not only feel but also see the energies around them. This is a natural event in human evolution and as more years pass we will all find our abilities to sense auras and energies increasing.

Howard and Dorothy Sun (1993), in their work, *Color Your Life*, propose that auric energy vibrates around all living things, absorbing sun and atmospheric light. This light, according to mediums and some scholars/scientists, is divided (similar to a prism) into "component color energies" (red, orange, yellow, green, turquoise, blue, purple, and pink). The color energies are then directed toward the body's energy transformers, the chakras. These so-called energy centers are "power points in the body through which energy flows and is transformed." Chakras, therefore, according to Orientals and some parapsychologists, transform and balance the energy currents coming from the higher, finer energy fields so the material body can use this energy. Ms. Allan, a former Buddhist nun and current Naturopath and Natural Healer, provides personal insight into auric colors and their potentiality for change -

Over the last fifteen years, I have been observing changes taking place in the spiritual colors of my own aura. I have had these colors confirmed by a friend who sees auras. Many times when I have been speaking publicly, people have commented on my colors. Fifty years ago my colors showed a very pale aqua green, indicating healing abilities. Today that color is a deep sea green when I'm healing or speaking on the subject of healing. The field of colors changes in size and density the more the energy is balanced and in harmony within the seven Chakras (Allan 1996).

The aura, Allan noted, besides providing an array of colors ranging from one end of the spectrum to the other, also has texture and shape variations. Some of these variations include solid and brittle, thick and thin, light and heavy, and luminous and dark [The author, although having tried to see such light vibrations under lab conditions, has been unable to see these colors or textures]. Many times a brittle or broken aura is produced by fear, confusion, greed, envy, or doubt. These auric or electromagnetic

bodies, according to Allan, are also divided into seven bands or fields. These fields surrounding the body include: Etheric, Emotional, Mental, Astral, Etheric Template, Celestial, and Ketheric. Some psychics and healers state that there are other "finer" levels on the cosmic plane.

According to *Hands of Light*, by Barbara Ann Brennan, a former research scientist for NASA (1987), when these energy fields become unbalanced, it is possible to reorganize and heal them by clearing the unhealthy or "blocked" energies (note *Capturing the Aura* healing chapters) by trained and gifted healers [Writer's comment: This technique seems to be similar to REKI, which the author has observed in various research centers in the States and overseas].

According to psychics and mediums, much of the healing process of auras, regardless of their condition, must also come from within. Auras are strengthened by pure thoughts, exercise, sunshine, fresh air, and proper nutrition and eating habits. The Societas Rosicruciana in America (an esoteric group originally connected with the Masons) stresses the importance of concentrating, visualizing, and meditating on an outpouring of "Spiritual Fire" which covers the physical and spiritual bodies in illumination. This, according to them, is the healing power of God that heals and protects. An individual, according to Rosicrucian philosophy, must desire and will this light, which is always present but invisible, to immerse the body in its divine rays. To accomplish this goal, auric fields must first be seen.

Although these human energy fields, described by mystic C.W. Leadbeater (1987) in *Man Visible & Invisible* as "very dense and solid-looking mist surrounded by an egg-shaped cloud of diaphanous mist;" are visible to some psychics and mystics, the Aspiritual skin@ remain invisible to the average person. Therefore, some scientists and researchers have attempted to devise machines that will photograph and analyze the aura, then diagnose its condition (note my article below on Aura Photography - The camera was originally designed by Guy Coggins, a noted inventor).

For over 100 years, researchers have tried to photograph these luminous fields. Since the 1890s, however, when the first "aura photograph" was taken by Nicola Tesla (see picture above) (whose body was attached to the output of his apparatus), this search has succeeded in producing mostly fraudulent, poor quality prints and small direct contact Kirlian photos [Writer's comment: a high-voltage imaging process, such as the aura camera, can be used for numerous scientific experiments including some forms of biofeedback].

Science meets the Unknown

One of the first serious attempts at scientifically studying the aura was conducted by Dr. Walter Kilner of St. Thomas' Hospital (see below). Through a series of objective and

subjective experiments, Kilner was able to invent a crude detection device, which he stated, could observe auric activity.

By separating two pieces of glass, cementing them around the edges except for one small opening, pouring a bluish dye called dicyanin (coal-tar dye from Germany) into the hollow glass and sealing the glass, Kilner invented an apparatus that was sensitive to the ultraviolet energy spectrum. Dr. Kilner could then observe, by peering through the lens, vaporous energy (auras) extending from living bodies.

It seems, according to Kilner, that the longer one looks through the blue colored lens, the more sensitive the eyes become to ultraviolet and higher light spectrums. It is in this range that Kilner believed auras occur. In his book, entitled *The Human Atmosphere* (1911), Dr. Kilner presents "scientific evidence" for the existence of the aura. According to Kilner's research, he and his associates were able, on many occasions, to perceive auric formations extending several inches from patients= naked bodies. Within the pages of Kilner's work, he also describes a series of experiments that the reader may try. The only drawbacks to Kilner's method are the extreme difficulty in obtaining the blue dye and the potential for serious injury to skin or eyes if the apparatus was to leak (i.e., blindness and burning).

In 1924, Ernest J. Stevens, PhD, opened a research laboratory for the investigation of odic and auric energy. During the next few years, Dr. Stevens attempted to harness these forces, but much of Dr. Stevens's work is no longer in existence.

Later, in 1937, Oscar Bagnall, BA (Cantab.), in his work *The Origin and Properties of the Human Aura*, expanded on Kilner's theory presenting a simple method of observing auric formations by substituting the dye pinacyanol (dissolved in triethanolamine) for dicyanin. This dye, like the aforementioned dicyanin, is also difficult to obtain, and cobalt blue and purple glass may be substituted for the dyes used by Kilner and Bagnall.

In 1946, Harry Boddington, in his book *The University of Spiritualism*, announced that he had also discovered a method of viewing auras through glass made to the same spectroscopic tint as dicyanin. This process, obtained from glass produced in Czechoslovakia, provided the user with a permanently colored and safer viewing apparatus.

Boddington (1946), within the pages of his work, also alluded to a process by a Harley Street specialist who invented an apparatus based on the connection of a step-down transformer connected to electrical current with high voltage, low amperage and a

handle connecting to the transformer completing the subjectearth circuit, the researcher would approach the would-be subject with a electrical bulb or tube of neon gas. The closer the tube came in contact to the subject, the brighter it glowed. According to Boddington (1946, 107), the brightening of the tube was caused by A... some invisible emanation given off from the body of the subject ... [an] aura@ [Writer's comment: Some additional research on the topic]

Shortly after Bagnall's aforementioned experiments, a radically new technique for auric detection was created. Soviet scientists Semyon and Valentina Kirlian (c. 1939) developed a method for "photographing and viewing the aura".

The Kirlian Experiment

This form of radiation field photography, introduced by the Kirlians, was later researched by V. M. Inyushin, and Victor Adamenko. This technique, using electric current, exposes the presence of energy patterns which are then transferred to a photographic plate. More specifically, the subject places his fingertip on the condenser-like plate. As over-head lights are turned down, a bright ghostly blue light rises from the plate area and a strong odor of ozone fills the room (produced by low ampere high electrical voltage). The pad produces a crackling sound as electrical current is transferred from the plate to the subject's finger. Small tentacles of white and bluish light jump in arcs, lighting the space between the skin tissue and cold metal (plate is insulated). Once the photograph is developed, the print reveals an array of brightly colored lights extending from the fingertip. In one print of a healer's finger, the center of the fingertip was dark while from the upper portion, extending out about one-third inch were a series of blue hair-like strands of current induced lights. Near the bottom was a bright red and orange light extending from the finger, connecting with the blue upper corona³ to form an outline of the darkened finger.

It was during these initial experiments that Kirlian accidentally discovered the therapeutic benefits of Kirlian photography. According to Susana Madden (1995), an aura imaging photographer, while conducting a series of experiments, Kirlian took a picture of his finger tip which revealed no corona discharge. Surprised, Kirlian once more attempted the experiment with the same results. Shortly thereafter, he came down with the flu. Soon after this experiment, his wife also exhibited similar effects while attempting to photograph her aura. She too, only a few days later, contracted the flu.

According to Stan Krippner and Daniel Rubin's (1972) *Galaxies of Life*, researchers are divided in their evaluation of the Kirlian phenomena (the author taught with Dr. Krippner in the 1990s). Some call the manifestation "corona discharge," believing that the technique only reveals commonplace electrical occurrences while others conceive of radiation field photography as revealing the "bioplasma body" or aura [Note extensive footnote concerning a scientific explanation of Kirlian Photography]³.

According to Viktor Adamenko, a Russian scientist (c 1970s), the discharge is Athe cold emission of electrons. @ Relating to the bioplasmic theory, V. M. Inyushin of Kirov University, felt that Athe photographs reveal the >bioplasmic body= of organisms, a patterning of electrons and photons that determines the structure of the physical body @

(Moss 1974, 478). AInside the >bioplasmic= body, said Inyushin, processes have their own labyrinthine motion, different from the energy pattern in the physical body, yet the bioplasmic body is not a chaotic, but a whole unified organism which acts as a unit, is polarized, gives off its own electromagnetic fields, and is the basis for >biological= fields@ (Tompkins and Bird 1989, 204).

Thelma Moss and other Investigators

By the 1970s, the Psychical Research Foundation and Department of Electrical Engineering at Duke University began investigating not only Kirlian photography but a technique known as bioluminescence (Duncan and Roll, 1995). This procedure used highly sensitive light amplifiers to map very faint natural light that seems to be radiated by the body (Duncan and Roll 1995). Kirlian photography possessed a near magical quality which continued to draw researchers. On the west coast at UCLA, Dr. Thelma Moss was just beginning her research with Kirlian photography.

Many of the early 1970s experiments by parapsychologists (psychologists with a major in paranormal research) led them to believe that the Kirlian camera, which produces photographs of electrical corona, actually provided proof of the existence of an aura or soul (Robinson 1981). Scientists, such as Dr. Viktor Inyushin (State University of Kazakhstan, Russia) were inclined to believe, based on their experimentations, that bioluminescence represents auric manifestations.

Although being an indicator of moods, emotions (Singer 1981), and certain physiological changes, scientists soon discovered that the Kirlian process did not reveal the seat of the soul, but rather ultraviolet radiation arcing between the instrument, photographic plate, and subject. The Kirlian camera, earlier thought of as a means of psychic detection and perhaps an instrument for perceiving the soul, has recently been shown to merely measure sweat. As Duncan and Roll (1995) states, the effects produced by Kirlian technology "is due to an interaction between electromagnetic radiation from the camera, the air surrounding the hand and perspiration from it." These variations in shape, size, and color of the photographed "aura" are due to variables such as moisture, salt content, and gases produced by the skin. More precisely, as electricity from the Kirlian apparatus enters the test subject, a gas ionization occurs around the moist (i.e., perspiration) object. Therefore, "during exposure, moisture is transferred from the subject to the emulsion surface of the photographic film and causes an alternation of the electric pattern on the film" (Pehek, Kyler, and Faust 1976). For this reason, a photograph taken in a vacuum does not produce an auric pattern (Hines 1988). In all, there are over twentyfive variables which may influence a final Kirlian photograph (Singer 1981).

Although some parapsychologists will agree to the non-psychical explanation of Kirlian's "auras," these explanations do not explain the so-called "phantom-leaf@ effect wherein a portion of a leaf is removed, and a Kirlian print is made revealing the intact configuration of the original leaf. These experiments were conducted by researchers including I. Dumitrescu and Allen Detrick. According to L. E. Bartlett's *Psi Trek*, these

effects were first noted by Soviet scientists and later confirmed by UCLA researcher, Dr. Thelma Moss.

Further, Lois Julien (1996), one of Dr. Moss= former lab assistants, says AWe wanted to make sure that we were on the right track. We did all sorts of tests to make sure that it was not something else like sweat. We studied the effects of moisture, temperature, the room, the atmosphere, the film. We eliminated all of these factors. What it came down to was energy.@

The following data has appeared on the <u>Australian Institute of Parapsychological</u> Research website:

The acupuncture points have higher electrical conductivity, potential and capacitance than the surrounding skin, and these increase further with ill health. He has obtained electroluminescent images at cell and tissue level, and invented a new method (electrograph) for imaging the whole body.

Leonard Konikiewics (Polyclinic Medical Centre, Harrisburg, Pennsylvania) has used Kirlian photography to correctly identify 16 out of 18 cystic fibrosis patients in a sample of 140, and 37 out of 48 carriers of the CF gene. He has also studied menstruation of the human female. The luminosity of the Kirlian aura increases during ovulation. When the female took a birth-control pill (preventing ovulation), the Kirlian aura remained at constant intensity.

Harry Oldfield (Charing Cross Hospital, London) has built a Kirlian hand-gun. It fires high-frequency radio signals at the heart. Resonance of the heart is picked up by the gun and displayed on an oscilloscope, indicating anomalies. He and Dr Peter Kandela have also photographed undiagnosed breast tumours in women.

Conclusion

As with all scientific endeavors, there is still disputes as to whether the Kirlian photograph reveals merely a physiological manifestation or an ever present bioplasmic electromagnetic energy field. Moss and Julien purport one theory while other researchers such as Duncan, Lindgren and Roll support another.

Notes

- 1. The writer of this article, is open to new research possibilities of the existence of "auric energy" and its potential use in some forms of healing or disease detection. This is based on his own personal research in the mid 1990s.
- 2. The corona refers to the display of millions of electrons which are produced by an electronic discharge. As in Kirlian photography, these electrons travel to a photographic plate from the photographed object.
- 3. Note the **skeptic view**: http://www.astunit.com/faq/skeptic.txt "The technique involves applying a high-frequency, high-voltage electrical source (such as from a Tesla coil) to a subject. The source is also very low-current, so the subject does not get electrocuted (it's the current in electricity that does the harm, not the voltage). When this is done, an 'aura' of lightning-like electrical discharges forms around the subject. This field is visible to the naked eye (in a dark room, anyway), and may be photographed. Adherents of

Kirlian photography claim that this field is some sort of 'life energy' which may indicate things about the subject, such as health, psychic ability, and so forth. They claim that Kirlian photography sometimes shows the 'phantom effect.' That is, if a limb is amputated from the subject (or, less gruesomely, if a piece is torn off a leaf), that the field will still show the missing piece for a time, because its' 'life energy' is still there. There is no truth to the claims that it shows any sort of 'aura' or 'life energy.' It is merely a coronal discharge, complete with ozone production. ..."

Note my extensive background in the natural and social sciences - http://users.panola.com/lindgren/biography.html

Due to the numerous comments made over the past 5000 years depicting some form of energy being released from the body, I feel that there could be an objective correlation between aura color and and various physiological and psychological variables of the body. As scientists, both social and natural, we must work for the truth. At time, the truth is strange.

SECTION 2

GUY COGGINS AND HIS CAMERA

A Scientist takes it Apart!

Contact Prof. Lindgren for a copy of *Capturing the Aura* - celindgren@panola.com Also phone or e-mail him about the camera (purchase, specifications, techniques and uses).

Known as Aura Imaging Photography, proponents of this technique claim to produce a full-spectrum color print of remote bioplasmic energy transfer. According to these researchers, the resulting photographs show the upper segment of the subject's body including the head, neck, and shoulder bathed in auric light. Experimentation is currently underway toward producing a full-body perimeter electrofield image. This system utilizes traditional biofeedback

measuring combined with high-voltage field imaging. The camera displays the aura as colorful fields of light providing the therapist or healer with quick recognition of shape, color, and size, and processing (each color suggests a specific physical, emotional, or spiritual condition) [Writer's comments: The camera provides exceptional biofeedback techniques].

According to Stephany Hurkos (1996), widow of famed psychic Peter Hurkos, these sensors measure the subject=s Aelectromagnetic field, based on the Ayurvedic (acupressure points on the hand) system of meridians. The machine codes these energy readings into frequencies (which correspond to certain colors) and processes the photograph, a computer sorts the

information and prints the Aura Photograph.@ These colors and their corresponding emotional states include passionate and joyful red, happy and creative orange, disciplined yellow, healing green, sensitive and solitude blue, relaxing violet, and spiritual white.

The original researcher and designer in this new technology is Guy Coggins, inventor

of the Aura Camera 3000, which he introduced in 1992. The Aura Camera 3000 and the new 6000, according to its inventor, does not actually "see" auric energy, rather it perceives them electronically, converting energy impulses with the help of a computer program into an auric image. These images can then be viewed on a projection screen or photographically printed, creating a permanent record.

Coggins (1994) states that this camera "transmits radio waves through the subject's electromagnetic field, then converts the waves into electrical energy which can be processed ... as light and color."

Further, Goggin's states that:

[The photographic instrument] uses a hand sensor (see above). A person would put their left (or right) hand onto the hand sensors. This in turn would allow a particular product to measure the standardized biofeedback parameter. The hand sensor itself has various contact points on them; these are connected with certain organs of the body, as well as measure the electromagnetic field of the user and can thus deliver information about the energetic and auric qualities of that person. The hand sensor can also measure deviations in temperature, humidity and static electricity in the environment and the person, allowing for greater precision in data gathering. These data parameters are then projected as a radiant, colored aura field around the body on either a Polaroid photo or onto a computer or television screen. In no time thereafter, a brilliant color photo or computer print out can be presented to the user.

Does the Aura Cameras show auras? Perhaps and perhaps not. However, the instrument is one of the best real time video biofeedback instrument available to the researcher or technician. According to the research,

Auraphotography, using the **AURACAM 6000** and the **BIOFEEDBACK HAND SENSOR**, measures your energetic and auric qualities and exposes that on a single Polaroid photograph. However, this only shows your aura for your current feelings and emotions, and does not represent subsequent changes.

Interactive Auraphotography, on the other hand, measures and continues to measure this data in real time. This information is then displayed on a computer or television screen, allowing us to see changes in your emotional state *live* as it happens. As the video-feed is being shown, the person and their personal aura colors may come to considerably large changes and can also show the instability of ones aura, especially if the emotional state of that person is not in balance. Generally the aura picture does change with every emotional or mental change of the user; this enables us to see the kinds of effects that therapy and adjustments of personal vibrations can have upon ourselves.

Conclusion

The search for the aura continues. "In small, one-man laboratories, psychic circles, healing sessions, and university para-psychological departments, scientists and psychics are searching for the elusive 'aura'. It is hoped that, within the near future, all individuals

will be allowed, whether naturally or through some technological advance, to see, record, and study this inexplicable phenomenon."

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A Positive View of PSI:

- Institute of Noetic Sciences
- Boundary Institute
- Bijzondere leerstoel Parapsychologie (RU), Parapsychologisch Instituut Utrecht
- Fourmilab Switzerland
- Pacific Neuropsychiatric Institute
- Koestler Parapsychology Unit

Another View of PSI:

- Why Bogus Therapies Often Seem to Work Barry L. Beyerstein, Ph.D.
- The Energy Fields of Life