

Measuring Human Energy Field
Revolutionary Instrument to reveal Energy Fields of Human and Nature
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The belief that there are subtle energies in Nature as well as humans that interact and can affect health and behavior has been a basic tenet in Eastern medicine and philosophies for millennia. Western scientists and physicians have largely rejected this because of lack of proof that invisible forces like *Qi (chi)* or *prana* exist. The Chinese sage Lao Tsu, considered to be the father of Taoism, described *Qi* as follows:

Look, it cannot be seen - it is beyond form.

Listen, it cannot be heard - it is beyond sound.

Grasp, it cannot be held - it is intangible.

Suggestions that that there some type of energy similar to this have surfaced sporadically. The medieval physician Paracelsus proposed that a vital force called *archeus* acted like an inner alchemist to sustain life by taking advantage of the *vis medicatrix naturae* (healing power of nature). The 17th century mathematician-philosopher Isaac Newton, who was also an alchemist, borrowed some of these ideas in his concept of a mysterious cosmic "aether" that pervaded all space. Two centuries later, Franz Mesmer postulated an invisible "universal fluid" with magnetic properties that circulated throughout the body to provide energy. Disease occurred when this flow was blocked, but health could be restored by swallowing iron filings and applying magnets to the affected area. The magnets were soon discarded since Mesmer believed the cures were due to his mere presence and the power of his "animal magnetism" when he touched or moved his hands over the patient. Other physicians subsequently proposed analogous healing energies, such as the Odic force of Baron Karl von Reichenbach, Oscar Brunler's biocosmic energy, and most recently, Wilhelm Reich's orgone. All of these have also been discredited because of lack of proof of their existence, much less any health benefits.

The History and Evolution Of Electrography

As might be expected, numerous attempts were made to prove that such energy fields could be identified in humans as well as Nature. The first inkling of this was a 1777 discovery by the German physicist and philosopher George Lichtenberg, who reported that when any object was placed in a strong electrical field, a glow could be seen around it. Lichtenberg was able to print images on a plate covered with coal dust that physicists called "Lichtenberg' figures". Interest in photographing electrical fluorescence increased all over the world due to the influence of Nicola Tesla, who demonstrated in 1880 that the application of a high-frequency electrical circuit to the body caused a bright fluorescence to surround it. While this seemed dangerous, it was perfectly safe when special coils were used, that were later called "Tesla coils".

The term "electrography" was coined by the Czech physicist B. Navratil in 1888 to describe photographic images of such energy emanations. A significant advance was made by the talented Byelorussian scientist Jacob Narkevich-Yodko, who developed his own technique for making electrophotographs. He studied the effects of electrical stimulation on over 1,500 fingers of various individuals, plant leaves and grain, and presented his findings to the St. Petersburg Institute of Experimental Medicine in 1892. His results generated so much interest, that in 1893, a conference on electrography and electrophysiology was organized at St. Petersburg University. He was later invited to lecture at numerous European scientific centers, including: Berlin, Vienna, Paris, Prague, and Florence. Narkevich-Yodko received medals of commendation at several of these and at the 1900 Congress in France he was awarded the title of Professor of Electrography and Magnetism.

At around the same time, on the other side of the globe, very similar experiments were being conducted by Landell de Morua, a Brazilian monk. In 1904, he invented an electrographic camera to photograph electrical discharges, which was subsequently modified by others. In 1939, two Czechs S. Pratt and J. Schlemmer. published photographs showing a curious glow or aura around leaves. The same year, the Russian electrical engineer Semyon Kirlian and his wife Valentina developed their own technique after observing a patient who was receiving medical treatment from a high-frequency electrical generator. Electrotherapy was popular at the time and they had noticed that

when the electrodes were brought near the patient's skin, there was a glow similar to that seen in an electrified tube filled with neon. Kirlian photography consisted of placing photographic film on top of a conducting plate, and attaching another conductor to a hand, leaf, or other part of a plant. When the conductors were energized by a high frequency high voltage power source, the resulting image showed a silhouette of the object surrounded by an aura of light.

The Kirlians published the results of their experiments for the first time in 1958, and in 1961 reported that the characteristics of fingertip auras not only varied in different people, but was also affected by their emotional status [1]. If someone felt very anxious or was in an opposite state of deep relaxation during meditation, there was a corresponding change in the size and intensity of the glow. Their work was virtually unknown in the West until 1970, when two Americans, Lynn Schroeder and Sheila Ostrander published their book, *Psychic Discoveries Behind the Iron Curtain* [2]. One of the most extensive investigations was carried out at the UCLA Center for the Health Sciences, where Moss and Johnson took more than 10,000 'modified' Kirlian photographs, including the fingertips of over 500 people and over 1,000 leaves. [3] They reported that human energy fields were affected by numerous factors, such as ingesting alcohol, performing yogic exercises and during hypnosis.

They confirmed that the changes were most dramatic when experiencing different emotions, and that they frequently differed when the researcher and subject were of different genders, as opposed to same sex experiments. A strict authority figure, such as a senior skilled researcher, tended to elicit a much smaller corona compared to a more informal and friendlier assistant of lower status. In studies involving four "healers", their coronas were apt to be much larger and brighter before the healing session than during or after the intervention. In contrast, their patients' coronas increased sharply over their baseline status, suggesting there had been an actual transfer of energy to them from the healer. Dramatic differences in the corona were also found before and after acupuncture treatment. The brightness and clarity of the corona were particularly prominent when needles were inserted at acupuncture points known to be related to the patient's particular complaints. Based on extensive investigations, the researchers concluded that these

changes could not be explained by alterations in skin resistance or temperature changes due to peripheral vascular blood flow.

LW. Konikiewicz, another American researcher, subsequently demonstrated in carefully controlled double-blind studies that he could accurately identify patients with cystic fibrosis, as well as asymptomatic carriers of the gene. [3], He found that the day of the menstrual cycle influenced variations in the brightness of the energy field and that he could use this to identify when ovulation occurred. Subjects taking oral contraceptives had different patterns. He also reported success in detecting cancer and other abnormal conditions in a subsequent book co-authored with LC. Griff [5],

Scientific acceptance of Kirlian photography was rather limited because the quality of equipment used by early investigators varied considerably and results were inconsistent since there was no standardization. Things improved when a multidisciplinary group headed by William Eidson, professor of physics at Drexel University in Philadelphia, showed it was possible to image electrical parameters of a specimen in real time, thus making it possible to map human energy fields and any rapid changes. This six-year project and related research were summarized in a 1976 article in the prestigious journal *Science* [6]. The International Union of Medical and Applied Bio-Electrography was formed in 1987 to help standardize equipment, research methods, and data acquisition.

The Advent Of Modern Bioelectrography Utilizing Gas Discharge Visualization

Gas Discharge Visualisation (GDV) technology was developed in Russia by our team in 1995 (www.korotkov.org, <http://ktispb.ru/en/index.htm><http://www.ktispb.ru/>) and has been described in detail in prior publications [7-10]. The GDV device is a state-of-the-art computerized system that has superseded traditional Kirlian photography for several reasons. A major difference is that it allows direct, real-time viewing and analysis of changes in human energy fields since the data is quantified and analyzed by sophisticated software. Because the results are obtained so rapidly, it has become an “express-method” not only for diagnosis, but also detecting abnormalities that require more detailed investigation. Most importantly, since this technology and the protocols used are standardized, GDV results obtained by different investigators can be compared with reliability. The results are interpreted based on the energy connections of fingers with

different organs and systems via meridians that have been used in acupuncture and traditional Chinese medicine for thousands of years.

This approach was first proposed by the German physician and engineer Reinhard Voll in his Meridian Stress Assessment. A variation of this was subsequently developed by the German naturopath and acupuncturist Peter Mandel, who energized certain acupuncture points by using different colored lights to achieve a desired response. Mandel's Energy Analysis Emission diagnostic system utilized Kirlian photography and his Esogetic Colorpuncture therapy is believed to restore *yin* and *yang* equilibrium. All of these modalities, as well as non-invasive laser acupoint stimulation, have been used with varying degrees of success in thousands of patients over the past 2 decades [11].

The GDV device is based on the stimulation of photon and electron emissions from an object when it is placed in an electromagnetic field and subjected to brief electrical pulses. This process is called 'photo-electron emission' and has been thoroughly studied with cutting edge electronic techniques. The emitted particles accelerate in the electromagnetic field, generating electronic avalanches on the surface of the dielectric (glass) plate in a process called 'sliding gas discharge.' The discharge causes a glow from the excitement of molecules in the surrounding gas which is constantly measured. Voltage pulses stimulate optoelectronic emissions that are amplified in the gas discharge, and light produced by this process is recorded by a sensitive CCD (charge coupled device) camera that converts it into a colored computer image, or BIO-gram. Data obtained from the fingers of both hands are converted into a Human Energy Field image using proprietary sophisticated software,

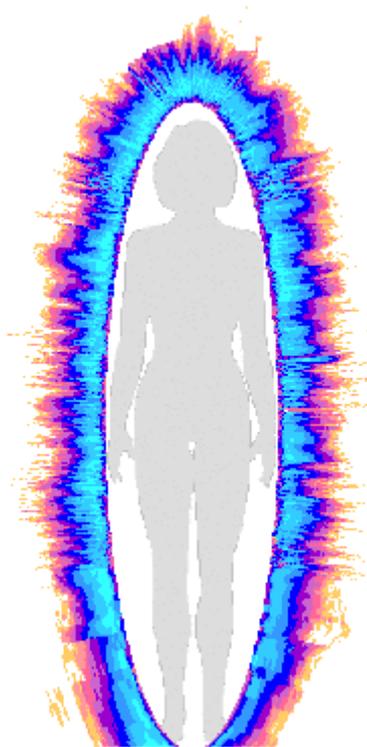
This technology has extraordinary implications for all health related fields, including conventional as well as complementary or alternative therapies. A comprehensive review of these varied GDV applications can be found in a recent book [12] co-authored with Dr. E. Yakovleva from Moscow Medical University. Research with the GDV device is currently being carried out at universities and research institutes worldwide in medicine, "energy medicine", athletic training, biophysics, parapsychology, and other disciplines [13-23]. We have recently developed a new application of GDV for "Remote Detection of Human Emotions" called "GDV Sputnik" [24,25]. GDV has been used in numerous significant

research projects that have confirmed its usefulness and reliability and value. Some examples include:

- A presentation at the National Institutes of Health to an audience of 27 recognized experts from U.S. government and academic institutions, including Dr. Leonard Wisneski, author of *The Scientific Basis of Integrative Medicine* [26].

- A Pennsylvania State University study was conducted by scientists from the National Institutes on Aging, which validated that GDV can be utilized efficiently in high volume venues to provide an accurate and consumer-friendly assessment of health status [8].

- Significant correlations between GDV indices and (HRV) Heart Rate Variability assessments have been demonstrated by various research groups [9]. HRV is the most accurate, objective measurement of stress and a powerful predictor of sudden death. These observations confirm that GDV reflects autonomic nervous system activity. [7,10]



- GDV has also been the basis of graduate doctoral dissertations in various countries that included research in medical and other technical fields [16-18].

- Our group has hosted a series of annual international scientific congresses in St. Petersburg during the last two decades that has attracted scientists from 46 countries, all of whom are involved in GDV research. They have reported significant results in diverse areas, including early detection of certain cancers.

As will be seen, GDV technology provides a convenient and user friendly method to assess patients with a wide range of complaints and can also be utilized to assess responses to drugs, meditation, stress reduction therapy or any other interventions.

Fig.1. Human Energy Field of a healthy person.

Energy Fields – The Good, The Bad And The Ugly

The Energy Field of the individual in Figure 1 to the left is uniform, has no gaps, holes or strong outbursts, and is of optimal size. This would likely represent the type of field seen in someone who not only has no physical problems, but is also not stressed and in a very good mood.

We recognize that it is quite rare for anyone to have absolutely no physical or mental complaints. Most people adapt to problems that only cause mild discomfort under particular circumstances, such as joint discomfort that is weather related or following strenuous exercise. With appropriate dietary and other lifestyle changes and medication when needed, they lead an active life, have few complaints, and would be considered healthy. However, many healthy people may not be aware of asymptomatic weak or abnormal GDV Energy Field findings. In some instances these could be precursors of dangerous conditions such as a heart attack or stroke that might be prevented if appropriate measures were taken, as illustrated below in Figure 2.

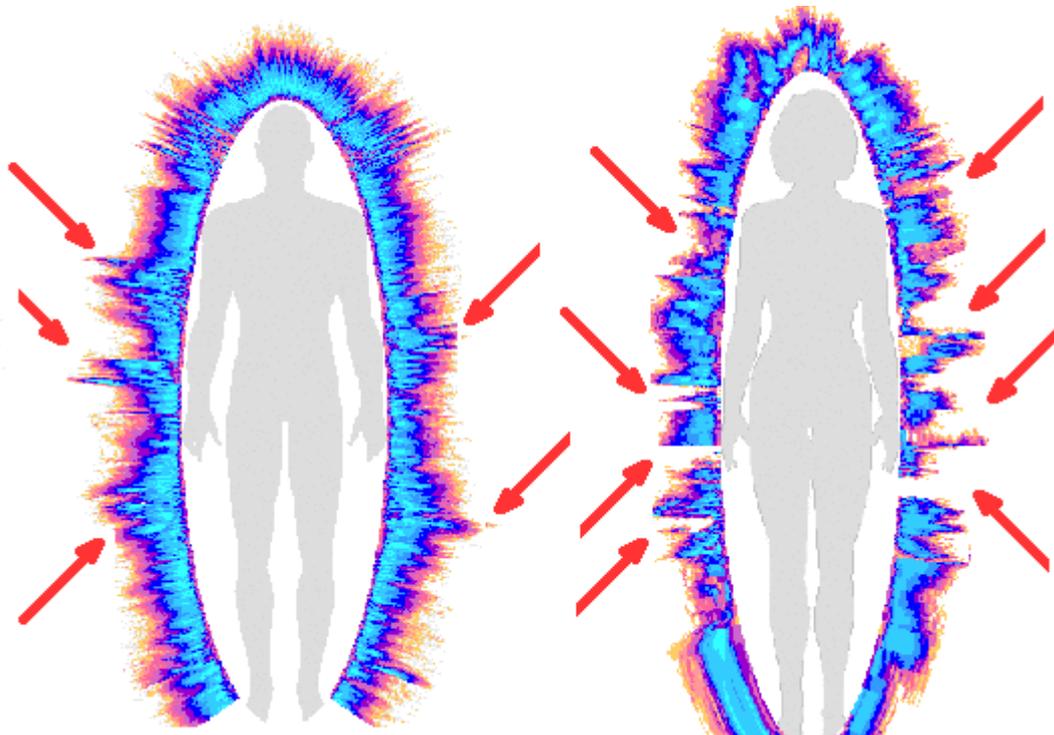


Fig.2. Human Energy Field of apparently healthy person with problems. Areas indicate the areas of attention.

As can be seen in Figure 2, abnormalities requiring further investigation may be manifested as outbursts as well as gaps. In both cases the overall contour is not uniform, and there are marked irregularities at various sites. More sophisticated studies have revealed that gaps in the Energy Field are very often correlated with microcirculation blockages. In some cases, the differences between Energy Fields of apparently healthy people and those suffering from chronic problems are so faint that they are difficult to distinguish. An accurate assessment in this and other instances can only be made by an experienced investigator with special training in programs that provide illustrative examples and information. A major purpose of the GDV device is to serve as a screening tool to determine the need for further investigation and to recommend treatment that will provide preventive or therapeutic benefits.

GDV assessment also makes it possible to demonstrate the effects of physical exercise, meditation, prayer musical performance, acupuncture and any other intervention. For example, in Figure 3 above to the left, note the relatively uniform appearance of the Human Energy Field in a maestro prior to conducting a symphony orchestra. This is in sharp contrast to the very irregular and jagged image following the performance, with multiple gaps reflecting the large amount of emotional and physical energy that had been expended. One can also demonstrate the benefits of a therapeutic intervention, as illustrated in Figure 4 above to the right. Although the changes may not be immediate, one can see the marked improvement in the Human Energy Field following a course of acupuncture. The goal of therapy should be to achieve this type of uniform and balanced image.

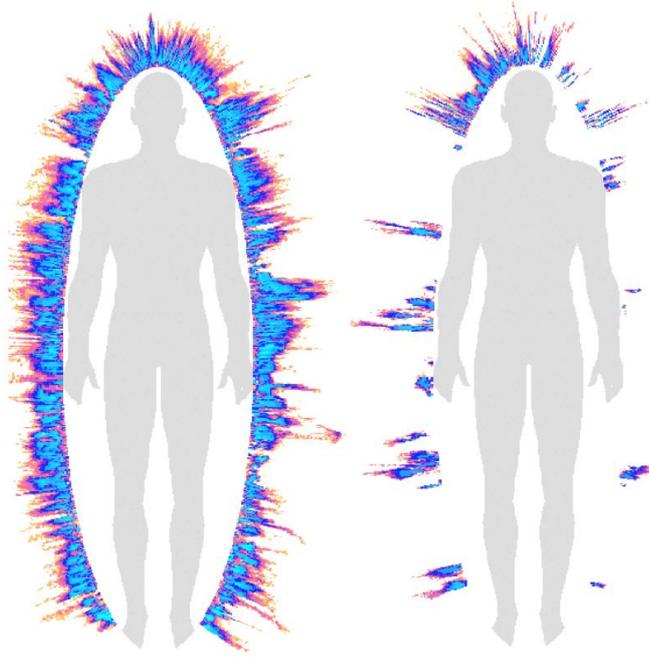


Fig.3. Energy Field of an orchestra conductor before and after symphony performance.

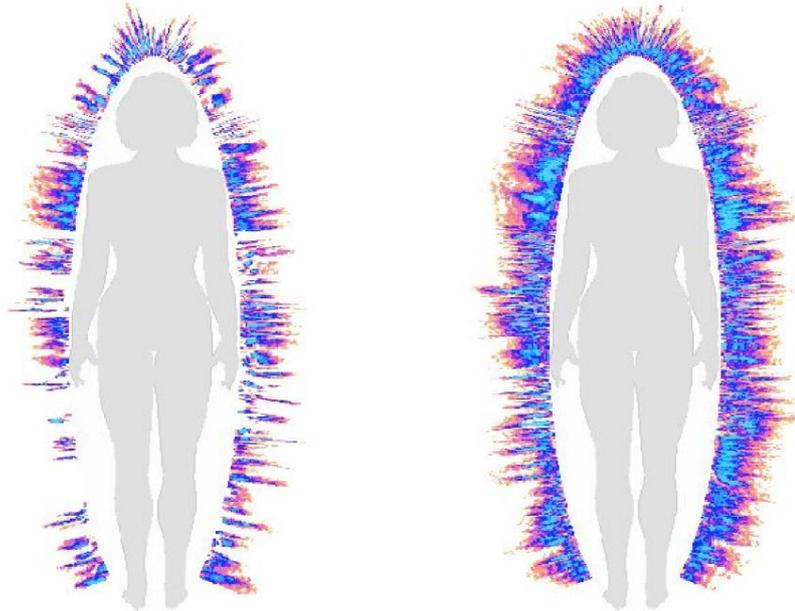


Fig.4. Energy Field of a person before and after the course of acupuncture.

It should also be emphasized that a very large energy field is not always indicative of good health and there is an upper as well as lower range of normalcy. Since this may vary with different individuals, an internet based assessment is being developed to assist in evaluation, which would otherwise require consulting a qualified expert.

Stress Level Evaluation

Stress is a complex factor that has both an emotional component such as anxiety, and a somatic component that results from prolonged exposure to anxiety or any stressor. Stress has a very strong impact on the Energy Field, but by using special GDV software, it is possible to make a quantitative assessment of the effects of anxiety index on a 10-point scale.

Altered State of Consciousness

This is a very specific condition that can result from diverse situations ranging from deep meditation, intensive prayer, artistic creativity and hypnosis, to sleep or oxygen deprivation, trauma, severe infection, psychedelic drugs and temporal lobe epilepsy. In most cases an Altered State of Consciousness will have a specific influence on the Energy Field, as shown to the left in Figure 5. This image was obtained during an Ajurveda ritual involving a homemade alcoholic drink and rhythmic music that induces a trance like state. As can be seen, the image is very distorted, the left and right sides are not balanced and there are large gaps. This condition is of particular interest to neurologists, psychiatrists and researchers who are actively involved in investigating the nature of consciousness.

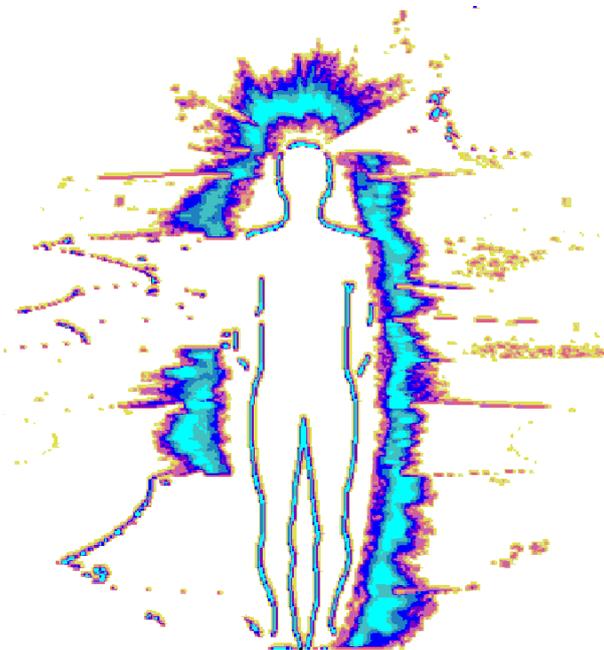


Fig.5. Energy Field of a person in an Altered State of Consciousness in the process of Ajurveda ceremony.

Chakra Measurement

According to Eastern metaphysical theories and principles of Ayurvedic medicine, there are seven “Chakras” or integrated energy centers that affect physical, mental, emotional, and spiritual well-being. These energy

“disks” are positioned or embedded into the spinal column at various locations starting at the coccyx and rising to the crown of the head. Each Chakra is thought to resonate at a different frequency level.

GDV software now makes it possible to quantitatively estimate the energy of Chakras, display their level of activation, and indicate whether this level of activation is above or below the average values found in a large number of healthy controls.

The distribution of the Chakras is most important. Ideally, they should be aligned along Sushumna – the central line of the spinal cord, as shown in Figure 6. Such optimal states are uncommon and it is more likely to find misaligned chakras that have shifted from this central position and are smaller, This is particularly true when individuals are under stress or emotionally disturbed, as seen in Figure 7, where the subject is not well grounded (Chakra N1 is not centered), has some problems (heart Chakra N4 is out of order), but has high spiritual development (upper Chakra N7 is well positioned). Such Chakra abnormalities are usually related more to psychological and spiritual rather than physical factors and are described in detail in Ayurvedic texts.

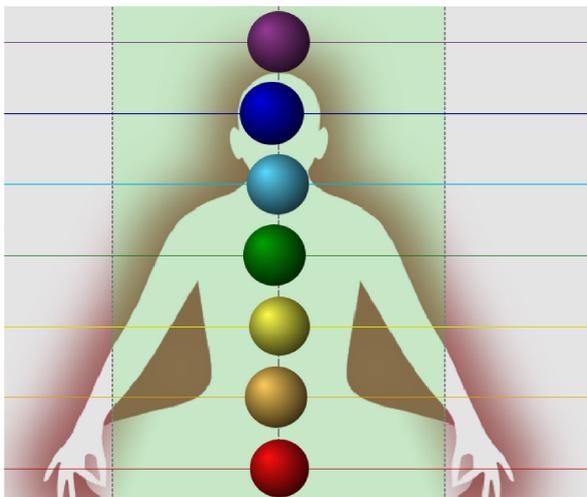


Fig.6. Ideal Chakras distribution.

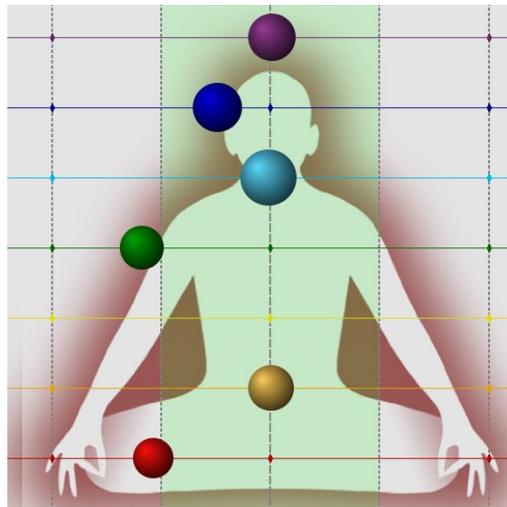


Fig.7. Chakras distribution of a person.

Monitoring Energy Status To Predict Responses

As previously demonstrated, the GDV device can evaluate the efficacy of an intervention such as acupuncture, as well as responses to stress. When it is used in the “Monitoring Energy State” mode, it can also predict how you will respond to different environmental stimuli, as shown in Figure 8.

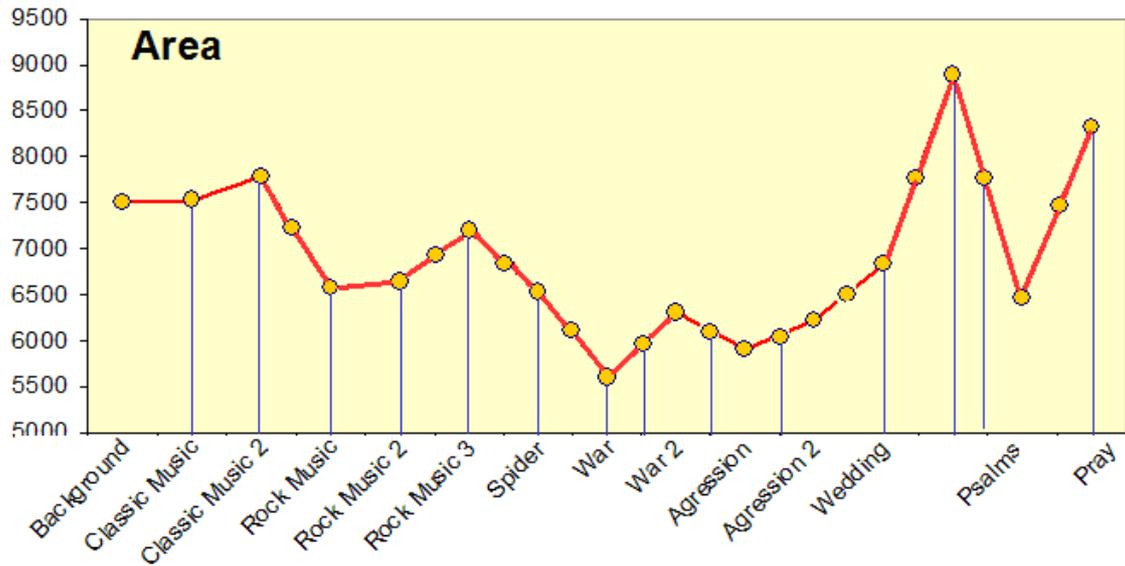


Fig.8. Change of Energy Field of a person in an experiment.

In the above experiment, the subject sat before a computer with her finger on the GDV device electrode as different sounds and images were displayed on the screen. A neutral blue screen was inserted between images of different content to minimize any carry over effect. As can be seen, the signal dropped after beautiful classical music, but then stabilized and slowly increased with rock music she was familiar with. It fell again following negative images (spider and war scenes) and then increased with a happy wedding scene. The highest reactions were to the Psalms and Prayers at the end of the experiment and the nadir occurred during horrific war pictures.

The “Monitoring Energy State” mode can also be used to predict responses to drugs, foods, allergens and any item by holding it in your right hand and noting the response on the graph. If the line goes down, the reaction of your Energy Field is negative; but if it goes up, this signifies it is a medication, food or something else that will increase your energy. This technique can also be used to select gemstones, jewelry and fragrances that are beneficial, or products that may cause problems because they are allergens. Costly and sophisticated blood tests done in special laboratories can supply this information, but the GDV device allows you to do it for yourself, your friends and relatives at home.

Monitoring the Environment

The GDV device with a specially designed sensor called the “Sputnik antenna” is used to monitor the Energy of the Environment and its effects on emotional status. The

“Sputnik antenna” is a specialized Bio-Well device that measures the energy of the environment in a room that enables you to see how it varies when people meditate, pray or listen to a presentation (See <http://gdvcamera.com/gdvcamera-bio-well>). The physical principle it is based on is measuring the electrical capacitance of a space by using two connected resonance contours [24]. This may be useful for the following purposes:

1. Testing different places in a search for locations that are calm or contain turbulent energy.
2. Testing the energy status of different sites that are significantly affected by the position of the sun, moon, season or time of the year, etc.
3. Measuring the energy in the Places of Power – both natural and man-made, such as temples and other houses of worship, sacred places, ancient cities, etc.
4. Testing Geoactive Zones, in particular, Geopathic Stress Zones [19].
5. Detecting the influence of emotions and focused attention on the environment.

It has long been observed that people feel differently depending on environmental factors that may include temperature, humidity, atmospheric pressure and geographic location. There are some places where you sleep like a baby, have wonderful dreams and wake up full of energy. But there are others where sleeping is disrupted, fatigue is frequent and there is increased susceptibility to illness. Western science has no explanation for this other than it represents a confluence of geomagnetic influences, subterranean anomalies, hollows, water streams, natural and industrial atmospheric gases; gases, electromagnetic fields, and especially solar and cosmic emanations. It has been practically impossible to distinguish between all these factors or to determine what each contributes, so our ability to measure the cumulative effect at any particular place can best be described as primitive and rudimentary,

The GDV device may provide an exciting breakthrough. Many years of research, including expeditions to Peru, Colombia, Ecuador, India, Myanmar, Siberia, and other locations have demonstrated the sensitivity of this device to assess local environmental conditions and idiosyncrasies. There are Geoactive Zone variations in energy during sunrise and sunset or just prior to a thunderstorm. Measurements conducted during religious ceremonies, yoga exercises, group meditation, public lectures, and musical

performances also show statistically significant changes in the signal of the Sensor during these activities that correlate with the duration of the event, as shown in Figure 9.

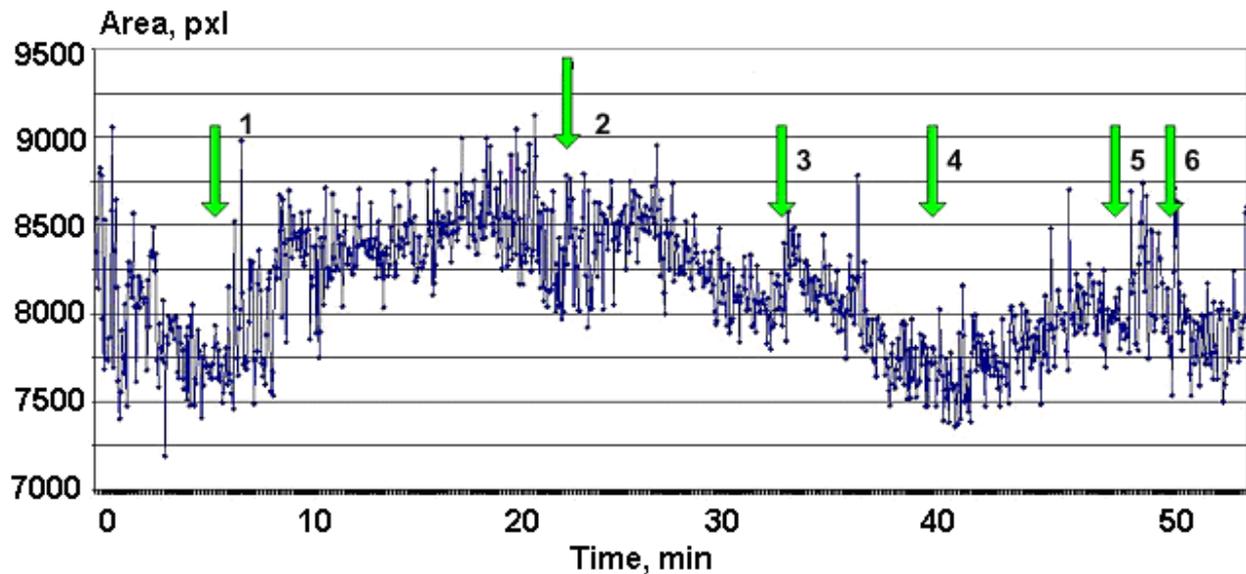


Fig.9. Time dynamics of the Electrophotonic sensor area parameter during Dr. Emoto ceremony. 1 – beginning of ceremony; 2 – beginning of the first meditation; 3 – presentation of Dr. Emoto; 4 – collective meditation; 5 – singing a song; 6 – end of the event.

On August 3 2008, Dr Masaro Emoto conducted the ceremony of blessing the water at Olkhon Island on lake Baikal in southeast Siberia. Figure 9 demonstrates the time dynamics of signal amplitude and Intensity recorded from the antenna in the power units that characterize signal strength. Arrows mark different stages of the ceremony. As can be seen, each significant moment in the ceremony was followed by a corresponding change in GDV activity. The gradual decrease between points 2 and 4 might be explained by the group's slow but progressive loss of its initial intense concentration. Nevertheless, group meditation and singing showed consistent positive responses.

A similar set of measurements was made during the first day of a September 12, 2008 Reconnection Healing Workshop in Los Angeles conducted by Dr. Erick Pearl and Doug DeVito, as illustrated below in Figure 10 [27].

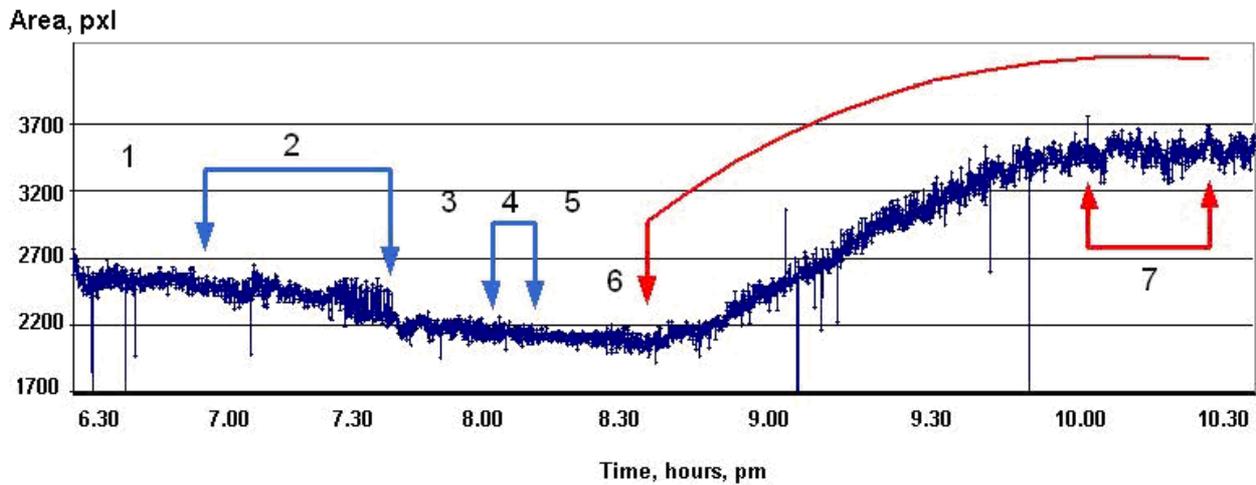


Fig.10. Time dynamics of the Electrophotonic sensor area parameter for the first day of the workshop (September 12, 2008) with marked moments of interest: 1 – empty room; 2 – beginning of the workshop; 3 – break; 4 – second part of the workshop; 5 – discussion; 6 – Eric Pearl presentation; 6 – group discussion.

As can be seen, the signal fell during the hour or two of the session, which consisted of introductory comments about the program that most participants had heard many times before and generated little interest. However, when Dr. Pearl started his stimulating presentation, it began to rise (red arrow) and continued to increase over the next two hours when it reached a sustained peak. At the same time, researchers measured changes in energy using a special pH electrode sensor developed by William Tiller, Professor Emeritus of Materials Science and Engineering at Stanford University. These showed signal changes during Dr. Pearl's presentation that correlated with the GDV results.

We have also demonstrated that the GDV “Electrophotonic Sensor” is sensitive to geophysical environmental changes by field testing in various locations in Northern Russia, Venezuela, Cambodia, Colombia, Ecuador, and England. For example, in Novosibirsk, Russia, during an August 1, 2008 solar eclipse, six “Electrophotonic Sensor” devices positioned in different locations of the region recorded statistically significant differences ($p < 0.00001$) in signal strength during different phases of the eclipse. Figure 11 shows the signal from one of the devices, with the arrow signifying the moment of a

complete eclipse of the sun. As can be seen, there is a marked difference in energy parameters prior to and following the eclipse.

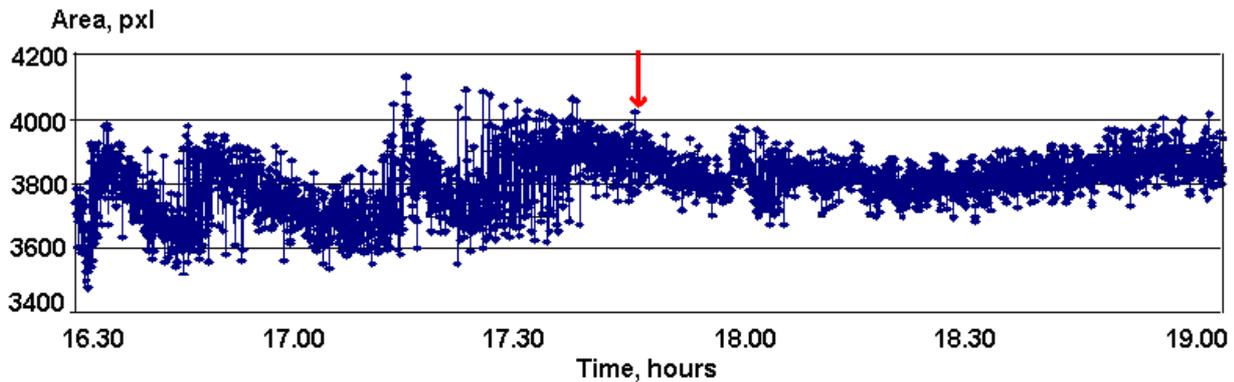


Fig.11. Time dynamics of the Electrophotonic sensor area parameter before and after Sun eclipse in Novosibirsk 01 August 2008.

In August 2007, our group participated in two shamanic ceremonies during a trip to Peru. One was held on the Amantani Island of Lake Titikaka, the largest lake in South America. It is situated high in the Andes mountains and is the highest navigable lake in the world, with an elevation of over 12,500 feet. Amantini island is considered a sacred place because it has two mountain peaks called Pachatata (Father Earth) and Pachamama (Mother Earth), both of which have ancient ruins and artifacts at the very top. The island has no electricity, cars or heavy machinery, and the 4,000 residents who are engaged in agricultural activities work by hand and rely on batteries and candles for light. The ceremony was held at a clearing near the top of one of these mountains but when we turned the monitoring equipment on, there was no response. Further testing revealed that all the batteries were dead. This was difficult to understand, since they had all been replaced with fresh ones, were working perfectly the previous night, and the equipment had been turned off. Nevertheless, the charge had completely disappeared after we had climbed to the site where the healing ceremony was traditionally conducted.

The second shamanic ceremony was held near the Inca capital of Cusco and the ancient city of Machu Picchu on a bank of the Urubamba River, known as the *sacred river*. The Urubamba Valley through which it flows is called the "Sacred Valley of the Incas" because of its special geographical and climatic qualities and still contains numerous

archaeological remains. There was no problem with the batteries at this location but there was a dramatic and unexplained change during the ceremony as shown in Figure 12 [28].

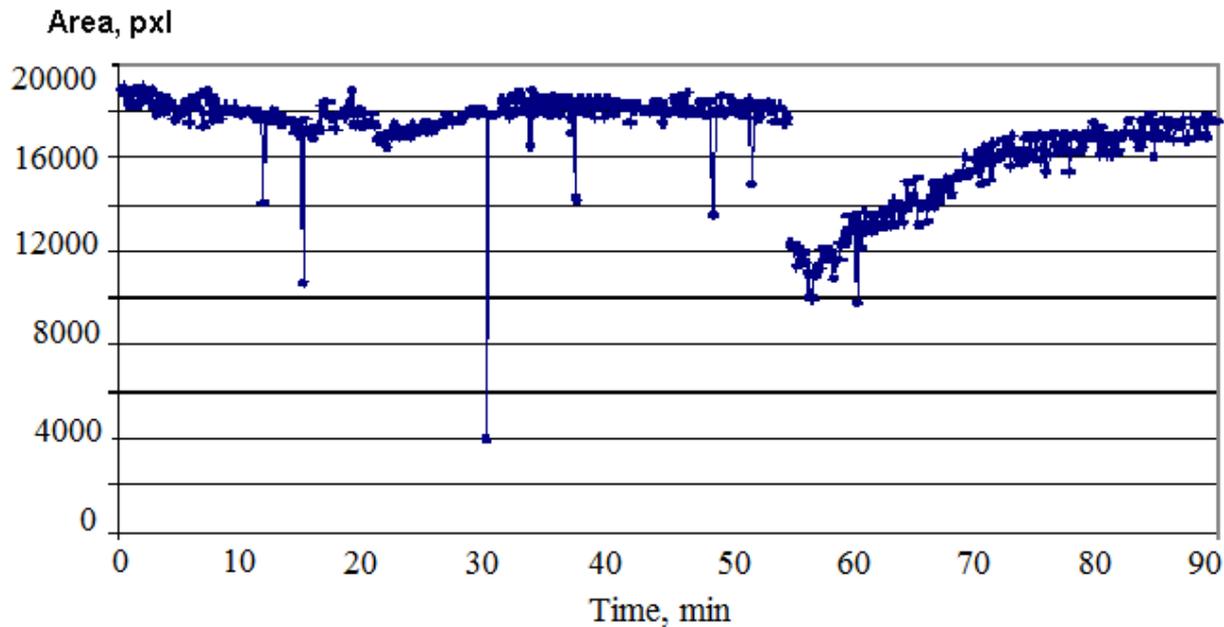


Fig.12. Time dynamics of the Electrophotonic sensor area parameter during shamanic ceremony in Peru 24 August 2007.

As can be seen, there was a very abrupt and sharp drop in energy 55 minutes after the ceremony started, which gradually returned to previous levels over the next 30 minutes. It is difficult to attribute these changes either to the emotions of the group or to a change in observable environmental conditions. The ceremony was held about 50 meters away from the river, the weather was mild, with a slight wind was blowing, and the participants were standing at some distance from the sensor. We did not have an opportunity to replicate this phenomenon.

A similar unusual and inexplicable recording was obtained when we were investigating a curious crop circle in England. Some people believe that crop circles are formed by natural geomagnetic or electromagnetic forces that interact to form certain geometrical patterns. It is also thought that being inside a crop circle can have healing properties because they provide a source of this energy.

As noted in Figure 13, the energy level outside the crop circle was quite stable. In contrast, once the subject was inside the crop circle, it steadily increased throughout the entire measurement period of well over an hour.

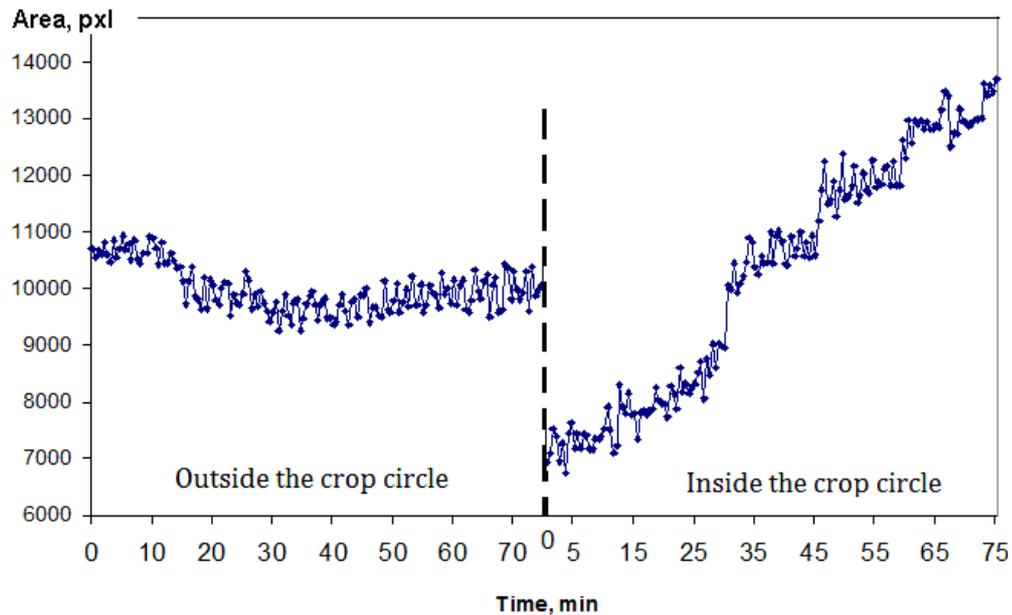


Fig.13. Time dynamics of the Electrophotonic sensor area parameter outside and inside the Crop Circle in England.

Discussion

There is widespread acknowledgment that environmental conditions can affect health, especially changes in weather. The foehn is a dry southerly wind that blows from the Alps across Switzerland and southern Germany that is associated with a statistically significant increase in accidents, emergency room admissions for heart attacks, asthma and respiratory problems, as well as a spike in suicides. Some hospitals routinely postpone elective surgery until these "winds of depression" subside. Similar responses may accompany the Sirocco in Italy, the Mistral in southern France and the Middle East's Sharav, which the Arabs call Hamsin (the fifty days wind). Western Canada and the U.S, have the Chinook, a foehn-like wind that raised the temperature in one Montana town by 96 degrees in less than 24 hours (-48°F to 48°F). The strong, dry Santa Ana winds of California, called "The Bitter Winds" in Indian lore, have also been blamed for an increase in suicides and homicides. Some studies suggest that these effects may be due to

electrical changes in the air that increase positive ions or decrease negative ions. GDV technology has the potential to confirm these observations.

All the energy on earth is derived from the sun, which continually emits a stream of charged particles. The ability of solar magnetic storms to cause mental aberrations was noted by Alexander Chizhevsky almost 100 years ago [29] and subsequent researchers have confirmed this and other effects on health [30]. The earth itself is a giant magnet that is constantly in motion. Since life evolved under these influences, it should not be surprising that biological systems have developed to take advantage of electromagnetic forces, or that they can significantly influence physiology and behavior. This can be vividly demonstrated in lower forms of life like bacteria and planaria, but is also evident in homing pigeons and birds that use geomagnetic information to guide curious migrational habits that have persisted for centuries.

The Chinese used certain animals to predict earthquakes over 6,000 years ago and there is abundant evidence that all animals can anticipate other natural disasters like storms, hurricanes and volcanic eruptions. Flamingos, elephants, wild boars, snakes, reptiles and other animals all fled their usual habitats shortly before the 2004 Indian Ocean tsunami hit. Sharks, dolphins and, fish can also sense an approaching earthquake or hurricane well in advance. Domesticated pets may retain this ability since it has been observed that advertisements for missing cats and dogs consistently increased in volume a few days before an earthquake struck.

Some individuals also seem to be unusually sensitive to natural as well as man made electromagnetic influences. In addition, there is increasing evidence that living things emit their own energy fields or signals that interact with these environmental forces, as well as with other forms of life. Verifying this has been difficult, because skeptics correctly demand objective proof rather than anecdotal reports. As indicated above, attempts to provide this by electrographic visualization of energy fields date back to 1777. Significant progress was made in the last century due to the efforts of the Kirlians and others, but techniques varied, results could not be consistently reproduced nor were mechanisms of action delineated. The advent of GDV technology and its sophisticated software, has now removed these impediments, and will withstand scientific scrutiny.

Conclusions

GDV technology bridges the gap between logical Western science and the intuitive science of the Orient. It makes it possible to present the same phenomenon in different languages, in different systems, and to look at the same phenomena from different perspectives. Experiments can be conducted in a theater, concert hall, church, auditorium or during sportive events to record individual as well as collective emotional responses. The GDV camera and other equipment is very user friendly and since protocols are standardized, only minimal training or experience is required to conduct a study that will provide meaningful results, because it can be compared with others. Different models can be developed to explain observations, ranging from those based on chemical and physical criteria to quantum physics and more esoteric principles, but it would be premature to attempt this now. Our top priority must be to amass a very large database of observations in different situations by researchers with diverse interests.

To facilitate this, we recently developed an inexpensive, compact GDV BIOWELL camera that will immediately display your energy level. It does not require an energy source since it is powered via a cable that connects to the USB port of a computer, so it can be used anywhere by friends or family to assess energy levels and how they are affected by stress, emotions, medication, etc. <https://www.bio-well.com>.

Collating this information could provide important insights into mechanisms of action and/or the need for further studies in certain areas. We have only scratched the surface of GDV's vast potential, such as investigating the nature of biological (EZ) water that acts like a battery to supply energy to all cells. There is evidence that this or something very similar is present in waters from Lourdes, the Ganges river and Hunza valley, which have long been associated with curative properties and longevity.

It should be evident from all of the above that this is still a work in progress, since there are many more questions than answers. Finding solutions will require a concerted multidisciplinary approach, and such collaborative efforts are well under way.

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