

Disease as a Biofeedback Device for the Transformation of Man

by

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1. Introduction

The flux of world-wide investigation and activity in the area of psychoenergetic fields and phenomena has been such that mankind has now exceeded the "critical mass" condition for a self-sustaining reaction and we can anticipate a continued growth of awareness and perception relative to this domain of Nature. Such an activity does not deny the validity of our present knowledge of the universe; rather, it calls for an extension or expansion of present laws to reliably model behavior in the expanded domain of variable space that circumscribes both conventional fields and psychoenergetic fields. Here, one should reflect on the example of Newton and Einstein. Newton's work on gravitation was not shown to be wrong by Einstein but merely limited to a domain of variable space in Nature far removed from speeds approaching the velocity of light. The laws of Einstein reproduce the laws of Newton in the appropriate limit of small velocities.

In the decades and centuries ahead, we would hope to follow and extend Einstein's example and develop quantitative laws that reliably model nature in the psychoenergetic domain and which simplify, in the appropriate limit, to our present physical laws of Nature. In the present article, I wish to touch upon the role that disease plays in the expansion of human awareness, human perception and human transformation. A broader perspective of Nature is illuminated by considering this example. However, rather than proceeding immediately to the main topic, I wish to condition the reader somewhat by making a brief sketch of what experience during the past few years has taught us concerning the need for a broader model of Nature than we presently project.

2. Some Recent Experiments, Experience and Theories

We may liken conventional scientific understanding of the universe to the visible tip of an iceberg. We have come to know that exposed tip very well. However, most of Nature is still hidden from us and we know it not. History contains references to and speculation on many aspects of the hidden iceberg and very recent research suggests some fascinating possibilities.

(a) From experiments on telepathy, psychokinesis (PK), manual healers, etc.⁽¹⁾, we seem to be dealing with new energy fields completely different from those known to us via conventional science and upon which our present technological society is built.

(b) The universe organizes and radiates information in other dimensions than just the physical frame. From experiments on PK⁽¹⁾, radionics⁽²⁾, materialization-dematerialization⁽³⁾, etc., the cause-effect relationships seem to follow a different path or "field-line" than we have been used to dealing with in the conventional (positive) space-time frame of reference.

(c) At some level of the universe we are all interconnected to each other and are connected to all things on this planet. We see this in the Soviet telepathy experiments with rabbits⁽¹⁾. We see this in the Baxter experiments with plants, eggs and cells⁽⁴⁾. In the cell experiments, he takes some of his own blood cells and connects electrodes between a solution of these and a polygraph recording instrument. As he kills a separate batch of his cells, an electrical signal appears on the recording instrument. We also see this in the Soviet experiment wherein they put two uncorrelated beating hearts at the two foci of an elliptical mirror and found after 5 to 10 minutes that they were beating in perfect synchronization. Finally, we see it in the example of treating the earth as a spherical electromagnetic resonator wherein its calculated fundamental wavelength and its higher harmonics correspond to the alpha, beta, theta and delta rhythms of human brain waves.

(d) Time and space are not as immutable and confining as we have tended to think. Experiments on precognition⁽⁵⁾, materialization and dematerialization⁽³⁾, etc., point to this.

(e) From modern information theory⁽⁷⁾ it seems clear that we do not perceive reality but only gain some information about reality; we can never know reality using our presently developed sensory systems. Our sensory systems are stimulated and generate signals which travel to the brain for interpretation and they are interpreted by the brain in terms of whatever is in the picture book of that brain. In fact, the brain often does signal processing to squeeze the information so that it represents the closest facsimile available in the picture book. Thus, we, because of what is in our picture book, are creating our own version of reality. Emanuel Kant

long ago said that time and space are merely our vehicles for perception and not reality itself. Slater's experiments on the "upside-down glasses"⁽⁶⁾ strongly support this view.

(f) Finally, from a feeling standpoint, it seems as if from somewhere in the Cosmos a rheostat has been turned up so that special new energies of a non-physical nature are flooding into this sector of our Universe and that a biological imperative exists for mankind to take an evolutionary step⁽⁸⁾. This biological imperative brings in its vanguard the psychic age of man which has already begun!

We seem to be voyaging into a new world and we do not yet have reliable tools with which to cope with this new environment. We shall have to go forward very much on faith, trust and very hard work to both understand and bring about the major medical revolution that will occur in the next twenty to fifty years.

In order to put us one step closer to my main topic, it is necessary for me to reiterate how I look at substance^(2,8). After giving some examples of how we might use these insights, a picture will be painted of what healing is all about (from the author's point of view) and how it seems consistent in terms of the information storage capacity of the universe. Finally, we shall discuss what one needs to do to maximize the process.

I have come to think of substance in a larger sense than man has normally done in the past because the conventional model seems too limited in its capacity for rationalizing the new experimental observations (a to f). The author's model deals with seven unique levels of substance. Nature expresses itself in terms of 7 unique dimensions each with unique sets of laws and these, because of polarity principles, form atomistic type

of special energy configurations. The energies of the different dimensions are thought to interact only weakly with each other under normal conditions but that they can interact strongly using the agency of mind. This model, for which there is no scientifically acceptable supportive evidence at the present time, treats the physical or positive space-time frame as the lowest energy state in terms of basic energy quanta. The next higher energy level is the negative space-time frame (etheric or bioplasmic level) which is the conjugate or mirror energy system to the physical. The third level is a transition dimension between the space-time dimensions and the non-space/time dimensions and is called the astral level. This energy state seems to be the vehicle for the emotional network in our being. Above this there are next three energy levels which are levels of mind: instinctive mind, intellectual mind and spiritual mind. These are non-space/time expressions of the universe. Finally, the seventh level is the level of spirit which is also a non-space/time dimension. There thus appear to be two important groupings of energy levels: one which is space/time that we may think of as an enlarged physical frame; the other which is non-space/time that we may think of as a soul frame. The bridging between the two is via the transitional frame. As one proceeds from the positive space/time energy level towards the spirit level, the basic quantum unit of energy is thought to steadily increase. This can also be thought of as a continuously increasing frequency.

We must think of these 7 substances as interpenetrating each other (at least in a correlative or interactive sense) so that our bodies are to be thought of as an interpenetrating network of 7 major types of energy correlation. With our conventional microscopes, we can really see only

one type and probably detect, but do not correlate, energy manifestations associated with interactive coupling to other types. We must invent new kinds of microscopes to really see the others. That is the difficulty!

From our positive space/time frame experience, one mode of characterization of different materials is by observing the spectral distribution of the radiations they emit as a result of certain stimulation. The electromagnetic spectral intensity of a particular material as a function of frequency might be like that illustrated in fig. 1, and this is like a special fingerprint of the material that allows one to identify it among a large mixture of other materials. Extending this basic idea of radiation response of a substance over a certain frequency band to our seven-level model of complex substance, we should expect radiations to occur from each level or dimension which will give rise to an "aura" pattern from each dimension. Figure 2 is the appropriate representation for this, although we should use a uniquely different coordinate axis to represent the spectral distribution from each level. However, it is conceptually easier to assimilate the idea by placing them all on one coordinate axis with merely shifts of frequency range and envelope shape (these shapes of radiation lobes are only for convenience and have no intrinsic meaning). Beyond these seven levels there is the domain which I call the Divine. However, since our present average state of consciousness does not allow us to meaningfully understand this level, it has not been included on the figure.

Referring to fig. 2, the mind and spirit levels constitute the real man, the non-space, non-time individuation of indestructible intelligence that is coupled with all parts of the universe. The transitional or astral level forms the vehicle that man travels in between incarnations in the

space-time frame. The two lowest levels form the temporal reality and are used to fashion the vehicle we drive. The entity individuation puts itself in a vehicle that is well suited to this earth environment and much of a lifetime is spent learning to work the "knobs" of that vehicle.

Let us compare certain aspects of the positive space/time frame and the negative space/time frame (physical-etheric) which contains the psychic sensory system of the combined vehicles. In the P-frame we find that, as temperature increases, the system generates disorder; in the conjugate or N-frame, as temperature increases the system generates order. In the P-frame, the basic atomic unit is built from electrical substance--we do not know what electrical charge is but we have defined it to have certain characteristics. In the N-frame, the basic atomic unit is built from magnetic substance. In the P-frame we have major electrical effects and minor (although they sometimes do not seem so minor) magnetic effects; in the N-frame we have major magnetic effects and minor electrical effects. Since the two are strongly coupled, it is hard to say, at the moment, how these two intertwine in the actual equations of electromagnetic energy. In the P-frame we have positive mass and in the N-frame we have negative mass. Of course, we do not know what "mass" is but we have defined it to have certain characteristics. In the P-frame we have defined what velocity is and Einsteinian physics tells us that the velocity must be less than the velocity of light, c ; in the N-frame the velocity must be greater than c . In the P-frame, the flow of time is in the positive direction; in the N-frame, it is in the negative direction. Again, we do not know what time is nor what space is but we have defined them in terms of our collective experiential observations based on using the physical sensory system data. When we

really wish to work with the sensory system at the conjugate level we must use conjugate definitions so that information transfer will have proper correlations both within and between these levels. Finally, there must be some relationship between what an observer sees from the P-frame versus what he sees from the N-frame; i.e., a relativity relationship must exist.

To belabor the point a little further, consider a plot of energy as a function of velocity as illustrated in fig. 3. If we take a particle and increase its velocity, V , continuously, we would find that the energy of the particle would begin to rise sharply as we approached $V = c$ and Einsteinian predictions would have it go to infinity at $V = c$. Relativity theory says it should happen this way because $V = c$ is a mathematically singular point; however, Nature generally does not exactly correspond with such simple mathematics in the vicinity of singular points. Rather, because of interaction effects, such curves actually make a sharp transition very near to the singular point and appear to be coming up from minus infinity on the other side. Thus, as we keep accelerating the particle, an energy interaction and correlation effect occurs so that the particle can tunnel through the barrier into the N-frame and the particle will appear to have mirror image properties. Likewise, if we have the particle in the N-frame and decrease its velocity bringing it down to $V = c$, the energy decreases along the curve and, at a critical level, suddenly punches through into the physical level.

Now, in physics, we have what is called the Heisenberg uncertainty relationship which tells us that we cannot predict with ultimate accuracy at the particle level but can expect only a probability type of result. My own feeling is that this is because we have neglected the interaction

of energies from the other 6 levels (because they are not presently recognized by science and because we do not formally know how to express them even if they were recognized by science) with the particle at

the P-level. If we neglect the existence of such an interaction, and it is present, then our observations can yield only results having a statistical representation (like dice thrown from a box--the detailed interactions with the walls are neglected).

Considering the above model of energy change as particles tunnel through the light barrier, we might speculate that this is a mechanism for the origin of black holes in space and for the great energy inherent in quasars. One has energy correlations increasing to higher and higher levels and suddenly they punch through into another domain of the universe so that the radiations that come from it are no longer present to us via our conventional sensory system (including instruments we have built to sense information). We have yet to develop systems based upon the physics of the N-frame.

In spite of the fact that we have not yet developed a quantitative physics of the N-frame, we can still anticipate a variety of useful things for medical people to be aware of. First, we will assume that the primary coding of a disease or body condition is represented by information patterns at deeper levels of the universe than the P-frame. Consider the case of a deathbed patient who has had a long illness and great pain. The person is radiating his condition all the time and these radiation patterns are absorbed by the mattress, bedsheets, pillows, etc. We have a practice of sterilizing these by heating, washing, etc. This is fine for information

patterns at the physical level because temperature increase produces disorder which breaks up these information patterns of pain, illness, etc. However, it does not do anything for information patterns stored at the etheric level. To disrupt these, the materials should be treated to a period in the deep freeze. As the human species becomes increasingly aware, at a conscious level, of sensations from the N-frame, this practice will become increasingly more important. This procedure is also advised for the use of natural hair pieces that one purchases in order to remove any linkage with the hair's previous owner. As a general rule, if one wishes to erase information patterns at both the P- and N-frame levels, then both a high temperature and a very low temperature treatment is needed.

The second thing that we can anticipate is that, because of energy coupling between levels, a flow of energy at one level will give rise to a small flow at another level. We postulate that this secondary flow can be strongly increased by the directed use of Mind. Thus, we can create an information pattern at one of the higher levels and have it projected down the scale to all the levels below it, finding ultimate manifestation at the physical. In addition, an up-scale projection can also be created. For example, by producing a flux of electrical current at the physical level, a flux of magnetic current should occur at the etheric level, an astral current should appear, etc., up the line. Since many people have postulated that it is energy movement which is required for the generation of health and healing, we might ask how could one augment the natural energy movement situation. One suggestion would be to apply, between the floor and the ceiling of an ill patient's room, an electric field and inject electrical ions into the room. Ions of one sign would translate down the field from

ceiling to floor and those of the opposite sign would travel up the field from floor to ceiling. This ion flux produces a small electrical current flowing in one direction and induces a correlated current to flow in the N-frame. These energy motions in the vicinity of the body help to rebalance the body energies of the patient so that he will heal faster. It is interesting to note that Bassett and Pawluk⁽⁹⁾, working on rabbits, found that they could reduce the healing time for a fracture by a factor of 2 by placing metal plates on each side of the fracture site but incorporated into the cast fashioned for the fractured limb and then connecting the plates to a conventional dry cell battery. Here we see static electricity playing a dominant role in healing (although it is expected that a very small current was flowing). For the patient's room, the electric field should have a magnitude ~ 1000 volts/meter.

In general, a continuous electric current flows through the atmosphere and also through the entire human body. On mountain ridges, one finds fields of several thousand volts per meter, whereas the average field near the surface of the earth is only about 200-400 volts per meter. Under normal atmospheric conditions, this continuous electric current is in the order of 10^{-12} amps through the entire body or approximately 10^{-16} amps per square centimeter of the body. Since there are always freely suspended ions in the air, it is the presence of the electric field and its strength that is the most important factor for creating the continuous electric current and the beneficial physiological effects. Without the presence of an electric field as a moving force, the ions would not move, so no current would flow and no physiological effects would appear. We can expect that the electric current flows through all of the cells, organs and the nervous

system of the body and thus stimulates the metabolism. Physiological experiments using this technique have shown positive beneficial physiological effects on human subjects such as (a) greatly improved brightness discrimination, (b) uneven and fatigued breathing quickly becomes regular and tranquil, (c) drowsiness decreases and attentiveness increases. On thoroughbred horses, the technique is found to dramatically alleviate stall walking and weaving (hypertension).

If the human organism remains in a room or space where there is no electric field at all, as in a Faraday cage, or if there is only a very weak field present, then it will tend to become fatigued, tired and sleepy. This is perhaps the major cause of drowsiness and fatigue in automobiles, planes, trains, etc. For such enclosed spaces, an artificially created and properly controlled electric field is perhaps the only sure means of eliminating the difficulty.

In a slightly different vein, a third topic is worthy of consideration. For some time it has been assumed that the earth and the ionosphere surrounding it form a spherical-type of resonant cavity system having a natural resonant frequency in the 10-Hz range (10 cps)⁽¹⁰⁾. Correlations appear to exist in the 1-20 Hz range with geomagnetic conditions. Analysis of recorded signals by König⁽¹¹⁾ reveals two principal types of waveforms. These are (a) Type I or sine wave signals of frequency about 9 Hz which predominate in fine weather with maximum amplitude in the afternoon and minimum at night, (b) Type II or irregular shaped signals of frequency about 3-5 Hz which exist for durations of around 1 hour and most often during conditions of rain and low-lying clouds. Other signals of nearly sine wave character but frequency about 0.6-2 Hz have been observed⁽¹¹⁾. (These seem

to correspond with beta, alpha, and theta brain waves). Studies on human reaction time have shown that performance of test subjects decreased at times when Type II signals were recorded and performance increased during exposure to Type I signals. The reaction time seems to be inversely proportional to the applied frequency.

It thus appears that, if the skies are clear and bright, the pulse rhythm is in the beta-range, and we stay wide awake. If it is overcast and depressive, the pulse rhythm is in the alpha-range and we tend to meditate. If we happen to be an aeroplane pilot and go from one environmental condition to the other, our slowed response time could give us trouble in an emergency situation. Likewise, it seems that one could generate in a hospital room an internal ELF (extremely low frequency) environment. Thus, if one wants the patients to sleep, the pulse generator is set to beat at about 4 Hz; if brightness and awakesness is desired, switch the generator to the 10-14 Hz range.

3. What Are Disease and Healing All About?

Let me begin by projecting a model of what I call the Divine Hologram-- a hologram for the creation of existence. A hologram in the P-frame is a three-dimensional coherent energy construct which is, in the general sense, a force field. Thus, in my model, God created the Cosmos and he did it with a Divine hologram; i.e., there was a projection of a pattern at that level of reality for the Cosmos. This was a force field for organizing substance. The first stage was the organization of substance at the Spirit level since the strongest coupling with the Divine would exist at that level. This substance formed a pattern consistent with the Divine pattern. But

this substance is also comprised of coherent energy radiators so it, in turn, radiated a force field that was a modeling field for the correlation of substance at the Spirit/Mind level to organize into its consistent configuration. Since this substance is formed from partially coherent radiators as well, it radiates a pattern and that pattern, once again, is a force field for correlation of energy at the next level, and then the next level, and the next level, and so on, all the way down to the physical level. This is how the different levels of substance are thought to come into their configuration state in terms of information patterns in the universe--all from the projection of the initial Divine Hologram.

Now we, as entities, have been given free will but we do not know about the details of the Divine Hologram and the coherent radiation systems for the various levels. We begin to exercise our free will and project energy patterns from the levels of Mind and Spirit. These superimpose with the initial Divine pattern and start "screwing it up". By destructive interference, the combined pattern at these levels begins to change and this alters the force field applied from these levels to the space-time levels so that new things are created at this level. One of these things, we call disease! By our collective thoughts and collective actions, we produce creations at the space-time levels which become our future. Thus, one way of describing it is that the presence of disease is associated with disharmony with the Divine pattern. Healing, on the other hand, is associated with eradicating that incoherence or disharmony with the Divine pattern to bring about coherence of our thoughts and actions with the Divine pattern.

We generally talk about disease as a very negative thing; however, it has a tremendous positive value. First, disease is a form of resistance!

Without resistance we could not walk across the floor, we could not build our muscles, we could not learn. Without resistance, we could not create anything. From the Oriental literature comes the statement, "If one wishes to create in a medium, any medium, and the medium offers him no resistance, then he can make no durable impression." Thus, for us, resistance is the means to bring us to a state of creation and disease is just such a resistance. Disease is a motivating force! It is part of a biofeedback system to the deeper parts of self telling us that we are not functioning properly, that we are not doing it right, that the Divine pattern is not in that direction! Because of its presence at the physical level, we work, strive and struggle to develop those medical ideas and techniques that will eradicate the disease and bring us to a state of health, and will control our environment so that disease does not form. In addition, we must progress in our science, in our understanding of the universe, in order to empirically develop the needed medical techniques. What this does is to bring about for us an awareness of the proper energy correlations of universal intelligence; i.e., how the universe is representing itself and how we must respond to bring about harmony.

This biofeedback system is the keynote principle of our evolutionary state. It is moving us toward the Divine in terms of understanding and we, in turn, utilize this to generate coherence with these primary patterns. In fact, what the disease process does for us (think of it in the broad sense as discomfort) is to bring us to the stage of transforming the earth--the total biosphere. As we awaken in awareness of this, we are weaving into the system information patterns that are patterns of harmony.

We talk of disease at the individual level--it seems that war falls in the same category. It is really an illness representing itself in the family of man, i.e., man at the collective level, at the Mind and Spirit level of the universe where we are all connected. It is really a disease, a resistance to our mode of action which tells us we are not on the correct path. As we become aware of it, then we work harder and try to do it right--and eventually we do succeed in doing it right. Thus, we move on and on and on working our way back to the Divine, understanding all the 7 dimensions of the universe represented in fig. 2 in the process and restoring harmony to these dimensions of the universe where previously we had sown disharmony because of our selfish ego involvement and misguided free will (and because we did not know any better). That, it seems, is part of the larger process, the part of knowing ourselves, of knowing our larger self. And disease plays an amazingly important role in this. The total process involves, then, the building of the individual self and then the building of the total self--the large collective self.

4. Storing the Potential of the Cosmos

In the science of thermodynamics, one talks about two important quantities, energy and entropy. Most people are familiar with the concept of energy but not the concept of entropy. This latter quantity is used to measure the amount of disorder in a system (the amount of lost potential in the system). For example, if I take a jar of black marbles and a jar of white marbles and mix them together, I have increased the entropy and lowered the potential of the universe (since I would have to do work to separate these marbles again). Scientists have been able to prove that, in any non-equilibrium process, whether it be the human consumption and digestion of food, a humming auto engine or the cooling of a hot cup of

coffee, the rate of entropy production is positive so that the entropy content of the physical universe continually increases and its potential continually decreases with increase of time. Until quite recently, we thought that all aspects of entropy were positive and that this meant chaos must continually grow with time so that civilizations must inevitably degrade and decay. However, in the past 20-40 years, we have begun to recognize that the information gained in a particular event or process is negative entropy and that, although in the course of evolution, the potential of the physical universe continually decreases, the content of information continually increases.

The information content we speak of here can be in two forms: it can be in the form of physical order or organization of a structure of ^{an} entity or it can be in the form of knowledge (a different kind of organization). Thus, as an organism grows, it ingests chemicals in a disordered array and transforms them into an ordered arrangement in its own structure or body. Higher organisms do the same sort of thing with mental concepts or ideas to produce a conscious organization of knowledge.

The more information gained in the event or process compared to the energy expended in the operation, the more efficient are we being with the consumption of the potential in the physical universe. For example, if two people talk to each other and transfer only foregone conclusions already known to both of them, the information content of the universe has not increased. On the other hand, it cost one person energy to transmit and it cost the other energy to receive; i. e., this action created entropy and dissipated potential with no gain of information (consciousness). It would be most salutary if everyone would try to maximize the information transmitted at minimum dissipation of available potential--in this way, we

allow the path of human evolution to stretch farther before the physical universe wears out.

I tend to equate information (in the sense discussed above) with consciousness, and feel that the aim of life is the growth of consciousness; i.e., the growth of information in the very broad sense. Let us then consider the amount of information inherent in a situation, an atom, a person or a group of persons and see how this relates to the frequency spectrum of the particular item under consideration.

Let us first consider the information capacity inherent in a typical electrical communication system and apply these general engineering concepts more broadly. The first element of the standard communication system, illustrated in fig. 4, is an information source (a taped symphony, for example). The output of the information source is called a message (the music). The next element in the system is a transmitter which transforms the sound into electrical impulses, places these impulses on what is called a "carrier wave" by a process called mixing and modulation and then radiates this signal into the next element of the system, the communication channel. The input to the transmitter is the message and the output is the signal. The channel, which may be air or an electrical cable, is the medium used to transmit the signal from the transmitter to the receiver. While going through the channel, the signal may be altered by noise or distortion (thunderstorm or other electrical disturbance). The output of the channel is called the received signal, supposed to be in some sense a faithful representation of the transmitted signal. The next element is the receiver (radio, TV, etc.) which operates on the received signal and attempts to reproduce from it the original message. It will ordinarily perform an operation which is approximately the inverse

of the operation performed by the transmitter. The two operations may differ somewhat, however, because the receiver may also be required to combat the noise and distortion in the channel. The input to the receiver is the received signal and the output is the received message (the sound patterns of the symphony). The last element of this communication system is the destination (the ear of the listener, etc.)

Another communication system with which we are familiar is that of the mind of one man (information source) communicating through a second man (channel) to the mind of a third man (destination). We can readily appreciate the opportunities for noise and distortion to enter this system. Perhaps the most significant communication system to each of us is the following: the higher forces of nature (source) working through ourselves (channels) in the human environment (destination). Here, the noise arises largely from our fears, uncertainties, insecurities, jealousies, ego, impatience, etc.

In the general communication system, noise may not only be generated in the channel but in the transmitter and receiver as well. An example that clearly illustrates this arises from the technological efforts we have made to automate the translation of foreign languages. The premise is simple--since we have dictionaries of each language, we should be able to faithfully map a word or phrase in one language into the corresponding word or phrase in another language. This can, indeed, be done; however, the intended sense of the communication is not faithfully reproduced by this translation procedure. On reflection, we begin to realize that a spoken communication has two major components. One is knowledge (which can be exactly mapped from one language to another) and the other I shall call understanding (which is an integration of all the undefined factors of environment, heritage, mood, etc., of the

speaker). At present, we know only how to transform the knowledge component of the message into a signal that can be faithfully retransformed at the receiver. Thus, since the total information content of the message was not transferred into a signal in the transmitter, we must state that the transmitter, in this case, introduced noise into the communication system.

From communication theory, we find that, for the simple system of fig. 4, the maximum ability to communicate information is determined by the channel capacity, C , which is given by

$$C = \Delta\nu \left\{ \log_2 \left(1 + \frac{P}{N} \right) \right\} \quad (1)$$

In equation (1), $\Delta\nu$ is the channel bandwidth (in this case it is the bandwidth of the transmitter), P is the signal power of the transmitter, and N is the noise level of the channel for the transmitter). The ratio P/N is called the signal to noise ratio. The

function $\log_2 A$ is just called the logarithm to the base 2 of A , and is just a number which varies with the magnitude of A ($A = 1 + P/N$) in the simple fashion illustrated in fig. 5. For the atom as a transmitter, the channel that limits the communication is generally the air or atmosphere between the atom and the detecting instrument. For a person as a transmitter, the channel that limits the communication is generally the human being himself or herself.

To maximize an entity's capacity to act as a channel for the evolution of man or for any other purpose, equation (1) tells us that he must grow in consciousness to increase $\Delta\nu$; he must increase his ability to generate or conduct a high-power signal, P , and he must quiet his fears and uncertainties to reduce the noise power, N .

From electrical engineering, we find that Δv (video) is of the order of 1000 Δv (audio) because the frequency is much higher for video. Thus, the channel capacity (and information transferal) for a video transmission is about 1000 times that for audio transmission (which may be the basis for stating that a picture is worth a thousand words). One finds, in general, that the higher is the resonant frequency ν_0 of a resonating system, the larger is Δv and, thus, the greater is the channel capacity and information transferal. For a human entity, this means the greater is the inherent level of consciousness (although it may not be apparent in manifested form). Following this line of reasoning further, as systems couple together (or organize themselves), Δv is found to increase so that the information capacity also increases. Thus, a molecule has a greater information capacity than an atom, and a small crystal containing many coupled atoms has a greater information capacity than most molecules (except perhaps for a very complex molecule like DNA). In fact, if we have 100 harmonic oscillators rather than one, and all transmitting at the same power, P , the channel capacity, C , increases by about a factor of 2 for $P/N \approx 100$ (by a smaller factor if P/N is greater than 100) if they are uncoupled, whereas it would increase by a factor of about 100 if they are strongly coupled together. This same augmentation of information capacity applies to 100 people acting independently versus their acting as a cooperatively coupled unit. Thus, we see that the level of human consciousness increases quantitatively in a spectacular and predictable way as they cooperatively couple their vibrations (their basic or fundamental frequency).

From our knowledge of television, we recall that a high frequency "carrier wave" is used to transmit the information. The information in the form of video (picture) and audio (sound) is of lower frequency than the carrier wave

and is placed on the carrier wave by processes called mixing and modulation. By these processes, the maximum bandwidth can be made to be approximately the carrier-wave frequency (somewhat smaller) at which point the maximum amount of information has been placed on the carrier wave.

Let us construct a similar analogy for people by assuming that each individual has a God-given frequency which is the carrier wave of the individual (it is unchanging). The evolution of the entity is growth in consciousness or the fulfilling of the information capacity inherent in his frequency. His consciousness ripples the carrier wave with many manifestations that are the information fulfillment of his being. Further, the higher the frequency of the fundamental wave (carrier wave), the greater is the inherent bandwidth and thus the information^{storage and}/communicating capacity of the entity.

We thus see that the greatest amount of information occurs at the Spirit level. However, we may not learn how to store information at that level without starting at the physical level. It is necessary for us to learn what it is all about and our experience over the past several hundred years of evolution of physical science provides us with useful models for projecting into the future which is the development of coherence and reliable information concerning the other six dimensions.

Looking at the whole overall pattern, the entire human species seems to be part of one vast organism, and we seem to be individuated and separated ^{only} from each other at the physical level/because our physical sensory systems work on the basis of contrast, i.e., on difference, a derivative effect. During the course of evolution, we put forth effort to organize our individuated and collective Being at successively more subtle and profound

levels, storing more and more potential in the form of the negentropy of our Being. As we become more collectively coherent, the entire earth develops into one harmonious cell that learns to function in a larger cosmic energy construct that is ever organizing itself closer and closer to the Divine pattern.

I like to think of it in the manner expressed by the eastern literature as the outbreathing and the inbreathing of the All. The outbreathing stage corresponds to the stage from the creation of the Divine Hologram to the development of man with consciousness centered in the P-frame. The inbreathing stage is our present stage (just begun) of evolution which obtains and stores the information in the inherent storage capacity of each of the levels until it eventually has reached the point of abundant storage at the Spirit level. At this point, the All has come back to complete Oneness again.

5. Tuning the System

As mentioned earlier, a biological imperative seems to be present in our part of the Cosmos. As described in Reference 8, it seems to be time for us to balance the glands of our endocrine system. These energies need to be brought to a special level of tuning so that they can function in asynchronization and harmoniously tap large quantities of power from the Cosmos via the energy centers called the Chakras in the N-frame body. The reader is directed to Reference 8 in order to understand a little about this energy system and the consequences of allowing an unbalanced system to be maintained. Here, a few words will be devoted to a tuning procedure.

Certainly, one of the steps in the tuning process is via some aspect of diet to reduce the physical dross in the system. However, that is a necessary but not a sufficient condition. I postulate that the most

important thing to do is the application of a mental polarizing field to the gland, to constrain the gland to function or radiate in a different mode than the usual habit mode. In this way we can gradually transform the gland.

Before providing a description of how this can be done, let me present an example from the physical world that illustrates what I am getting at. The example comes from the making of a magnetic material in the laboratory. Let us say we are going to make a strong magnet out of a material called Permalloy. It is a metal alloy with a variety of components and chemicals. One way to do this is to heat the solid up to a high temperature where these chemical phases go into solution in the solid (very much as salt or sugar would go into solution in water as you heat the water). Then, after soaking at the high temperature, you cool the material through a critical temperature range, and you find that little particles of a magnetic material come out of solution (again, very much as salt or sugar would come out of a hot solution if you cool it).

Now, think of these little particles as being like needles with an arrow on them. They come out of solution and the arrows are pointing in all kinds of different directions (see fig. 6a). And the total or net magnetic field, H_{net} , of this material, would be the sum of all the components of these arrows pointing in a particular direction. Well, because they are randomly oriented, the sum in any direction is very small. So, we have made a magnetic material, but it is not a very good one! All right, what can we do about it? We may think, "Let us apply a magnetic field to this material during this cooling stage." That is, apply a magnetic field, $H_{imposed}$, up along the axis of this bar (in fig. 6b). Now, with the magnetic field on, as the

particles come out of solution, their birth is influenced. Instead of being randomly oriented, they orient very much in alignment with the field. After you cool it down and take away the imposed magnetic field used during the processing, you find that your bar now has a very strong net magnetic field when you add up all the little arrows. You now have a very large internal magnetic field in this direction.

Basically, you have processed the material in such a way as to increase its polarization in a particular direction: i.e., its useful polarization in this direction. You have done it by the influence of an external field during the birth process of the precipitation of these magnetic particles. Now that we have this physical example, I want to move to say how you can do it with a gland.

First, I want to postulate that the functioning of the gland is related to the polarization of the cells making up the gland, or at least to the energy states of the cells, which can be thought of in terms of a polarization. Thus, the gland functions the way it does because of its structure on a cellular level. What we want to do is to change that essential structure. We change it by the application of a mind field--that is, we decide what is the ideal and mentally apply that image to the gland.

Let us pick the thymus as the gland we wish to deal with. We want to make sure it is polarized, or that it radiates most easily in the love mode rather than the hate mode. Thus, we take our highest conception of what is the expression of love and we mentally apply that to the gland, and hold it on the gland. So, think now of this gland with some mental field pointing in a particular direction (figuratively speaking) that indicates "high expression of love". In the gland, as in other parts of the body,

millions of cells die and are born every moment. Now we have a similar situation to the magnetic material example. We have a situation wherein cells are born in the presence of this influence field, this polarization field, and so they orient or polarize themselves closer in accordance to this influence field rather than to that field of the unconstrained gland. Think of the influence of the mental field as that of putting a constraint on the gland so that it functions more easily when it operates towards the love mode. However, it is still very hard for it to function this way because its easy groove of operation is the habit groove, and that may not be a very high expression of love. However, if application of this mental field is continued, eventually all the cells in that gland will have been born under the influence of that field. So, with the passage of time, the gland is basically restructured in the presence of this mental field. The gland is eventually able to function in its habit mode most easily when it expresses this new kind of love. Then the mental field may be removed and that portion of the mind can be directed to work elsewhere, because the gland will now respond automatically in this new ideal way with respect to its expression of love.

Of course, with the passage of time, the entity will grow further in consciousness and, in so doing, develop a higher ideal of the expression of love, and thus ^{we} will need to go back to the drawing board (or visualization board) and again reapply a mind field to again restructure the gland according to this new ideal.

This same procedure is the one responsible for the generation of the vital circuitry between the glands or between the etheric sensory system and the brain; i.e., this is how the linkages are made at the neural level

of the physical and etheric bodies. The repeated act of trying to do something focuses the mental attention or mind field on the unconnected nerve ends that are important for successful fulfillment of the act. This mind field is ultimately manifest at the physical level as a voltage gradient between these nerve ends. The electrical stress polarizes the intervening cells so that they are eventually organized into appropriate nerve cells and the connection between the nerve endings is made. Electrical pulses can now flow and information can be transferred along this transmission line so that the brain may now know of the message the sensory receptors have been trying to get through for so long. It is a continual muscle-building type of process driven by desire and focused mind power.

As the glands are tuned at the physical level, they are also tuned at the etheric level so that, even if an endocrine gland is physically removed, the function in the N-frame still persists. Following this path, we build ourselves to function with large power densities at the P- and N-frame levels; we expand our consciousness so that we can absorb and transmit radiations over a large bandwidth, and we quiet our uncertainties by being harmoniously attuned with the Cosmos. Thus, our channel capacity grows and grows, and we return ever closer to the Oneness of our Being--the All!

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Figure Captions

Figure No.

- 1 Intensity versus frequency plot for an idealized physical solid (many atoms interacting).
- 2 Schematic spectral distribution curve illustrating, along one coordinate, relative radiation characteristics of the seven levels of substance.
- 3 Energy-velocity relationships for particles between P- and N-frames (physical and etheric).
- 4 Important components in a standard communications system.
- 5 Functional variation of the logarithm (A) as a function of A.
- 6 Schematic illustration of the formation of a magnet by the precipitation of a magnetic phase from solution under (a) no applied field and (b) the influence of an applied field, H_{imposed} .

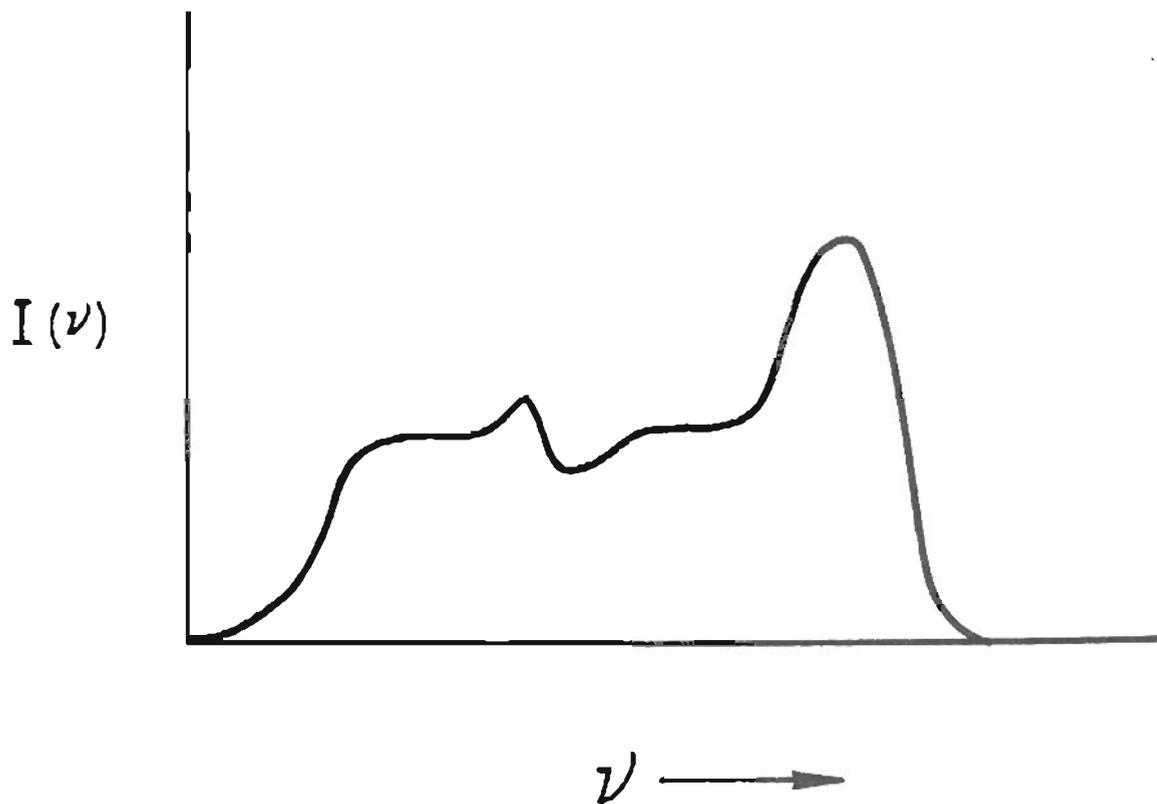
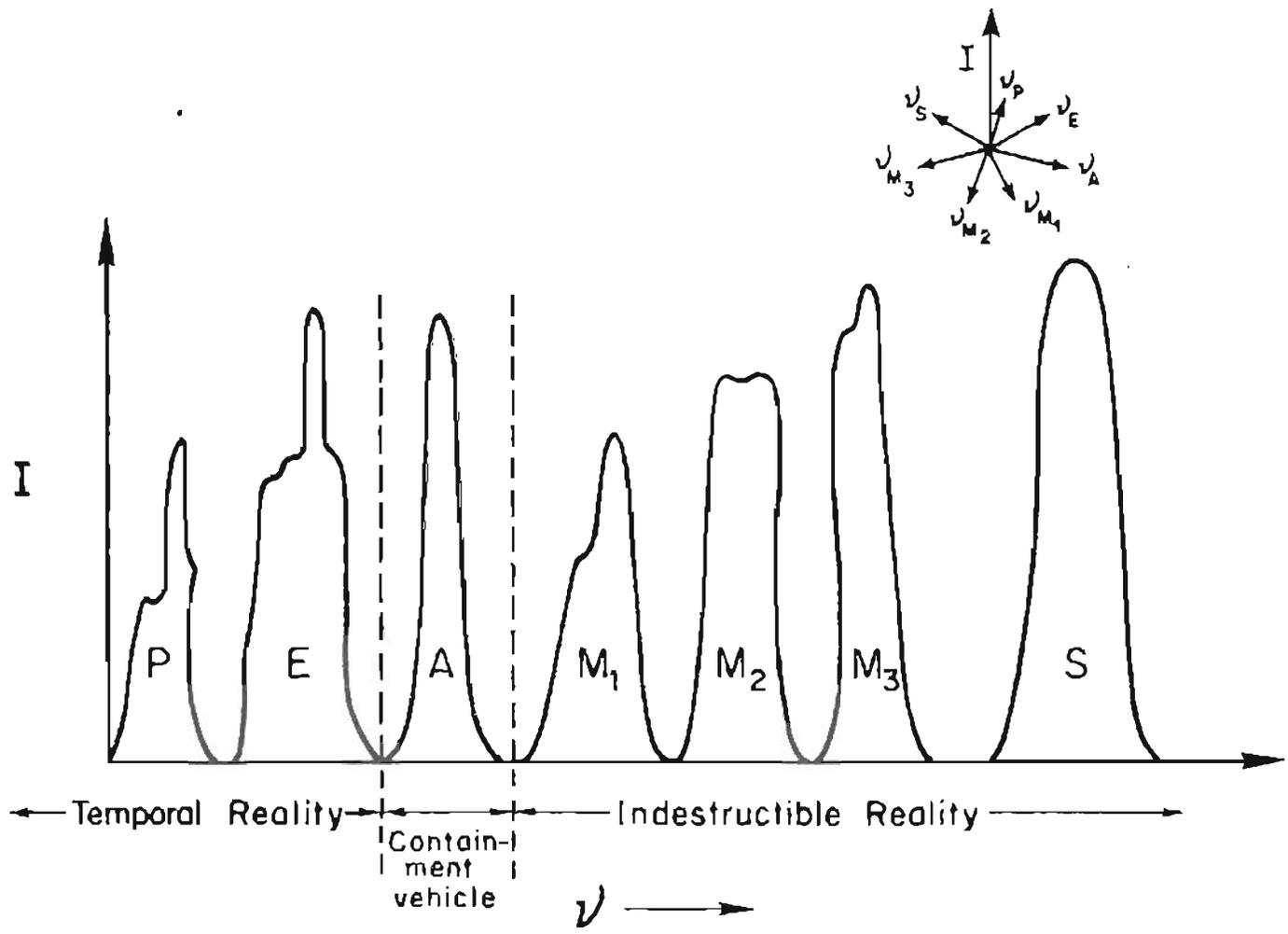


FIGURE 1

FIGURE 2



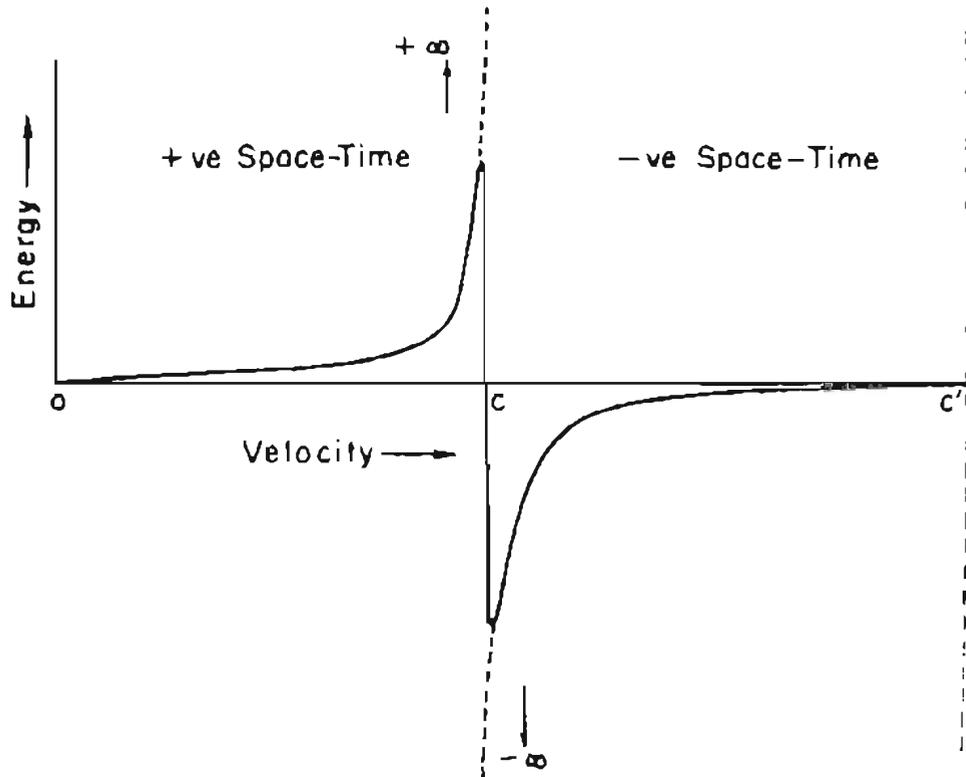


FIGURE 3

FIGURE 4

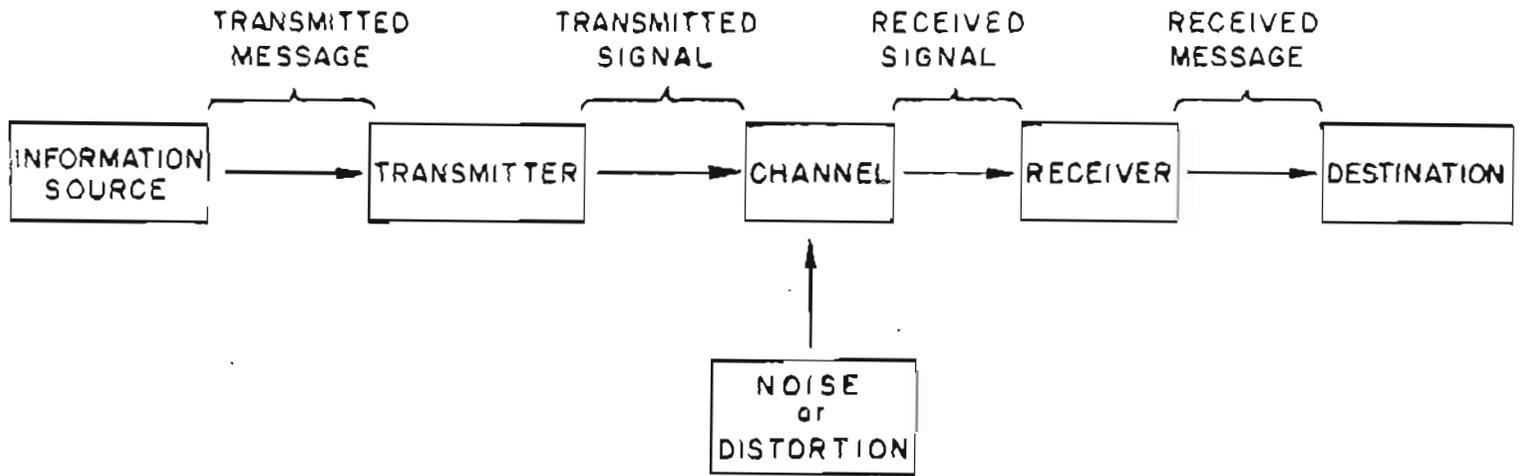
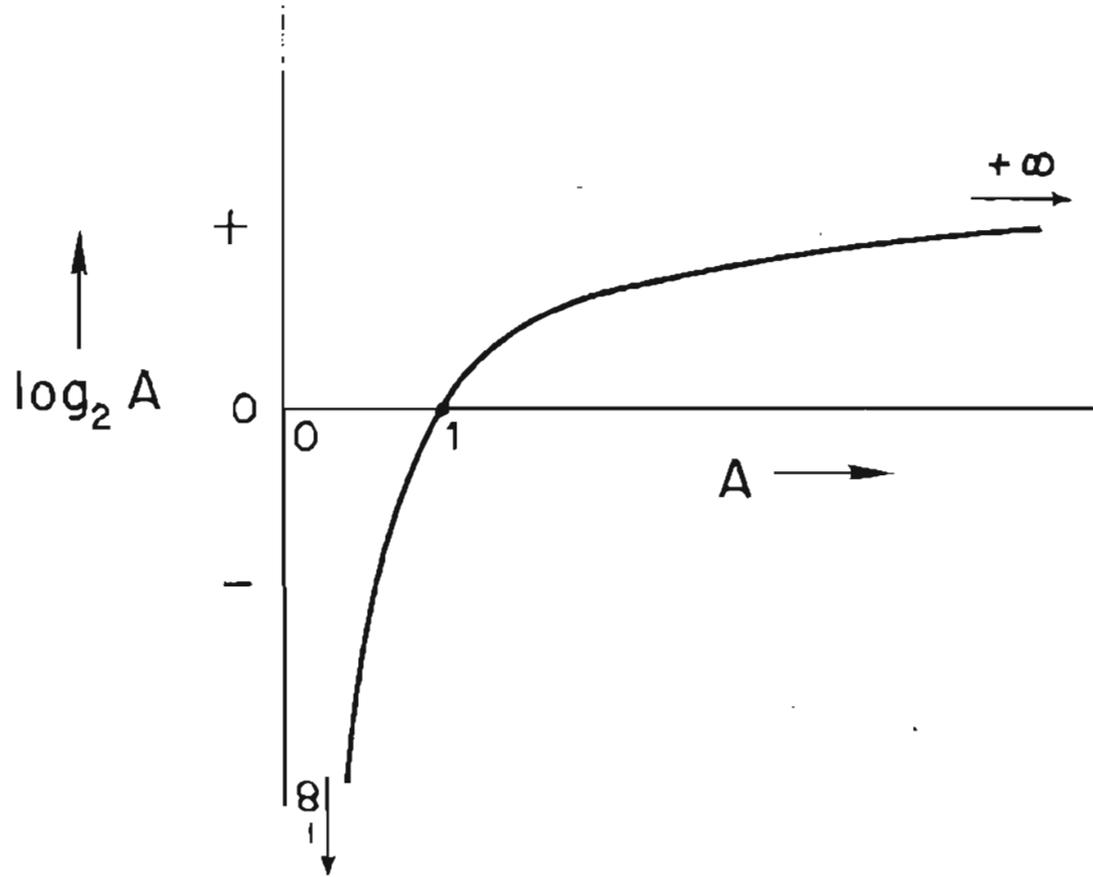
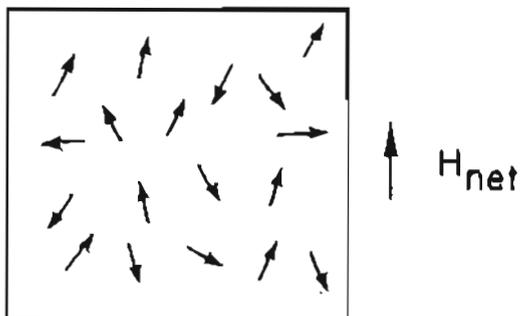


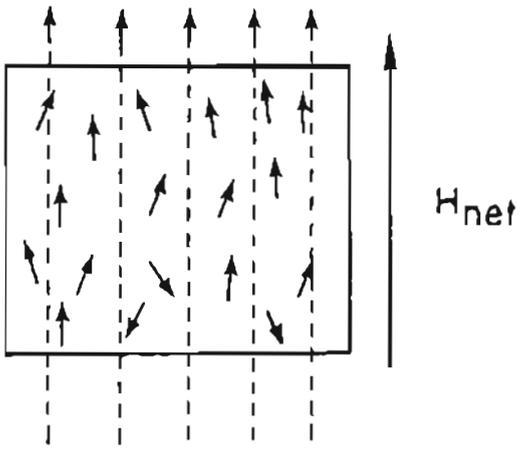
FIGURE 5





(a)

$H_{imposed}$



(b)

FIGURE 6