

Applying an Elementary Biocybernetic System to Medicine and Society.

Subtitle "Complexity, Democracy,
Sustainability".

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Excerpt:



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This paper has affiliation with Medicine & Health, Political Systems.

(keywords: Biocybernetics, Sociocybernetics, Psychocybernetics,
democracy,complexity,health)

Introduction: Today's General Field of Science

Einstein's Contribution

For Claude Bernard, considered as the founder of modern experimental medicine, as time goes by, every scientific theory becomes obsolete, incomplete. For a scientific theory to be correct, he argues, it would have to take into account all the phenomena, visible and invisible, past, present and future, known and unknown which is, of course, impossible. Therefore, a scientific theory, which is accepted and deemed "true" in an era, is the most satisfying for the time being. Therefore, the scientific mind should not stop at accepted dogma but should throw in some bold speculation able to give account of some unexplained facts. As such, Ptolemy's theory, in which the sun revolves around the earth, was the most satisfactory and accepted as "truth" for the Antiquity. Nowadays it only makes us smile!

Newton and his theory of universal attraction dominated the 18th Century. For the first time in history, the same law could explain the movements of planets as well as physical phenomena observable in daily life. Mechanics and physics thus appeared universal and matter was the important subject. With Newton we reached a satisfactory account of most observed phenomena; ensued the development of modern science and technology.

In medicine, Robert Koch discovered the bacillus responsible for tuberculosis. For the first time, a specific agent was recognized as the unique direct cause to a specific disease.

Under Louis XIV, filth was scientifically accepted as necessary to good health. It was thought that cleanliness could lead to illnesses. An example of life in Paris before the 19th Century can illustrate the fact that not much was known about hygiene. No water main existed. The passerby had to carefully avoid the content of night pails, which was thrown out in the street every morning by dwellers. Upper crust gentlemen and ladies were allowed to walk "le haut du pavé" (the upper side of the road), near the walls since the miry rivulet occupied the middle of the street. All this "water", ending up in the Seine River, provided drinking water for the Parisians. A sand filter was used to remove offending odors. For years, the University officially declared it good drinking water. The discovery that microbes, and also cholera and typhoid fever were related to water polluted by feces, and that plague was transmitted through fleas from rats, brought a revolutionary change in habits. Nevertheless, it took time to convince the farmers not to live near their manure heap because you know, the higher the heap, the richer the farmer was! The public found it hard to trust those health officers sent through the country. They found also hard to believe that invisible bugs could exist, let alone make someone ill!

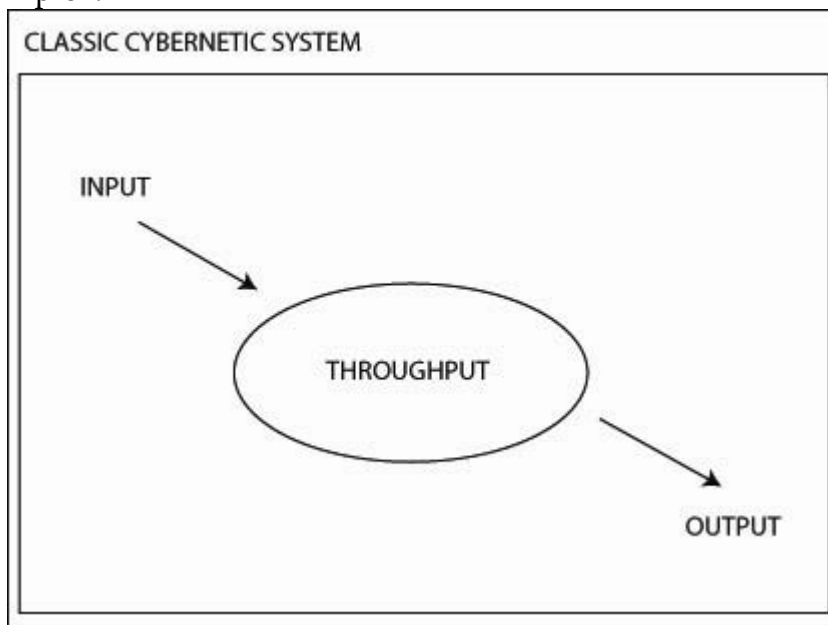
The mechanist point of view is also the basis for Charles Darwin's theory of evolution. He believed the organs to develop or atrophy depending on their use and natural selection to

work through elimination of the weakest. The neo-Darwinism applied this same theory believing the selection of beneficial new genes to be done through accidental mutations.

This Newtonian approach in medicine, where the DNA is at the cause of the life phenomenon has been satisfactory so far since it seemed to give account for most of the diseases.

Nowadays, 72% of patients' complaints relate to chronic ailments, functional symptoms. Where medicine was used to cure illnesses, it is now becoming palliative care. We mask the symptoms with the use of drugs because we are not sure of the real causes of these chronic complaints. Possible causes, which used to make doctors smile 40 years ago, (diet, exercise, stress) become serious factors accepted as having an important affect health.

Before we considered the organism more as an insensitive machine, each components being somewhat separated from each other. The environment was rarely taken into account. We are only beginning to see the complexity of the physical body and how each element interacts with each other. On the biocybernetic point of view, what we consider as "input" is getting more complex.

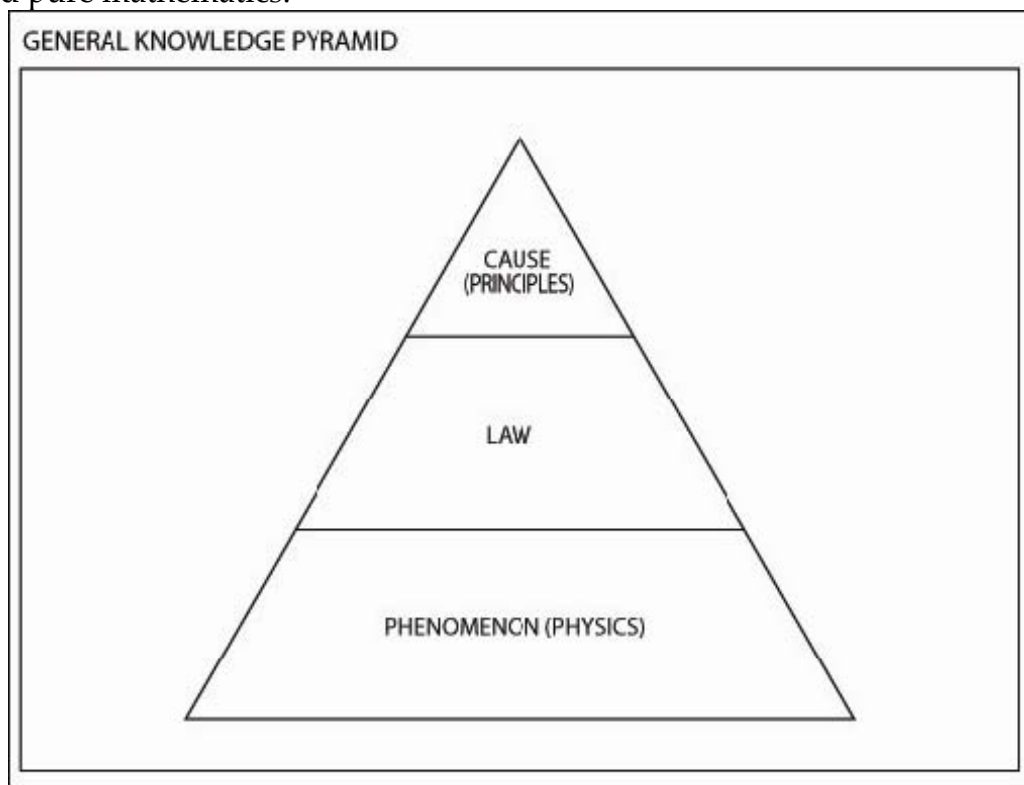


What we consider as an input to our system is not only physical anymore but also linked to the psychological or energetic aspect inherent to or affecting the organism. We also know that genes can be expressed or not and that a same "stress" will affect different people in different ways. We know that for an inflammatory trait to express itself, 35% is due to genetics and 65% is due to the environment.

Albert Einstein brought a scientific revolution as important as Newton's two centuries earlier. He showed that scientific progress is not a stockpiling of knowledge considered immutable, but instead a constant restructuring of the guiding principles of our accepted knowledge.

In his method, he started from the level of theoretical physics and pure mathematics. His findings made it possible to account for some unexplained phenomena (aside, of course, all previous knowledge), thus allowing the discovery of unsuspected phenomena such as nuclear energy. The attitude was quite revolutionary. As his friend, the French mathematician Henri Poincarre pointed out: at the opposite of the classical Newtonian method where the questions come from “the observation of phenomena, the mathematical physics give the question, and the experiment gives the answer.”

To illustrate this point, we can draw a “general pyramid of knowledge”: to the lower level correspond phenomena, which can be observed in physics. The second level corresponds to the laws. At this level of observation, we can give an account of most phenomena. The third and upper level corresponds to the principles or ultimate causes. It features theoretical physics and pure mathematics.

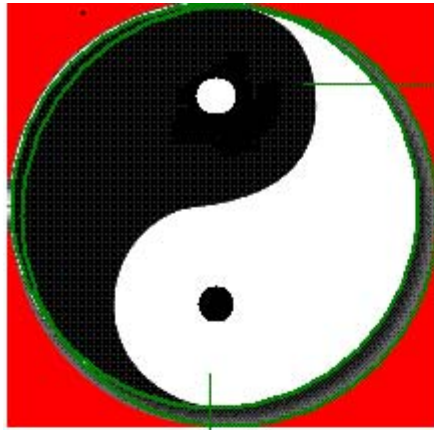


The difficulty with observable phenomenon is often to pinpoint the primeval cause. Usually, there is a time factor added before the apparition of the phenomenon plus there is also a domino effect of reactions. In these circumstances, the real cause is sometime difficult to detect and we might conclude that a mere phenomenon is “the cause”. That is why in system sciences, the level from which we observe is very important and we cannot mix the levels. Causes are always informational. We can quantify a cause only through its effects in the phenomenal world. As informational, causes are more of a qualitative than quantitative nature. As an example, the red light at a road section doesn’t need to be 3 meters wide to give stronger information; it needs to be red. Since the qualitative aspect address also the receptor, the law of affinity will become very important when trying to assert the importance of a cause

or informational agent. A cause without a proper receptor stays in the causal world and is not manifested. We can know and observe a cause mainly through its effects. Even then, the qualitative aspect of the information is analyzed through the receptor's understanding of the effect. Causes are not directly quantitatively measurable. They can be measured only through their receptors. We find this same at the physiological level. A virus cannot do its damages if there is no prepared receptor for it. Thus the importance of physical hygiene.

Another example is the Tao symbol.

If we mix the levels, we could assume that yin=yang. This would be a mistake since the dynamic aspect of yin is not of the same nature as of the yang; therefore, the receptors linked to each of them are different. There are some organs, which are more yang in nature and others which are more yin, down to the genitals which are, we all observed, very different in their function. Even if symbolically they have been put in a circle, it doesn't mean they are the same. It means that they complete each other in their function. Their dynamism is different, one being of expansion or emission, with a small aspect of reception, retention to prevent the explosion and also to be able to work with the other function; the other being of reception and retention with a small aspect of emission, expansion to be able to work with the other function and not be absorbed by the other function completely. In the manifested world, they express this function by + and – or emission and reception. If they were one without separation, there would be no movement or dynamism possible; the two functions would cancel each other. We are again approaching the dilemma of structure and function. The function precedes the structure. The Tao is an expression of two functions creating all the different structures of the manifested world we know. We can study the structures emanating from the interaction of those two functions but we cannot say that the structures are the function or that the functions are limited to the observable structures. Therefore to understand any living system, we have, first of all, to understand how those two functions manifest themselves in the system. This will give us a living system to study at the opposite of a static system, which is unfortunately the type of system we have studied until now.



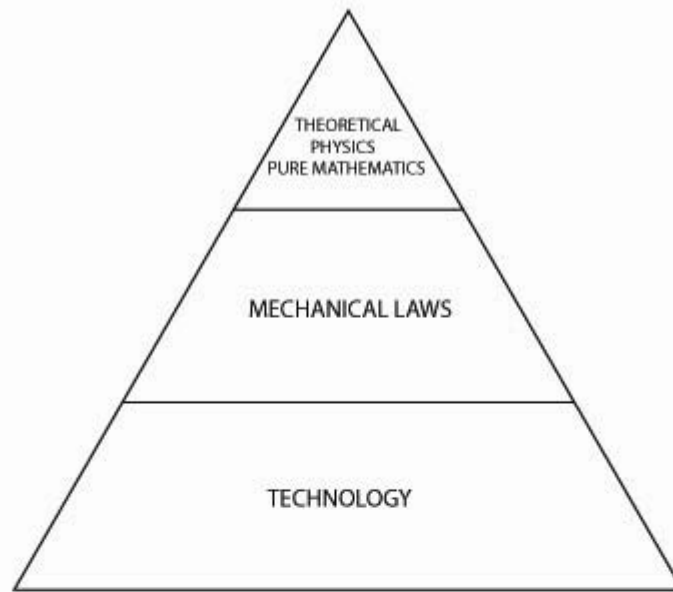
*receptive function
with its emissive dot*

*emissive function and its
receptive dot*

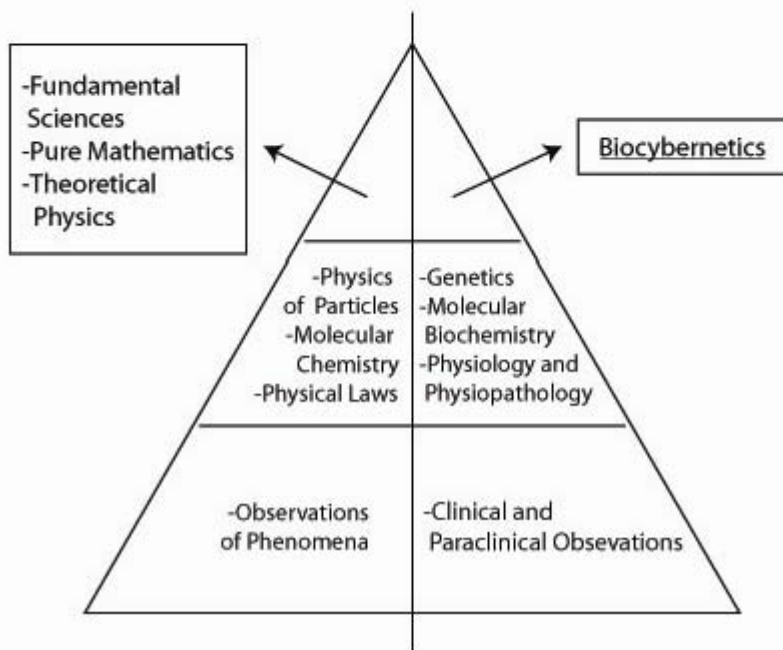
$$CAUSE = \frac{INFORMATION + TIME}{adequate receptor} = EFFECT$$

*necessary elements for a cause to manifest
itself.*

KNOWLEDGE PYRAMID



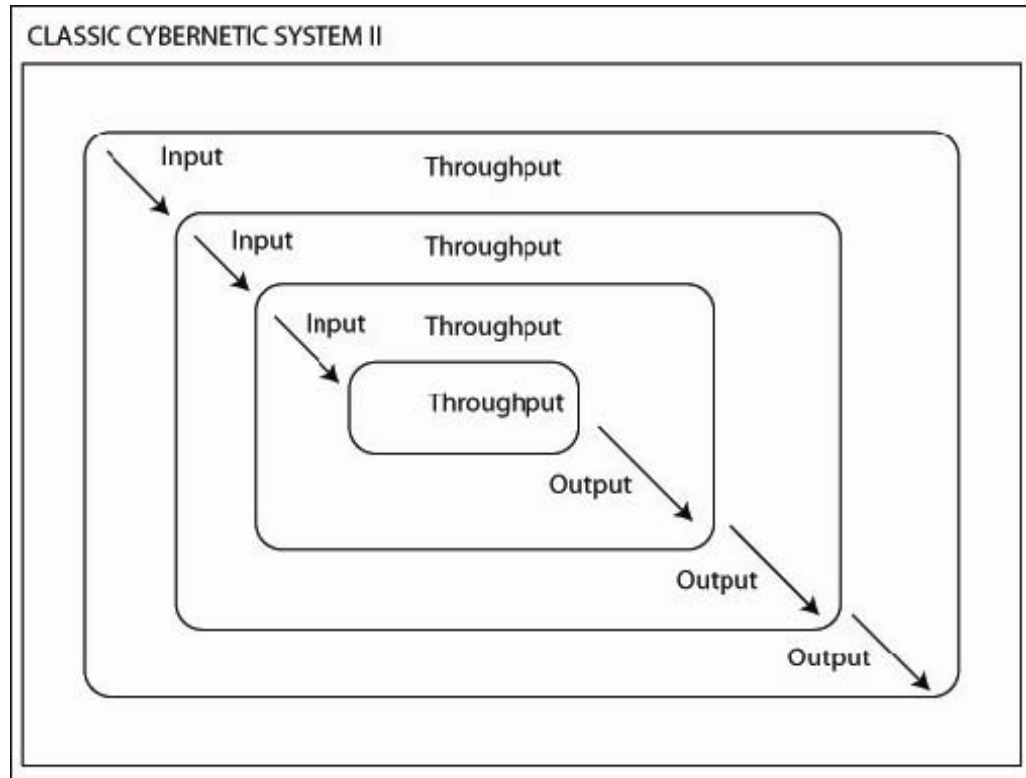
KNOWLEDGE PYRAMID SCIENCE AND MEDICINE



The purpose of our work has been to apply these same divisions to medicine. The lower level thus corresponds to the visible symptoms. The second level corresponds to physiology, physiopathology and genetics. The upper level is occupied by Medical Biocybernetics, a fruitful approach which brings discoveries independently of the observation of diseases but which is confirmed by observation and results.

Systems Approach

The systems approach is considered as enclosing both analytic and synthesized viewpoints giving this way a more truthful vision of reality. Ludwig von Bertalanffy proposed under the term of “General System Theory” to take into consideration that no living system, or organism, contrary to the reductionist point of view of materialistic science, could be adequately studied in isolation from the rest of the universe. In the same way, organisms, contrary to machines, are not a closed system but constantly exchanging with their environment, this environment being the throughput of a wider system.



These exchanges have been the object of very few studies. We accept these exchanges as being real if effects on the organism or on the immediate environment can be observed rapidly. With the factor time being added to the observation the proof of the demonstration becomes harder to make as we can see with the difficulty of some countries to accept obvious responsibility for climate change.

Concerning the human being, we can summarize these exchanges through “input” and “output” notions, leaving the details of the throughput to be analyzed by medicine (physiology) for the visible part, and psychology/philosophy for the invisible part. The systems theory is basic and could thus be applied to organism or to any structure.

The General System Theory has roots in the ancient belief that “the microcosm is a replica

of the macrocosm". The image most representative of this is the Russian doll where the most inner doll is an exact replica of the most enclosing doll.

By studying the most enclosing doll, we will have an idea of the most inner doll and vice versa. A subsystem is a projection and part of a super system thus permitting exchanges between those systems (law of correspondences, law of affinity). Systems are manifesting themselves on different levels. These levels, of all living systems, are not closed but constantly exchanging with each other. An example of this on a psychological level can be illustrated by "coincidental" discoveries; on a physiological level this can be illustrated by women living in a community: their menses will coincide in time.

By considering the different systems in this fashion, some phenomena, which previously seemed strictly anecdotal and were piling up in a corner as "unexplained", become part of the understanding of the throughput functioning. Because the same type of organization can be found in systems linked to different levels, (molecular, cellular, glandular etc.) it is possible to refine our knowledge concerning the throughput aspect thus transforming the "white box" (unknown throughput) into a more transparent one. Living systems appear thus self regulating, the common purpose of the cells being of following a global pattern which goal is normally to maintain the organism as a whole (good health) allowing this way to the individual cell to express its DNA and reproduce. When the system (the organism) is in crisis, certain elements will be protected despite other components to keep this wholeness of the organism. The hierarchy in this system is set by the functions of the different elements, the most important being those necessary to keep the cohesion (life) of the organism.

As fatal accidents have shown, in its struggle for survival, the organism will privilege the brain, the heart and the kidneys over other organs.

The common purpose of the cells with its subsequent "morality" is accepted by all the elements of the system, not as an act of kindness for some parts of the organism but as a necessity for a projected survival of the whole structure (thus of the elements pertaining to it) in time. This important notion of time, with its material manifestation of cycle, is added to the notion of space as an inherent and essential aspect of the function of all the elements of the organism. The laws governing the whole in this respect constrain the behavior of the different elements of the organism.

Living Systems

Elements of Biocybernetics

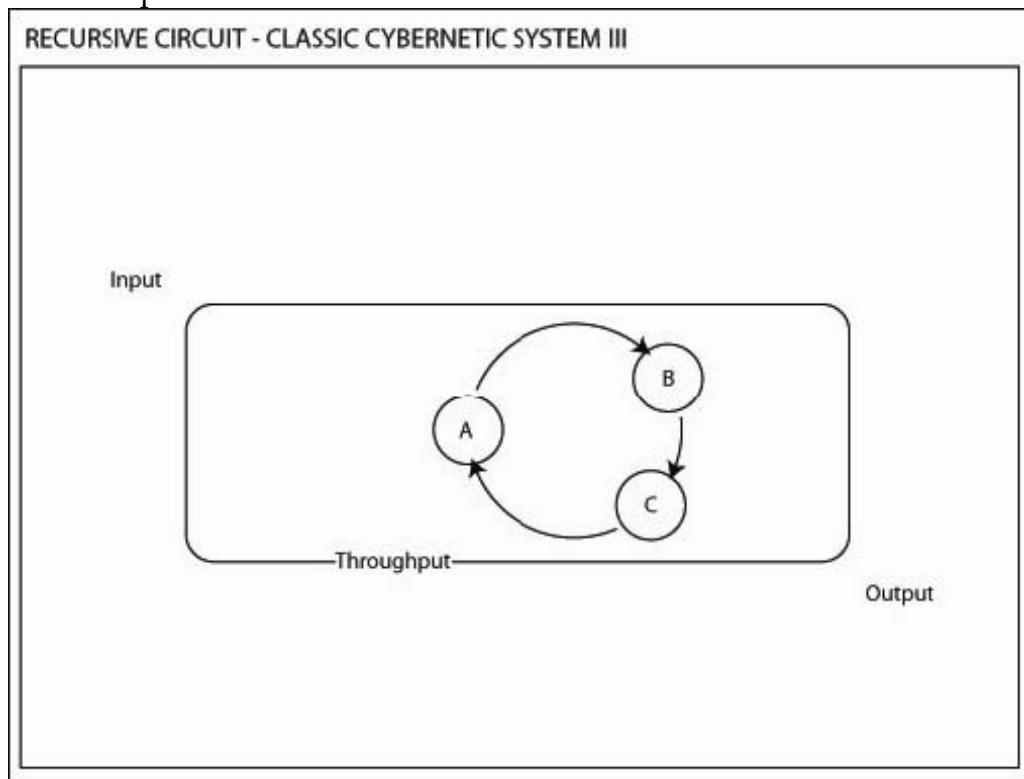
Einstein's procedure, starting from the theoretical level, brings some obvious advantage in medicine. Not only are we able to give account of most phenomena, that is to say symptoms in

medicine, but we also have a synthetic view of physiology and physiopathology. More, we can give account of some unexplained phenomena, for instance, numerous functional symptoms, and, what is quite new and a first in occidental medicine; we will finally have the ability to define health in terms other than “absence of disease”.

The clinical observation is not the level where the questions arise but the level at which our theory is confirmed.

Every living being expresses itself through an auto-regulated energetic system. Cybernetics being the “Science of information and its regulation among machines and living beings”(Wiener 1948), we should be able to find an elementary general biocybernetic system applicable and common to all living beings, this being true even at a molecular level. (SEE TABLE IV and TABLE V in addendum)

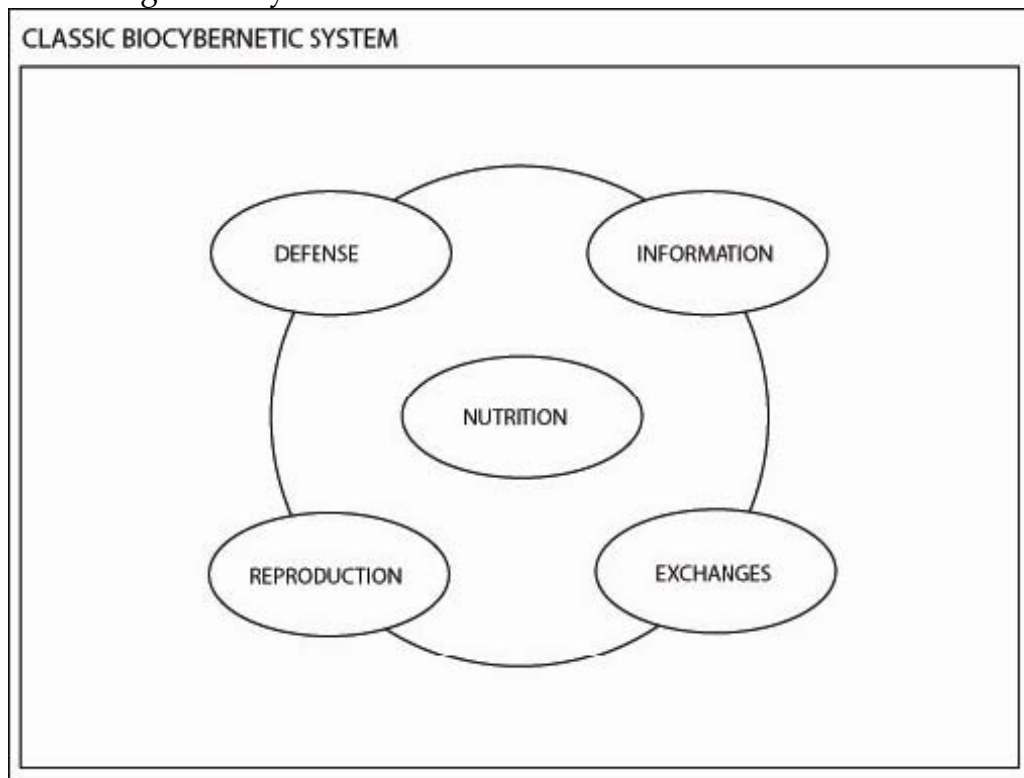
With Einstein, we can consider that matter is condensed energy. The electromagnetic wave with its phases of expansion-acceleration, retraction-deceleration with one intermediate element should point to the main elements of an elementary auto regulated biocybernetic structure. With a basic three elements, namely A B and C, A triggering B, B triggering C, and C triggering A, A is both cause and effect. This was called “circular causality” by cybernetician Heinz von Foerster. It is also known as a recursive circuit. The steam ball regulator is an example.



As we look back at evolution, or down through our microscope to minuscule organisms, we

can see that life on earth is permitted through cells adopting different functions. In this, we can see that reproduction, defense and nutrition are basic needs shared by all living beings. The recursive circuit understood as A being reproduction, B being defense and C being Nutrition is not complete enough to be auto-regulated for living systems since these are open on many levels.

As a matter of fact, we know that no organism can survive without a minimum of exchanges with the environment and without being able to process information, both internally and externally. These two elements, exchanges of information and processing of information, will be added therefore to the basic mechanic circular causality giving us a picture of an auto-regulated system of 5 elements.



The cell being a microcosm, template of the macrocosm,

we should find structures relating to these functions in the cell and we have:

- 1) The nucleus and the DNA supporting the genetic energy (programming-regulation)
- 2) The mitochondria and lysosome as the defense energy (immunity)
- 3) The RNA, which reads the DNA in order to synthesise proteins (enzymes). Thus

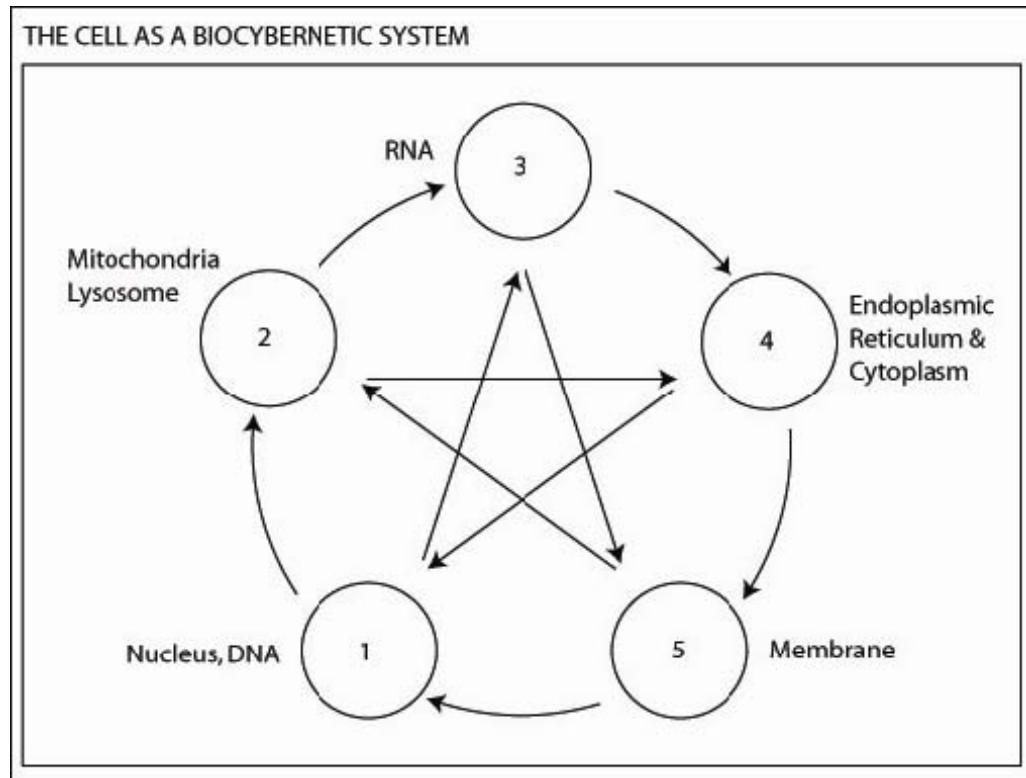
allowing an expression or repression of different genes acting as an information agent.

(information)

4) The endoplasmic reticulum and cytoplasm supporting the nutritive energy

and

5) The membrane filtering the environmental energies.(exchanges)



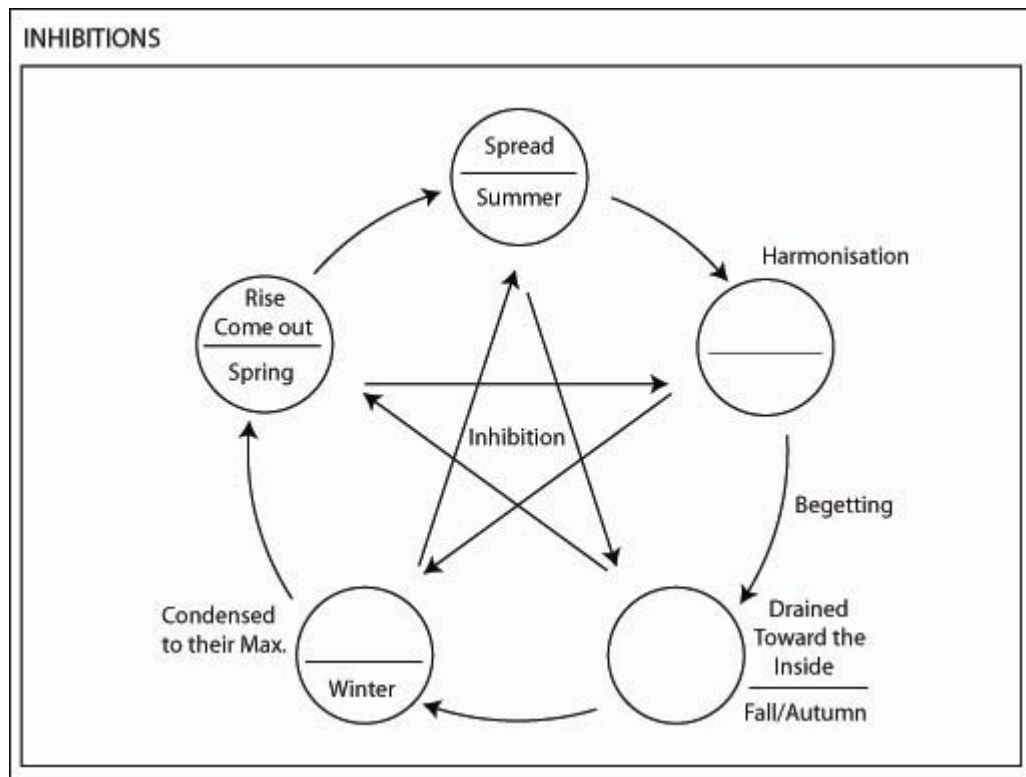
It is not mere chance that we believe the DNA to be the cause of all manifestation in the living organism. There, the energies are condensed to a maximum. But energies don't initiate from genes since there is no spontaneous generation in sciences. Genes are a manifestation, a coding, not a cause. As an example, the written letters are not the ideas themselves but the support by which the ideas are expressed. The written letter is thus the matrix, the receptive aspect, the idea is the emissive, the informative agent. The reader is the necessary receptor. He will react differently depending on his affinity with the text.

As with every natural phenomenon, we can observe a cycle, which corresponds to the movements of energy from its manifestation to its resorption. We can thus observe in winter that the energy seems condensed to a maximum. Spring comes and the energy rises. Then it spreads to the surface, manifesting itself through vegetation. Summer is here. Then, it seems,

time is suspended for a brief moment. The energy finally is drained toward the inside of the earth.

Our own breathing cycle seems modelled on these movements. If we add the electromagnetic wave with its phases of expansion-acceleration, retraction-deceleration with one intermediate element to the main elements of an elementary general cybernetic structure we should get a general biocybernetic system.

As with steam machines, certain elements will need to inhibit others to keep the cohesion of our auto-regulated system:

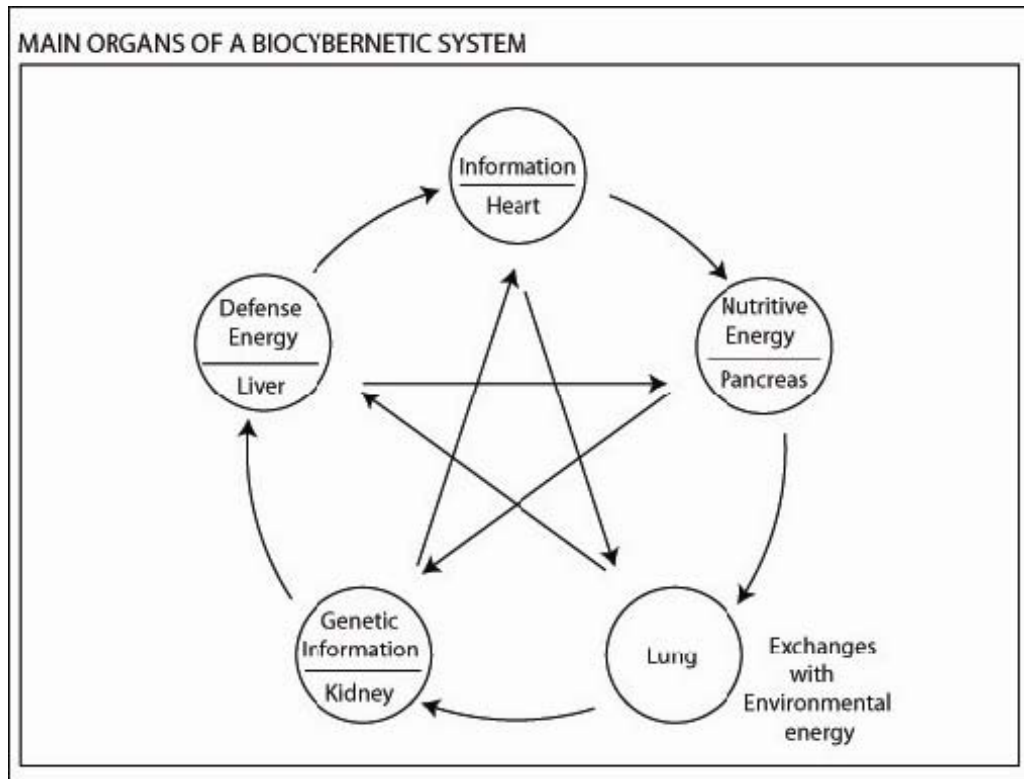


The cybernetic principle engineers discovered is a general one: if all the variables are tightly coupled, and if you can truly manipulate one of them, then you can indirectly control the system. This principle plays on the universal nature of systems. Latil writes, "The regulator is unconcerned with causes; it will detect the deviation and correct it. The error may even arise from a factor whose influence has never been properly determined hitherto, or even from a factor whose very existence is unsuspected."

These biocybernetic structures appear to be universal since they can be adapted to molecules, to the elements of the cell, to the organs, as well as to any viable complex structure built by Man (cities, society).

We find this biocybernetic system described in Traditional Chinese Medicine: There is a constant interaction between these five elements. For instance, in Chinese Traditional

Medicine, the weakness of the “lung” energy will produce an excess of “liver” energy. This will result in tendencies to allergies, generating an excess of “heart” energy (inflammation) both overcoming “lung” and “pancreas” and their corresponding elements.



In Traditional Chinese Medicine, the treatment here will consist not in alleviating the symptoms by giving remedies on the peripheral level, but by stimulating the energies of the “lung” (it’s not by mere chance that the classical aspirin works since the prostaglandin is secreted in large part by the lungs).

Since it has been shown recently that we can have an action on the DNA through the environment, which makes sense since the lung generates the kidney in our biocybernetic system, Medical Biocybernetics will include this one in the treatment. Medical history of the patient will therefore include information on the career, living quarters, emotional environment etc.. The environment in Biocybernetic includes not only the physical environment but also the emotional and mental environment.

The technology analyst George Gilder said:” The central event of the twentieth century is the overthrow of matter”. It is as if, as we analysed it, we saw the “cause” of everything as being material. It is easier to think that matter causes everything than to think that everything is caused by energy. The twenty first century might mark the liberation from energy since the control of information seems necessary for the control over energy.

We will eventually have to understand that control over information comes through

hygiene linked to the Biocybernetic System.

Physiology of the Subtle Digestive System (SDS)

The general meridian system used by all acupuncturists has been established a few times, notably by my teacher, Dr. J.C. Darras (Necker Hospital, Paris) who confirmed a previous experiment by Chinese researchers who used radioactive technetium 30 to render visible the meridian pathways thus proving its reality. That an invisible structure of pathways has been intuitively and so precisely described should be considered as an astounding feat but it seems that no one realises or even care about this fact. What in us make some of us able to see and feel what is not visible?

The presence of a second digestive system of which the function is reception, regulation, assimilation and excretion of subtle elements (energy, information) is as well not a theory but a fact. The traditional Chinese Medicine has described a system linked to the uterus in the woman as well as to the heart. Loosely translated this system received the name of "Master of the Heart". With acupuncture for so long embalmed, then illegal in communist China, and finally strangely translated, much of the profound meaning of ancient texts have been lost. With new scientific discoveries made through the understanding of some illnesses, through results from the Traditional Chinese Medicine and my own observations over 30 years, I was able to define and understand the functioning of this second digestive system which I have name the Subtle Digestive System (SDS).

Chouang Tseu refers to this system when he talks about "the path of the golden flower". Although for the layman in this domain, this could sound like a strictly poetic metaphor, it is rather a truly scientific term. This pertains to the very real flower function, information captor and emitter, of the Subtle Digestive System.

Our environment is a makeup of three main elements: solid, liquid and gas. Accepted as a fourth element, plasmas make up for 99% of our universe. To simplify the discussion and because plasmas is known to us on earth more by its emissions, I will name this fourth element through its effects, alternately "information" or "energy" although we know that less subtle elements such as solids and liquids, are also "energy" and "information" but in a condensed form. Living beings need these four elements in order to survive. We can go on for 40 days without solid food, 10 days without water, 3 minutes without air, we would probably die instantly without plasmas (energy).

Every living being considered as an open cybernetic system, input and output will refer to the digestive system (s), absorbing and eliminating the elements of the environment.

These elements (solids, liquid, gas and energies) will be absorbed by specific systems.

The law of gravity directs the dynamics of solids and liquids downwards. Therefore it is understandable that the mouth is above and the elimination of wastes located down below. On the other hand the dynamics of gases and fire (radiations) are directed upwards. Therefore the subtle digestive system (SDS) is upside down compared to the classical digestive system. The wastes are eliminated upwards through upper organs: the upper respiratory track for the gases, the throat and the vocal cords for thoughts and feelings. The mouth of this system should thus be located below in the abdominal area.

Solids are absorbed by the roots of plants and by the stomach, intestines and then metabolized by the liver in mammals. In our biocybernetic system, this is attributed to the LIVER and its dependencies as well as to an aspect of the pancreas.

Liquids are absorbed by the roots of plants and by the stomach, the intestines and then under the control of the Kidneys for animals. In our cybernetic system, this function is thus attributed to the KIDNEY.

The above two elements and the interested organs are linked to the classical digestive system, as we know it.

Air is absorbed by the leaves of plants and by the lungs in animals. In our biocybernetic system this is attributed to the LUNG and its corresponding elements. The lungs are easily recognized through its cyclical nature of expansion and contraction called breathing.

Plasmas is the most common and subtle form of matter, comprising more than 99% of the known visible universe. Commonly encountered forms of plasma include fire, the sun and other stars, lightning, the Aurora borealis, the solar wind, and interstellar Nebulae. We are not in direct contact with plasmas, of course, but we are bathed in its emissions, radiations, ions, electro magnetic waves, etc...

Radiation (from plasmas) is absorbed by the flowers of plants. How do animals absorb radiation? The only organ left in our biocybernetic system is the HEART.

Can we find a relation between heart and radiation?

It seems that patients following radiation treatment for cancer could jeopardise the health of their heart. [“ Myocardial hypertrophy, fibrosis and infarction following exposure of the heart to radiation for Hodgkin’s disease”. L O’Donnell, T O’Neill, M Toner, S O’Brian and I Graham]

Some researchers also found relations between the solar perturbations and cardiac infarcts. In 1959, on the Bulletin of the Medicine Academy of March, Dr. M. Poumailloux, head physician of cardiology to the hospital Saint-Antoine, Paris

wrote: “ our ascertainment have made to appear one truly impressive correlation between the increase of the infarcts of the myocardium, in periods of maximum solar activity and geomagnetic (solar spots) tips of agitation “.

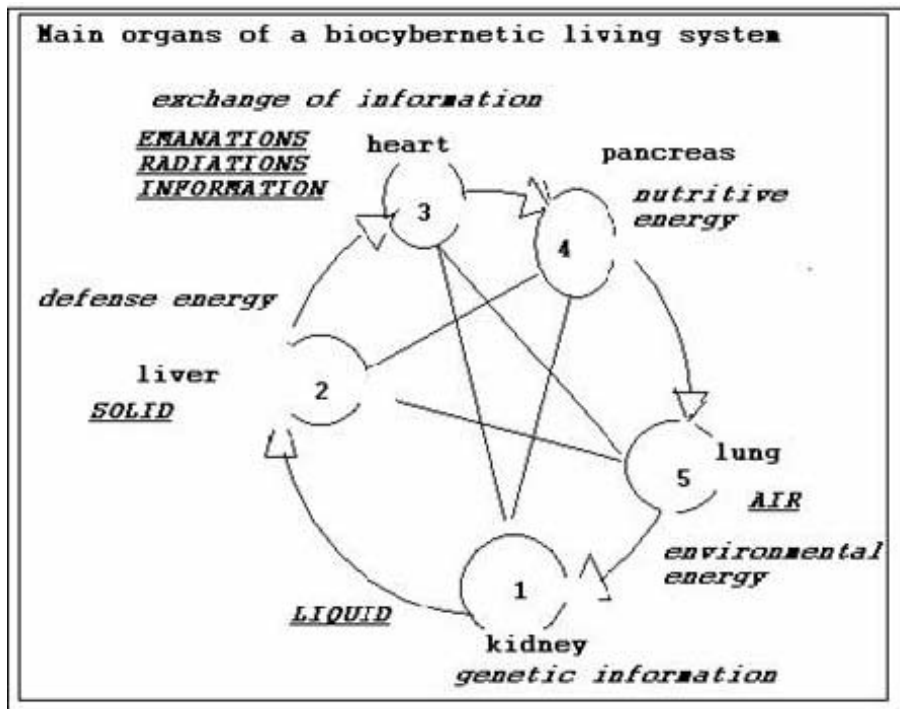
In 1945 it had already been observed that the curve of mortality for heart diseases in the former Soviet Union had been in tight relation with the index of the solar spots. [(Source: Pejarskaia, cited from N. Schulz, *Annales médicales de Nancy*, May 1962, page. 182).]

In India a study in such sense was performed by the doctors Malin and Srivastava (1979). The period taken in consideration goes from 1967 to 1972. They studied 5000 cases of infarct, which happened in two hospitals and compared them with the every day index of land geomagnetic activity in connection with the intensity of solar spots. Again, it was shown a definite correlation between infarct and solar spots.

The heart is logically associated with the absorption of radiations and more subtle, non-material elements, including thoughts and feelings. This is confirmed by common observations: Solar spots and changes in the electromagnetic field on earth are associated with an increase of number of heart attacks. Negative feelings are associated with a “heavy” heart in popular tradition. The expression through the voice of these feelings is at the very basis of any psychotherapy.

The heart we are talking about is obviously more than the pump propelling the blood and is associated with different energetic and anatomical structures involving the neuro-vegetative system.

We can thus confirm that the heart is involved in the metabolism/regulation of energy.



Can we, then, find out some structures involved, directly or indirectly, in the absorption, for instance, of light?

The pineal gland, situated in the brain, is the best known for its sensitivity to light, particularly among birds.

Thanks to the spring increase of light the pineal gland of the female is stimulated. It then stimulates the pituitary gland and ultimately the ovaries and the production of sexual hormones with release of eggs and attraction of males. Such a light stimulation is done through eyes and retina, but experiences have shown a stimulation of the pineal gland among blind birds. It seems there is a light sensitivity with nervous response through the skin. The only connection between pineal gland and skin is the subcoetaneous neuro-sympathetic network connected to the different plexuses (solar, mesenteric and cardiac plexuses) and the chain of para-vertebral neuro-sympathetic ganglions directly connected to the pineal gland through the first cervical ganglion.

The role of the pineal gland among mammals and human beings is more complex than among birds. The importance of the hypothalamus and the limbic system, influenced themselves by the conscious and the subconscious, play a stimulating or inhibiting role between pineal gland and pituitary gland. Nevertheless the pineal gland helps modulating adrenal and thyroid glands (S, Rogers). It is the richest element of the brain in serotonin, a key neuro-transmitter the lack of which is responsible for depression.

From serotonin it produces also melatonin, which is one of nature's age-reversing hormones (Pierpaoli). It has anti-cancer property, help improving insomnia, jet lag and high blood

pressure. It is also one of nature's most powerful anti-oxidants. It also can lower cholesterol and counter plaques build up in arteries. Most heart attacks occur between 6 and 9 AM when the level of melatonin is at the lowest.

It might be useful to observe the various locations of some animal's pineal glands. The Western Fence Lizard-*Sceloporus occidentalis* has a functional pineal gland which is a photoreceptive element named 'third eye'. It is located directly on the top of the head. A small opening (foramen) can be seen in the skull where the 'third eye' protrudes.

As the Treefrog and Fence Lizard, the Lamprey has its pineal organ located above the brain.

In the higher vertebrates, the pineal gland has migrated from the position on top of the head to below and centre. We can put this fact in correlation with the leaves of trees, which are external lungs, while mammals have internal lungs. There might be a hint by this of the spiritual aspect attributed by the ancients to the pineal gland.

Another feature of the pineal organ is the production of melatonin from serotonin. Serotonin is a neurotransmitter produced in the gut of the intestinal tract as well as in the pineal gland. It is one of the major four neurotransmitters. Serotonin transforms into melatonin in the pineal gland (this has been proved by the blanching of larval forms of amphibians). The pineal gland is the only area where this is done. [p. 603 Julius Lee, *Animal Hormones* (London 1975)].

Serotonin is a necessary chemical transmitter of electrical impulses across the synapses (the gaps between nerve cell bodies).

"Serotonin is transported via the bloodstream to the nerve cells throughout the body, but most especially in the neurons of the brain. Here they accumulate in their smallest molecular form. The molecule is used by the nerve cells for the complete execution of electrical impulses across the synaptic gap (which is the micro-gap between every connection of every nerve cell in the entire nervous system). The impulses come along the nerve cell going through the electro-chemical processes with the ionic forms of calcium and potassium (the two vitals of the nervous system) until they reach the terminal end of the cell's dendrites. Upon reaching the end of the electrical impulse it is translated into the neurochemical serotonin. This is then "squeezed" out into intercellular space only to connect and meet the other side which is the beginning of the next nerve soma (lining of the nerve cell)". [Bernard Aronson and Humphrey Osmond, *Psychedelics* (New York 1970 198-201)

The pineal gland is the real governing gland, working subtly to integrate the functions of the glands as well as control the action of light upon the body. The pineal is able to work with the pituitary gland (which is made of the same tissue as the thyroid in the throat while the pineal gland is made of the same tissue as the eyes) and works with it through speech and

body language.

It also contains a substance, which, if injected intravenously, causes fall of blood pressure showing this way a link between the pineal and the heart thus with the Subtle Digestive System. It also seems that the gland provides an internal secretion in children, which inhibits the development of the reproductive glands. It has been noted to this effect that pathological growths destroying the glandular tissue of the pineal have shown to accelerate the development of the sexual organs with the associated precocious mentality and induce an increased growth of the skeleton.

With the help of the Traditional Medicine we can elaborate the subtle elements pertaining to the SDS. With our knowledge in anatomy, we can elaborate the physiological structures linked to the SDS.

As a digestive system, it will be a template of the conventional digestive system but more interested with the subtle elements. Since this system metabolises subtle elements, its "mouth", because of the dynamics of air and fire (energy), is at the lower level with the "excretion" happening at the upper level. With the involvement of the neuro-sympathetic system, the absorption of radiation (energy) is made through the skin (neuro-sympathetic system) and mainly through the solar plexus. Proving this is the fact that the anatomical structure of this para-vertebral neuro-sympathetic ganglion evokes a receptive function: in a reverse fashion compared to the brain, the white matter, which corresponds to the reception of information (energy), is external in the solar plexus while the grey matter, which corresponds to the treatment and analysis of information (energy) is internal.

Situated behind the stomach, it is the most important neuro-sympathetic structure. It is made of a network of different ganglions. Their structure is the reverse of the brain one with the white matter (reception, transmission) outside and the grey matter (analysis, processing) inside. That suggests an overall receptivity of the solar plexus. We have found here the "mouth" of the second digestive system.

We can now put in place the energetic and neurological aspects of the second digestive system (SDS):

Different type of information (energy) will require, for the absorption, different type of organs. We thus find, most importantly:

- 1 The solar plexus and the subcutaneous neurosympathetic network
- 2 The mouth (sub-lingual nerves),
- 3 The olfactory system, and senses in general
- 4 Skin (blood capillaries from sub mucous membrane),
- 5 The submucous capillaries of the conventional digestive system.

6 The energetic centre of the body "Hara" The assimilation, as we have seen, will be done through

1 The heart energy associated to the circulation (including the cerebro-spinal fluid) and the neuro-sympathetic system (Solar and cardiac plexuses)

2 The lungs (absorption of negative ions)

The regulation-elimination, as one might expect, in the human, is most importantly done through

1 The speech,

2 The body posture,

3 The blood, sperm and physiological liquids in general

4 The nervous system and

5 The lymphatic system.

Since the SDS has a direct impact on the functioning of the conventional system, priority will be given to the SDS needs.

The nutrients for the SDS are, as we might expect, of a subtle nature and can be categorized in two main groups:

1 Nutrients of physical nature from natural or artificial elements

2 Nutrients of biological origin from living beings

We will identify them, whether they are beneficial or not, without entering into details.

1. Nutrients of physical or informative nature from natural or artificial elements.

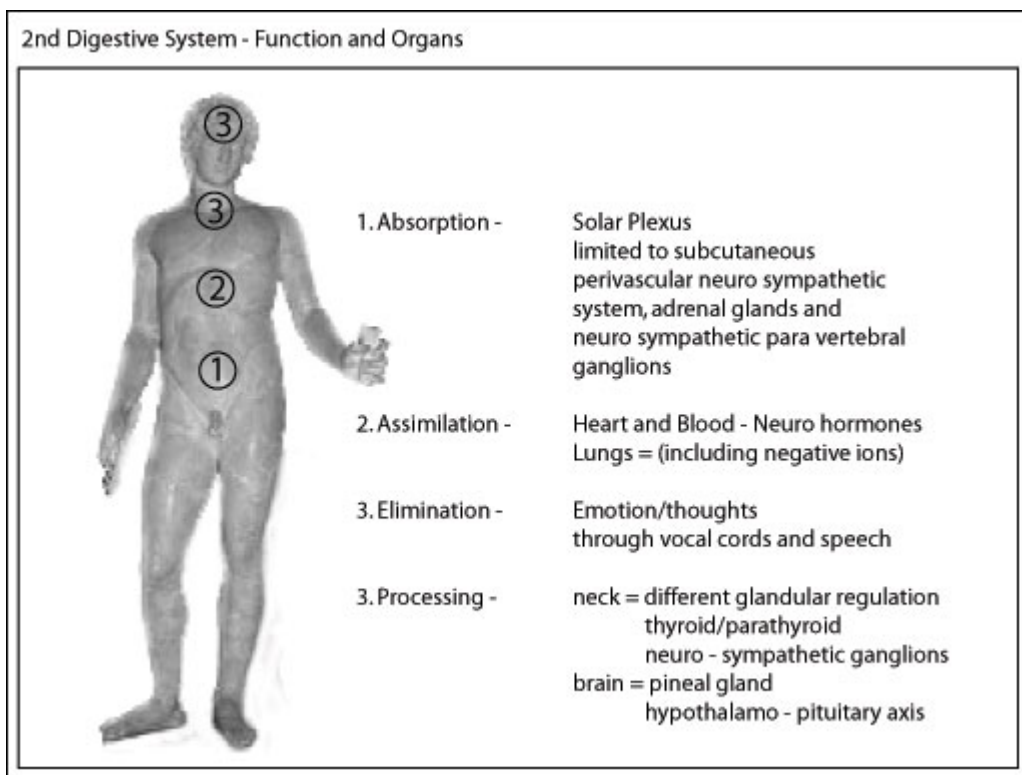
These are: oxygen, light (ultra violet to infra red), electromagnetic waves, ionizing radiations, electrical ions, atmosphere ionisation, electric fields, magnetic fields and other unidentified elements called "emanations" "vibrations" which are perceived by the SDS and come from the molecular structure, density, shape, color, odor, movements of an object, fire.

2. Nutrients of biological origin from living beings

These originate from minerals, plants, foodstuff, animals, and from the human psychological environment.

It is interesting to note that the level of consciousness of someone corresponds to the level of functionality of his SDS. We will thus find different levels, the lowest level being expressed through an interest for personal physical and psychological health, the highest one being the "Oneness" evoked by the greatest mystics.

In the world as we know it now, the necessary nutriment for the SDS are lacking. The only elements found in the “modern” surroundings are more than often polluting our SDS and making it non functional. These necessary elements are not socially recognized as essential, they fit under the word of “ambience”. It is a little bit as with the traditional digestive system: if the only food available is unhealthy, you close your mouth and decide not to eat for a while, but then in a state of starvation you will accept anything in order to survive. The Subtle Digestive System will shut itself, react too much (autoimmune diseases) or open itself to unhealthy elements. Here the psychological aspect through patterns will serve as a filter. We may choose to shut our mouth and decide not to “eat” for a while but then in a state of starvation, we will accept anything to survive, with the risk of chronic intoxication. By knowing the existence of the SDS it becomes easier to understand the cause of some pathological symptoms. For instance the desire of depressed teen-agers (mainly girls) to slash their forearms, for depressed cats to tear out the fur of their paws or for depressed parrots to tear off their feathers, each reaction corresponding to an attempt of eliminating a toxic waste.



Confirmation of the SDS through observation

We started our observation from a theoretical point of view (biocybernetic system and its attached SDS). If we are right about our theory, we should be able to find confirmation at the phenomenon level through physiology, physiopathology and the general evolution of living systems.

1 The anatomical structure of the para-vertebral neurosympathetic ganglion evokes its receptive function as we explained earlier.

2 The sexual organs in the human seem to have a close relationship to the pineal gland and the SDS. A sunbather, when completely naked shows an increase of more than 40% of Vitamin D synthesis compared to the same sunbather who would be wearing a small monokini.

3 The anatomical structure of the testicles shows a receptive function (external location, sensitivity, colder temperature), compared to other organs, allowing maximum absorption from the exterior. Researchers from California have shown prostate cells, like bone cells, have receptors on their surface for the hormonal form of Vitamin D. The prostate uses Vitamin D to help healthy cells grow normally and keep cancerous ones from spreading to other parts of the body.

4 The physiology of fertilization confirms that the role of the spermatozoid is to bring information and structure to the ovule. It was (and still is) commonly believed that the "number one" spermatozoid, the "fastest and strongest" had the privilege of penetrating the ovule. It has been proven {Dr. Minkowski and others, 1984} that the ovule secretes specific enzymes thus rendering the membrane permeable to the spermatozoid in affinity with it. We do not know if the affinity is chemical or energetic. Thus qualitative information is more important than quantitative force.

5 The classical pallid complexion of eunuchs and their higher pitch voice is a confirmation of the relation between sexual organs and the SDS.

6 Lungs working as bellows and heart working as a pump show their cyclical activity. Since they are related to the SDS we find again a cyclical physiology of a feminine nature.

7 As with butterflies, the human body secretes aromatic substances transmitting subtle sexual information. It appears that the synchronicity of menses among female boarders of the same school is linked to this pheromone (relation of sexuality, odors, lungs, information and pineal gland).

8 It was recently proven that in a couple, male hormones secretion varies with the woman's ovulation cycle (this means that a woman taking "the pill" doesn't stimulate as much the man's hormones. This is a thought to follow)

9 The sensitivity of olfactory organs decreases during puberty among boys and remains the same among girls.

© 10. The more an animal is evolved, the more the animals' SDS is developed (capacity

of treating information)

⊙ (See evolution)

10 Suppression of menstrual flow in women is followed by nervous tension and mood swings (the female human body has the heaviest periods among the mammals).

⊙ 12. CSF (the cerebra-spinal fluid) is not just a shock absorber as previously believed but is essential in the brain development and transport of nutrients and ions to the brain. [Owen-Lynch and others Oct 2002] It has a cyclical physiology being completely replaced 4 times/day and is driven by the heartbeat. We believe that it

⊙ is an essential transport agent for information otherwise why should it be replaced 4 times a day?

11 The existence of the SDS explains the mode of action of homeopathic medicines as well as various degrees of success from some therapies, including acupuncture. As Jesus said: "Take heart, daughter, your faith has made you well" [Matt.9, 20] in other words, your SDS was open to me therefore I could treat you since our two biocybernetic systems are in affinity because of your "faith" and connect like two communicating vases." (Jesus uses the word "daughter" and "son" when he heals to illustrate this fact) (See also Matt.9-1, Matt9-27 etc.) Conventional medicine would say that this is only due to the "placebo effect". If it is, we should study this effect and use it more! Conventional medicine is effective only in lying to the cells, which explains why it is "effective" in double blind studies. "Complementary medicines" act in an individual fashion on individual cybernetic systems. The relation doctor-patient in these is therefore crucial since the therapist own cybernetic system acts as a medicinal agent capable of harmonisation/regulation on the patients' biocybernetic system. The quality/health of the therapist is thus very important, as is the affinity between doctor-patients. It is interesting to do a correlation between Jesus healing the sick and the ancient function of kings, which was to heal the peoples' "écrouelles", a skin disease.

12 The fact that serotonin is produced in the pineal gland and in the gut also confirms the SDS since the gut is linked to the lungs in our Biocybernetic system and in Chinese Traditional Medicine. Also, the pineal contains a substance, which, injected, provokes a pressure fall, linking it to the heart. Thus we have Heart + Lung which is part of the SDS.

EVOLUTION

1 The DNA is not the source of life phenomenon. If the genetic selection is true for the individuals, it cannot give a satisfactory account of the apparition and evolution of species, or the existence of stem cells, or the complexity of more than 80,000 genes working harmoniously together in the human body. It cannot explain either some bacteria ability to repair their own broken DNA. Life precedes DNA materialisation. The function creates the form.

2 The process of elimination in evolution is not the consequence of the elimination of the weakest. A closer analysis of evolution shows actually the predominance of information and energy over primitive force.

There are 2 directions possible in time for organisms or we could say two polarities: One tend to bind things together and organize them, one tends to separate elements and return them into their original simple state.

Entropy corresponds to the degradation of the level of energy from the Big Bang, at the beginning of the universe, to the formation of the planets through progressive cooling. An example of this is that oxygen and hydrogen together tend to produce water but water never tends to produce oxygen and hydrogen on its own.

Negentropy corresponds to the increase in the energetic level, it happens only through a transfer from a higher level of energy to a lower one. Evolution and the phenomenon of life points to negentropic forces in play.

Viruses give us an idea of evolution. They collect all the information from their environment and finally collectively express a solution through their genes explaining the fight we are loosing against them.

General evolution through the different kingdoms shows us an intended selection on the overall towards a refinement and diminution of matter rendering it more apt to process a larger quantity of information as well as information of a higher energetic level. (See table I, II, III)

Table I evolution = ↑ energy, complexity, harmony, information vibration
transportation system: planes (high, fast, information controls) they need to be meticulously maintained the best planes have the purest kind of fuel.
computer industry : dust free environment, quality control, information
representation : of angels shows obvious signs of evolution: pure energy (you can't see them unless you are very pure), wings, colors, they express harmony, they carry information (their name means "messenger")

Table II Evolution in different kingdoms	
MINERALS	<p>(chemically) Helium H → <u>radioactive elements</u></p> <p>(physically) coal → diamond (pure carbon)</p> <p>Silica → quartz, emerald, amethyst</p>
VEGETAL	<p>seaweed → fern → flowers → orchids</p> <p>→ spirulina (able to absorb radioactivity from the bones.)</p>
ANIMAL	<p>Bee worm → caterpillar → butterfly</p> <p>fish → reptile (dinosaur) → bird (owl) → hummingbird</p> <p>mammal → human</p>

Table III common elements among the most evolved living systems
<ul style="list-style-type: none"> - increased role of light, energy and radiations - acceleration of natural rhythms or level of vibration - last appeared species are more likely migrants, their nuptial dance is more complex. - increased capacity to treat a multitude of information - higher life intensity - clear sexual differentiation (and for flowers and butterflies direct link to sexual reproduction) - absence of fight or destruction (unless defensive) of fellow creatures increased amount of variety and complexity. The orchid for example is the last appeared with several thousands of species. - increased necessity of purity (light to go through gems) - apparent fragility protected through mobility through space (birds) and time (flowers open at a certain time, usually when there is plenty of other food for the herbivores).

Thus dinosaurs have disappeared because actually the trend of Evolution is not to keep the brute. Those won over other species maybe in the short time but not in the long run. What kind of protection can we find for the evolved forms?

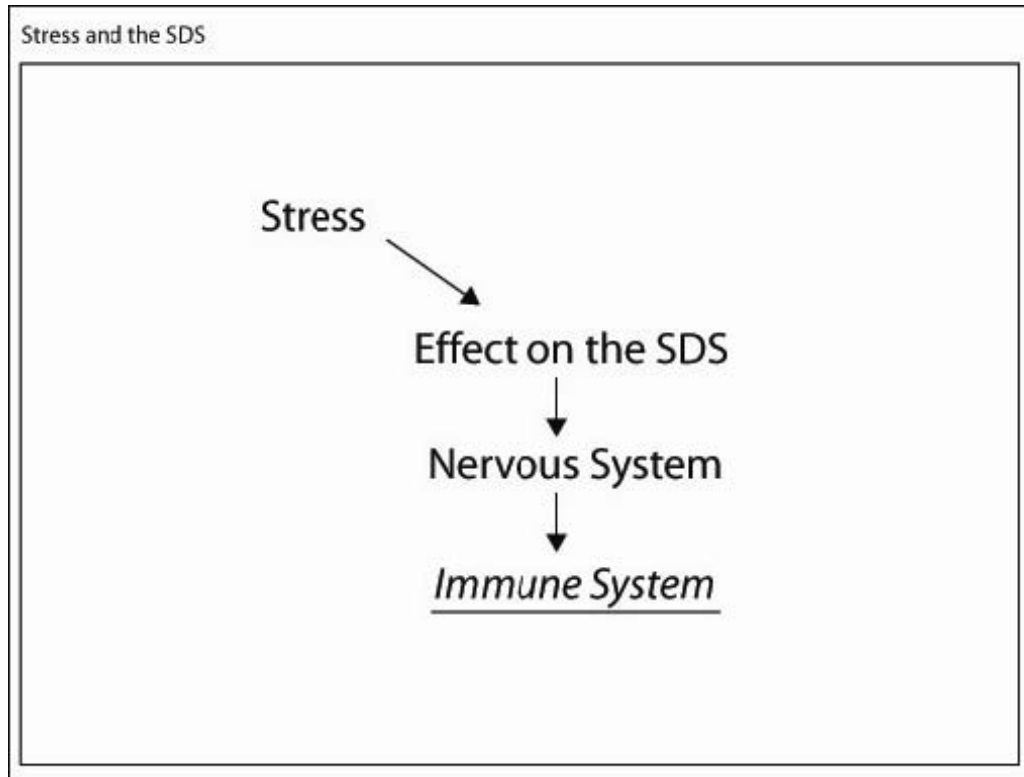
The mastery of fire and of different type of energy brought supremacy to humanity. For some other forms, the mastery of Air through flight was the best protection. In short, the most evolved forms survive by changing the level of their environment thus changing the space around them. The most primitive example of this is an organism running away from a predator. If there is a physical confrontation then only the strongest and most of all fastest will win.

The process of evolution is associated with a process of involution of corresponding interactive information (energy) since there is no spontaneous generation in sciences (in chemistry, law of preservation of mass, (Lavoisier), nor in physics, law of preservation of energy, (Carnot).

An informative energy is basically in its function of a qualitative nature and need a proper receptor to discharge its full potential. This explains the necessity of the SDS, which is related to the neuro-endocrinal (information/regulation) and reproductive (DNA) systems. In the vegetal kingdom, the "flower function" corresponds perfectly to that definition. In the animal kingdom (reptiles, birds, mammals) it is represented by the SDS.

For humans, this structure is therefore more complex.

The success medicine had over tuberculosis, plague and cholera was not through the use of a miraculous new drug but through the systematic use of hygiene. A profound study of the SDS points to the necessity of Hygiene not only on a physical level but also on a psychological (emotional, mental) level. In fact it appears that emotional pollution is even worst than physical pollution. This is accepted even by medicine today since we accept that the factor under the general term of Stress will undermine the immune system and put in jeopardy the whole organism. This leads us to understand the influence of psychological patterns on the human biocybernetic system.



Psychocybernetics

Structures of Psychocybernetics

From Freud to Jung, masculine and feminine polarities

Sigmund Freud based his psychoanalysis on a binary and phenomenological view of Man. To him, the mechanisms of the subconscious come under an Oedipus complex and his theory of castration. According to him, everything in human behaviour is directed by the presence or absence of a masculine phallic organ.

This theory is truly unacceptable when we consider Man expressing himself through a biocybernetic system. In practice, the Freudian theory talks much more about Freud and his complex of castration than about Man in general (we could discuss here the effects of circumcision on the SDS but it would take us too far). It is therefore not surprising that the therapeutic results of Freudian psychoanalysis were not as convincing as the logic would have made us hope. Nevertheless, Freud opened a door to the subconscious. Carl Gustav Jung, by integrating such notions as time and archetypes in his approach to Man, was much closer to a theoretical understanding of Man.

Carl Gustav Jung is probably the most prominent figure of the twentieth century in

psychology. He has been a student of Sigmund Freud before traveling through the world and studying many traditions. He has developed the concept of Animus and Anima, which are on the psychological level what we can observe on the energetic level. In a man the Anima, manifested in dreams under different archetypal forms, corresponds to what he has called the female complex made up of the different representations, innate and acquired, of the feminine polarity. He described 4 main steps, from the representation given by the mother, then through the different possible sexual partners, then through a lasting relationship, then, ultimately the representation of Sophia, the feminine aspect of God, the Shekina of the old testament or for others the Universal Soul manifested by the Primordial Water and the Mother Nature. In the same way the Animus corresponds to masculine complex of a woman, corresponding ultimately to the masculine aspect of God, God the Father or for others the Eternal Spirit manifested by the Primordial Light.

Because of these polarities, the relationship between man and woman is made up of the interaction of 4 elements: man and his female complex, woman and her male complex. They complement each other according to different levels: (diagram developed from O.M Aivanhov)

In my 30 years practice, I am always amazed to observe that the ailments most frequently presented by women (auto-immune diseases, breast cancer, anorexia nervosa etc...) are related to very precise structures in the biocybernetic system. As well, diseases occurring more frequently in men (pyloric stenosis, stomach ulcer, heart attack) are also related to an imbalance of certain well defined, but different, structures. We could regroup those different structures under two type or polarities: one feminine, one masculine.

A functional healthy biocybernetic system relies on the harmonious interaction of the 2 polarities Yin receptive feminine and Yang emissive masculine, each one being also polarized: any Yin including some Yang and any Yang including some Yin.

Polarity Yin: The key element is represented by the "lungs", since it is the "beginning of the yin", the "mother" of all energy. It corresponds to Fall and sunset. It is represented symbolically by the sunset, when the sun (a circle) is descending upon the earth (a cross), forming the feminine sign of Venus. The "lungs" Yin need to be balanced by some Yang. There are 2 yang elements, "liver" and "heart". Since "liver" corresponds to the male polarity, the remaining element is "heart". The female Yin polarity is then constituted of the association lungs-heart. Not surprisingly their cyclical function of expansion-retraction is similar to the female hormonal cycle. The expansion phase of the cycle corresponds to the ovulation, the release of an egg. The retraction phase of the cycle corresponds to the periods thanks to the contraction (spasms) of the blood vessels of the lining of the uterus and its elimination. Contraction and spasms correspond to the frequent nervous irritability and cramps of the pre-menstrual syndrome.

Since heart and lungs sets are linked to the second digestive system of absorption of radiations, the similarities between the female polarity and the flowers physiology are striking. They appear cyclically, open themselves for a maximum of absorption of sunlight and radiations reflected through their colors (heart). They produce perfumes (lungs) and are the dwelling of the sexual organs to prepare fruit and seed as the "lungs" set begets the "kidneys" set (genetic energy and DNA). The function of gestation, regeneration and nutrition of the female polarity is also confirmed by the extraordinary richness of pollen which contains, besides carbohydrates, proteins and lipids all the essential amino-acids, all the B vitamins, some pro-vitamin A, some vitamin C, D and E. and a wide range of minerals: potassium, calcium, magnesium, phosphorus, silica, manganese, copper and iron.

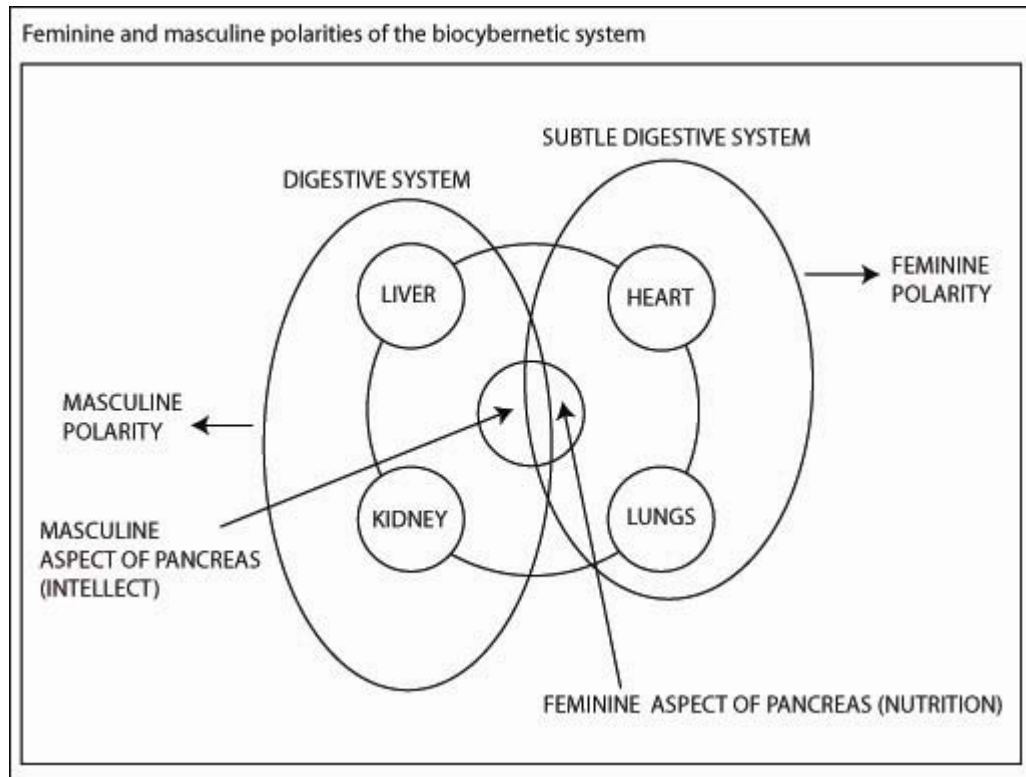
Polarity Yang: the "liver", since it is the "beginning of the Yang", represents the key element of the polarity "yang". It corresponds to Spring and dawn and the rising energies.

It is represented symbolically by the sun (a circle) emerging over the earth (a cross). The cross is then transformed into an arrow to express the exteriorization and to form the masculine sign of Mars. The Yang aspect needs to be associated with some Yin, which cannot be other than the "kidneys" element. (the other Yin element representing the polarity Yin). The polarity Yang is then constituted of the association liver-kidneys.

Their dynamics describe very well the masculine energy: concentration on one point (kidney) and exteriorization (liver). Like the different correspondences of lungs are involved in the female sexuality, the anatomical and physiological correspondences of the liver are clearly associated with the masculine sexuality

The last element, "pancreas" is both yin and yang (harmonization movement). Its yin aspect is closely related to nutrition and female energies. Its Yang aspect is closely related to the analytical intellect with tendency to repetition and obsession. (An aspect of the masculine sexuality)

The simplest physical observation shows that the polarity Yang symbolized by the sign of Mars predominates in man and the polarity Yin symbolized by the sign of Venus predominates in woman. But actually, since men have lungs and heart and women liver and kidneys, any balanced individual should have both polarities functional in one's self.

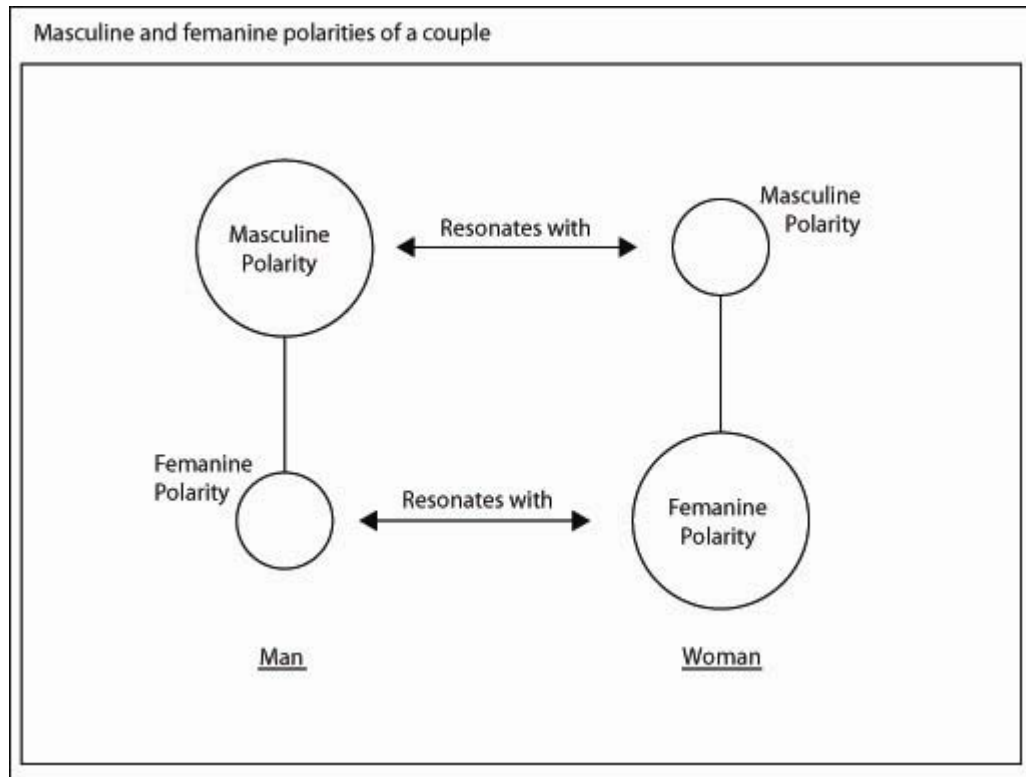


Using the basic biocybernetic system, it was then possible to gather those structures under two polarities. Hence it appeared that women have a lot of “lungs” associated with the “heart” type of energies. For men, it is a lot of “liver” associated with “kidney” type of energies.

Since we all have lungs and liver, we can say that every human being is composed of both feminine and masculine biological polarities. The energies linked to the feminine polarity are prevalent in the feminine physiology (and psychology); the energies linked to the masculine polarity are prevalent in the masculine physiology (and psychology). With this concept, we are closer to the Jungian “animus”(masculine) and “anima”(feminine) structures.

The experience we have of the two polarities very early in infancy and the subsequent patterns we carry within ourselves will influence our perception of the other, of ourselves and will have a definite effect on our own physiological and psychological biocybernetic system.

The couple we will create later on in life will depend on the information linked to our feminine and masculine polarity. The psychological aspect dominates the physical aspect.



The most common diseases appear mainly related to a disruption of the feminine type of energies. This may be explained by a general social distorted comprehension of “feminine” values. In human beings, the mental representation of masculine and feminine polarities (under a conscious or subconscious system of values) have a stimulating or inhibiting effect on the hypothalamus by the intermediary of the supra-hypothalamic zone, acting directly afterwards on all the neuro-endocrinal system.

This implies that even with a healthy physical environment, SDS wise, a social distorted pattern of the two polarities will annihilate most of the environment beneficial effects upon the Subtle Digestive System, thus the mouth of the system, namely the solar plexus, will have to be kept shut and we will speak of “Stress” and its ensuing physical symptoms.

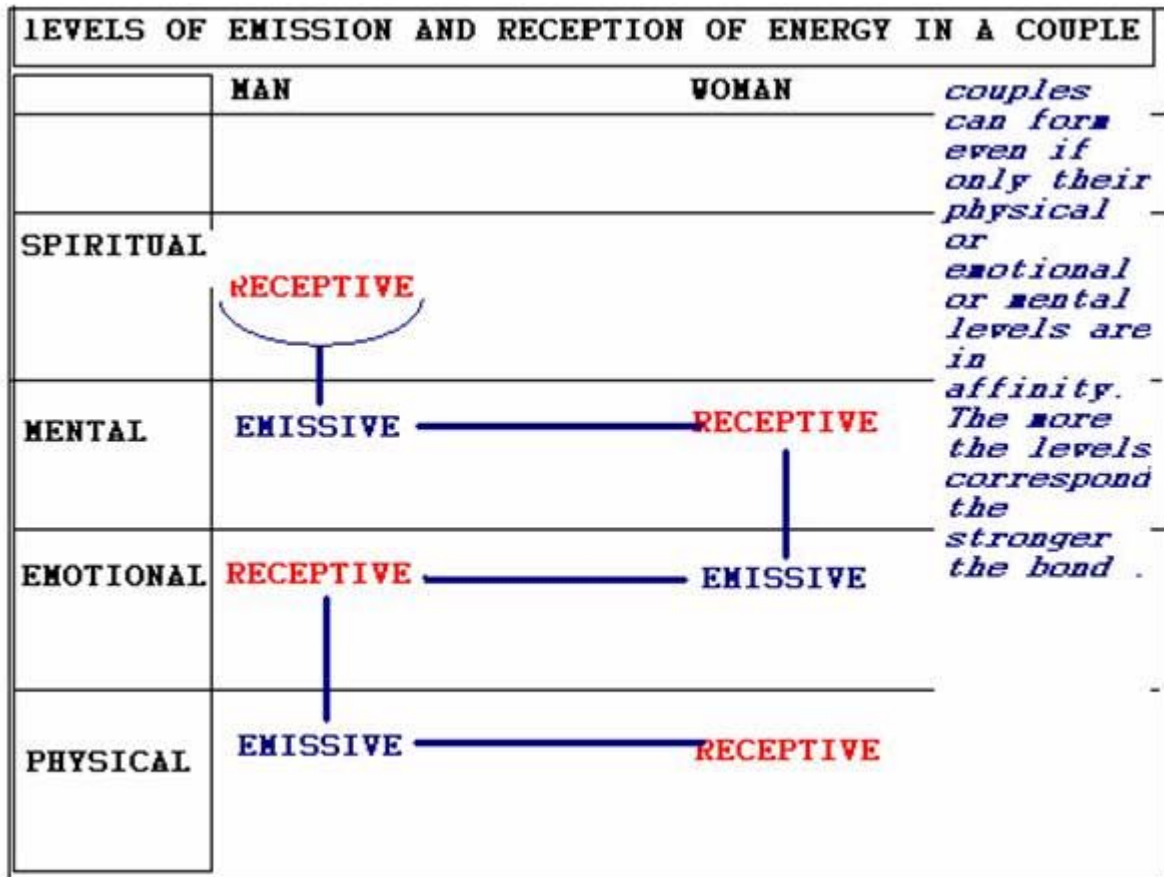
Generally speaking, the environment is the expression of our common social feminine and masculine patterns. These will, in time, manifest themselves in physical structures.

To give an example, in Paris we can still benefit from subtle energies coming from the different gardens, their castles, cathedrals and weekly farmers market. These have an action on the human psyche also since they are linked to universal archetypes we all carry (as per Carl Gustav Jung). With the general interest shifting from these to more economical aspects, the whole “ambience” will eventually change and the architecture and surroundings will express the interest of today’s dwellers.

With time, both physical and psychological expression of the polarities will present

imbalances and the whole community will have a dysfunctional SDS, believing those “normal” as it is the case nowadays.

This schema considers the different levels in human manifestation. To each level corresponds needs and function of the different polarities. An understanding of these levels and of how women and men interact could help redress the vision we have of the function of the feminine and masculine polarities in society.



(Diagram developed from O.M. Aivanhov philosophy)

Applications

The importance of Sociocybernetics

Every community hoping to ensure its permanence and happiness should facilitate an intelligent management of the two polarities and this, in all sectors. Each of the polarities should be well reflected, the masculine being concerned with the material and spiritual aspect of the community while the feminine interest itself to the cyclical and informative aspect.

To see solely, as Marx and the ultra-liberalists did, the economical conditions as

responsible for either human misery (exploitation of the poor by the rich for the Marxists) or human happiness (limitless exploitation) and to believe in a solely economic solution is to ignore the importance and preceding nature of the feminine polarity and is, therefore, a recipe for disaster.

A well-balanced society should be built on structures interested in the manifestation and protection of the feminine polarity in all its aspects by the masculine polarity as well as in structures related to the expression and regeneration of the masculine polarity by the feminine polarity.

The masculine polarity tends to a constant expansion. If it is not tempered by the feminine polarity, the result will be the explosion of the social cybernetic system with all its preceding social symptoms or, as we see regularly, the advent of a "providential" war.

In the biocybernetic system, the feminine polarity comprises the SDS, the heart, the lungs and the nutritive aspect of the pancreas. In the biocybernetic system, the masculine polarity comprises the kidney, the liver, the masculine aspect of the pancreas (intellect) and the digestive system.

In the society therefore, the feminine polarity plays the role of information and communication agent (SDS function). It makes the connection between the down-to-earth facts of the environment and the subtle world of thoughts and feelings (spatial reference) as well as between individuals and between all life cycles (gestation, birth, growth, senescence and death). Related to the pancreas, in its nourishing aspect and to the lung in its purifying aspect, the feminine polarity will search for nutrients, food of the best quality. Linked to the lung, its purpose is to maintain the purity of the environment whether it is of a physical or psychological nature. Also related to the "lung", the feminine polarity manages and controls exchanges between outer and inner, past and future, visible and invisible. By communicating with the past, the inner and the invisible, the feminine polarity is a guardian of traditions.

By communicating with the future, the outer and the visible, it supports maternity and primary education.

By communicating with the living nature and its rhythms, it respects all forms of life and cycles of time.

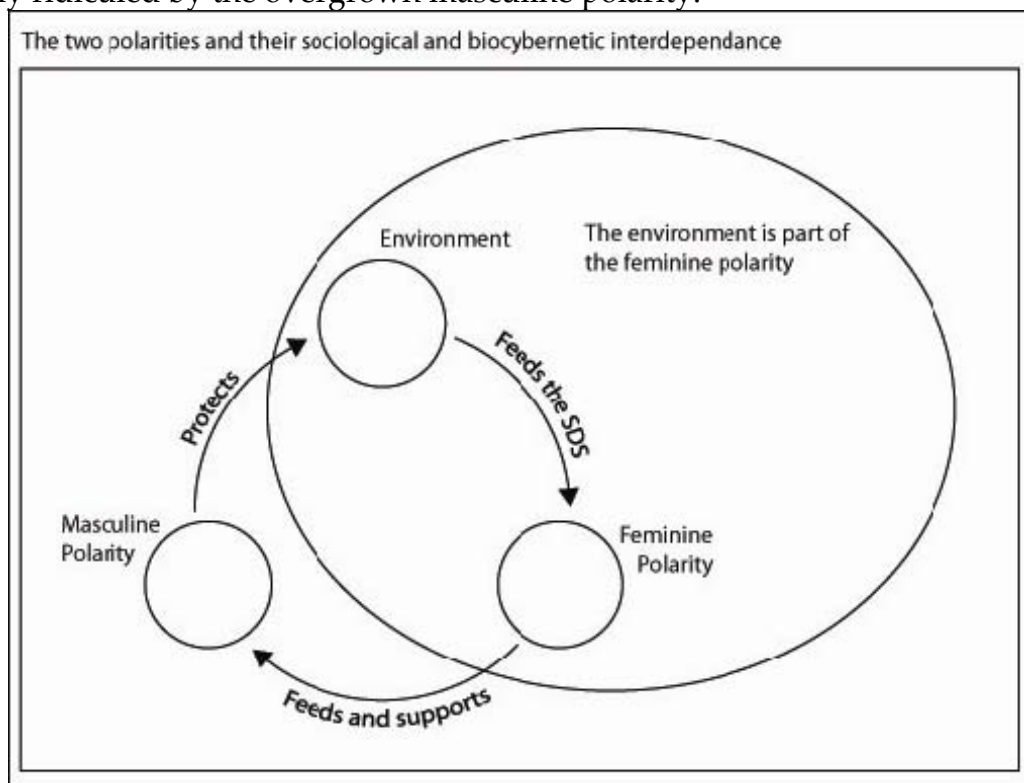
Finally, the feminine polarity is responsible for the manifestation of beauty and harmony.

With a blooming social feminine polarity, we should find all of these elements well in view and respected in our society.

The feminine polarity being connected to the “heart” it is responsible for the assimilation of information and closely linked to the SDS (rays, emanations). It allows the integration of the system into the environment as well as allows its proper functioning. This implies that the structure socially responsible for the management of the social feminine polarity should be of a moral authority (quality of information).

We have to understand that it is impossible to ask of a government dedicated to economic “priorities”(pancreas)(liver), thus essentially masculine in its action to decently manage the feminine polarity without having for goal, even subconsciously, to make money out of it.

If a structure devoted to the social feminine polarity exists presently in our society, it is certainly not noticeable. It’s more likely that this structure has been constrained and silenced if not totally ridiculed by the overgrown masculine polarity.



Complexity, Democracy and Sustainability: SIG Medical and Health Systems

Complexity

The question of complexity is addressed in medicine by the holistic approach.

Its purpose is to put together all the data gathered by the different specialties and to associate

those with appropriate (conventional and non-conventional) therapeutic tools. This is supposed to re-establish, within the patient, a sense of unity and harmony necessary to a full recovery.

Unfortunately, at the therapeutic level, it appears that more than often such an integrative medicine is merely a patchwork of different techniques. There is an urgent need for a genuine synthetic, systemic approach.

A twofold image can be given to represent the difference between Medical Biocybernetics and the conventional medical approach: a first part corresponds to the traditional medical approach and shows a man holding many balloons of different colors, each one corresponding to a different medical specialty or a complementary medicine. (The white balloons correspond to possible new specialties).

The second one shows a hot air balloon with the man in the basket, as an image of the functional unity of the human Being.

It already gives 2 key elements in Biocybernetics: the determinist aspect which corresponds to the direction of the balloon and on which there is no possible action (date and place of birth, genetic, etc...) and the part of freedom which corresponds to the capacity to act upon the elevation. A higher elevation symbolically corresponds to more purity and light; that is to say to more health and consciousness.

The biocybernetic approach is priceless because, as we have shown, it establishes a space-time continuum within the human being, from the molecular biology to the neurology and the physiology to the psyche.

To be scientifically validated such a model has to be able to give account of all or most of the phenomena in medicine. The Medical Biocybernetics, as a systems science, can do it because its starting point is at the level of general principles (Einstein in physics or Carl Jung in psychology have used a similar approach).

Democracy

“The government, which was designed for the people, has got into the hands of the bosses and their employers, the special interests. An invisible empire has been set up above the forms of democracy.”

“Democracy is not so much a form of government as a set of principles.” Woodrow Wilson

“The best argument against democracy is a five-minute conversation with the average voter.”

Sir Winston Churchill

“People often say that, in a democracy, decisions are made by a majority of the people. Of course, that is not true. Decisions are made by a majority of those who make themselves heard and who vote - a very different thing.”

Walter H. Judd

“Democracy without morality is impossible.”

Jack Kemp

“Democracy turns into despotism.” Plato

Hundreds of citations exist which pinpoint to the impossibility of true democracy in our day and age.

Our Biocybernetic system explains to us why “Democracy” as an ideal has not been manifested yet and why this is so.

Our system indicates that the basic patterns inherent to our western mind are of a masculine type. The great religions at the core of our society are masculine in their manifestation due to an interpretation of the essence of the Teaching. Consequently, the imbalance for the Socio Cybernetic System is the same as for the individual Biocybernetic System. Therefore there is an over compensation of the central stabilizing element, “pancreas”, in its masculine aspect.

Symptoms of this hypertrophy can be seen in our society as follow:

-Young male adults dominate the society.

-The socio-economic elements are the main focus of the general preoccupations. Every endeavour is translated mainly in terms of cost. Our banks are indeed necessary to our economy.

-Intellectual activity, diplomas are considered the best tools if they support managerial functions, all with the goal of more profitability.

-We can find an obsessive component in the analytical analysis (as if what can't be analysed doesn't exist), in the overspecialization of activities interested by this.

-Over consumerism and problem with over feeding. The quantity of food for the cheapest will be a trademark of a society with this type of imbalance. The sweet flavour will be relentlessly pursued. Since the feminine polarity is anemic, we will look for stimulant of this function through foodstuff, mainly coffee, tobacco, alcohol and different drugs that on the long run only intensify the problem.

-On a general viewpoint, there is a tendency to standardisation and individual depersonalization.

-The social fabric is shattered, scattered and strewn a little at the image of the endless neighbourhoods at the city periphery and of the city centre reduced to high towers and shopping centres.

© -The rigidity of structures, whether they are physical or psychological can be found in the expression of the "great" architecture: piling up of floors. The highest pile impresses the most.

-All this lead to a squandering of natural resources and difficulty in complying with the necessary actions linked to renewal of resources. The general feeling of this society will be to explain that humans are not responsible of the squandering ect..

-Illnesses in such society will not be considered as symptoms pointing to necessary changes to adopt but more as a fatality or an accident of which the manifestations must be fought and eradicated in a quasi-military fashion.

Sustainability

In the view of what we said above. Those who fight for sustainability are leading two wars at a time. It is thus very tiring and they would have the greatest advantage of understanding the causes to the problems of democracy, sustainability in our society before sacrificing their energies to combat the consequences. It is urgent to find a form of government, which could adequately address the present problems of the people. The Biocybernetic system is a simple model, which could be understood and applied by everyone. It gives a common Vision, Understanding and Goal: Health, at all levels and for all. These are necessary to a true democracy.

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