

# Spectral characteristics of Chinese Elements

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The theory of Traditional Chinese Medicine has a system of the Five Elements. Some people consider it as a certain abstraction, another endows it with mystical properties, and the third perceives it as a fact of quack speculation.

By this paper, the developers of Pulse Analysis System will try to represent the well known information from the standpoint of physic processes.

Let's put the projection of the Earth to the ecliptic plane (view from the north pole of the World, the Earth's rotation is counter-clockwise). Mark the areas of circle that correspond to specific Elements in accordance with the order in daily circulation as it is described by the theory of Traditional Chinese Medicine (TCM):

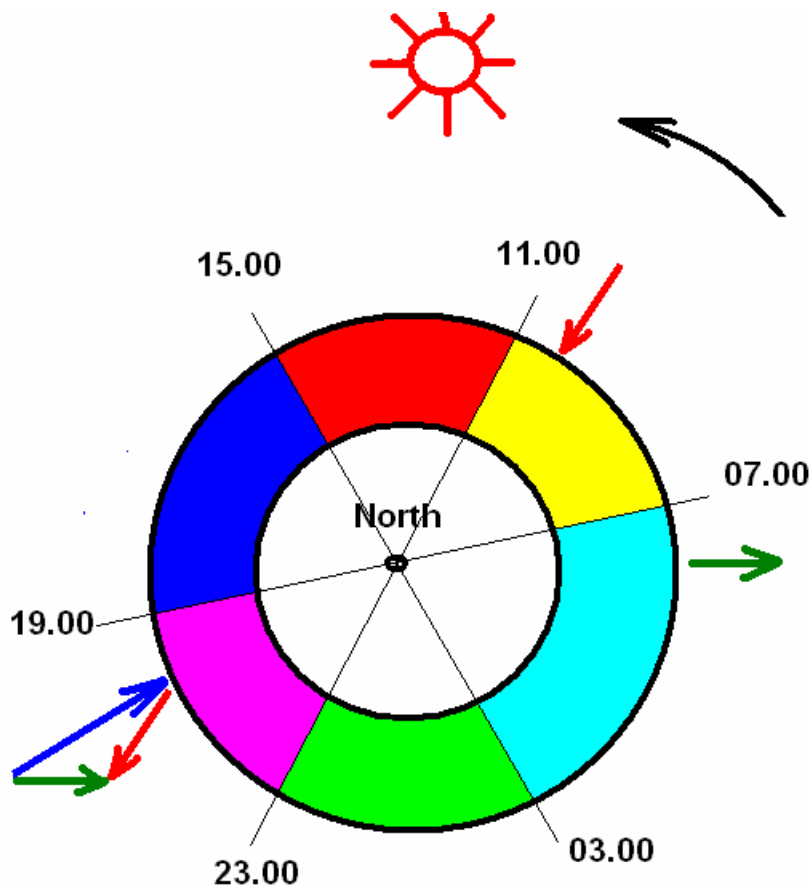


Fig.1

At the Fig.1 the areas of Elements are stained in a manner as follow: blue –Water (15.00-19.00), red – Fire (11.00-15.00), yellow – Earth (07.00-11.00), turquoise – Metal (03.00-07.00), green – Wood (23.00-03.00), magenta – Fire-Minister (19.00-23.00).

It is suggested that the motion of the Earth on the orbit (green vector) is stipulated by some power. This power possibly is a result of interaction of two vectors. We assume there is power of Yin (blue vector) – it is directed alongside a spiral trajectory toward the center of the solar system. It counteracts to the power of Yang (red vector) coming from the Sun. The resulting vector (green one) gives the vector of the power that moves the planet at the orbit. Points of

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actions of Yin and Yang vectors are set at Yin periods of Earth and Fire Minister elements (the moments, when vectors are directed toward the center of the Earth planet).

We have to justify the above presented hypothesis by suggestions as follow:

It is considered that ancient scientists had painted the Chinese elements in accordance with some order. Let's try to find this order. Please see at the solar visible spectrum (Fig. 2):

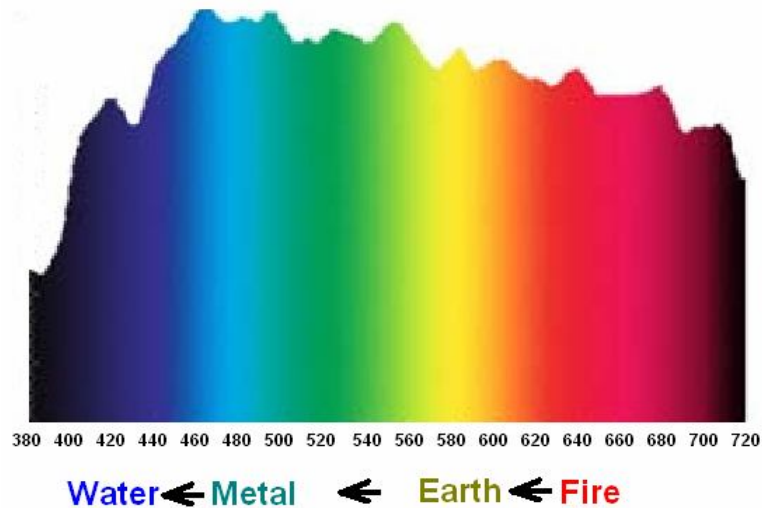


Fig. 2

As far as we can see all colors except green one, are disposed from the right to the left in order of mutual birth of Wu-Xing law of Chinese philosophy - Fire (red) → Earth (Yellow) → Metal (turquoise) → Water (blue).

Let's study the peculiarities of solar spectrum (Fig. 3):

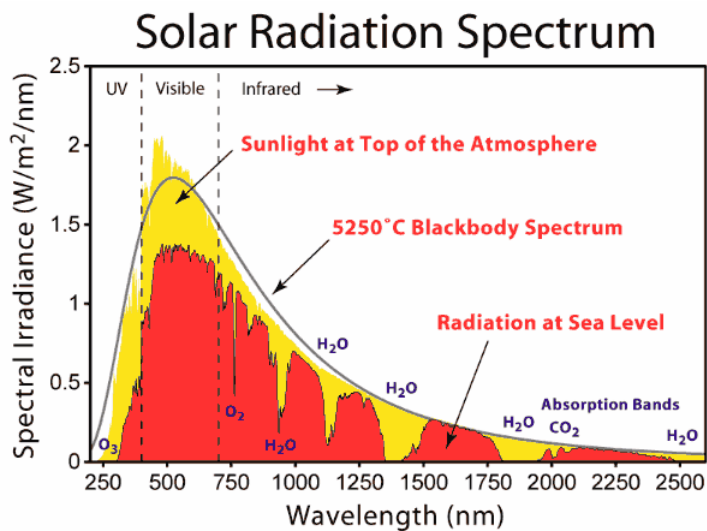


Fig. 3

The spectrum at the Fig. 3 is named in physics as a spectrum of the black body, i.e. this body is ideally balanced from point of view of thermodynamics – the energy is absorbing and irradiating at any length of waves without any limitation. The length of wave where the energy has the most

high power of absorbing and irradiating may be considered as a main resonant frequency of the whole solar system.

Manifestation of solar resonances at the area of Earth is frequency of own resonances based on geometrical size of Earth planet. If we'll take into account the light velocity 299 792 458 meters per a second and Earth's diameter as 12 756 200 meters, we can get the First Earth resonant harmonic equal to 23.5 Hertz( Hz). This frequency is a result of dynamic changes of compression and extension between extremal parts of energy waves (Fig. 4).

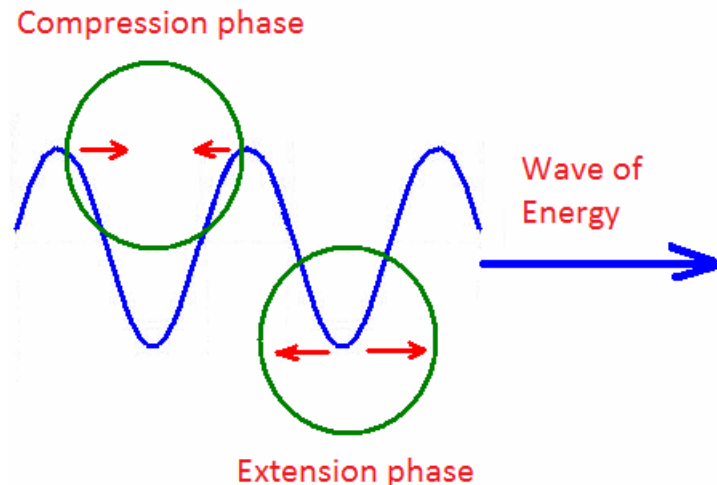


Fig. 4

Let's find the package of 5 frequencies which form the impulse of own resonance of the Earth planet. Naturally, the frequency **23.5** Hz will be a middle of the package of resonant harmonics. It turns out the most lowest harmonic among five frequencies in the package will be equal to the first Schumann resonance:  $23.4 \text{ Hz}/3=7.83 \text{ Hz}$ .

From the given package of interrelating frequencies: ((7.83), (15.66), (**23.5**), (31.32), (39.16) Hz) the impulse of own resonance of the Earth planet is formed. The period of this impulse includes 12 beats of waves at 8.83 Hz, 24 beats at 15.66 Hz, 36 beats at middle frequency – **23.5 Hz**, 48 waves at 31.32 Hz, 60 waves at 39.16 Hz., and it is equal to 1,5319 seconds. Suppose this impulse is called as a Schumann one. The Schumann impulse forms around themselves the space of harmonics of more lower frequencies, where it plays a role of the middle harmonic. For example the impulse at period 1,5319 seconds (**0.6528** Hz) has the package of frequencies as follow: (0.2176 ), (0.3264), (**0.6528**), (0.8704), (1.088) Hz, where the beats of new impulse will proceed in 36 periods of new middle frequency 0,6528 Hz ( $1,5319 * 36 = 55,15$  seconds).

The described mechanism forms Schumann fractal which in borders of a day has period of about 20 hours:

$1.5319 \text{ seconds} \rightarrow 1.5319*36=55.15 \text{ seconds} \rightarrow 55.15*36=33.09 \text{ minutes} \rightarrow 33.09*36=19.854$  hours (The infelicity of 19.854 hours at standard 20 hours is lower 0.7% and it much less then variations the Schumann resonances at real world. Also, please note, the difference between 20 hours and 19.854 hours is equal to 0.146 hour, then if we divide 0.146 hour by 20 hours, we'll get  $1/137$  – the fine-structure constant of physical world. It gives us the right to consider the above mentioned processes as fundamental.

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Exactly this impulse at period of 19,854 hours produces the interfering picture of frequencies of Schumann resonances and frequencies of daily circulation (Fig. 1). The repetition period of interfering picture for the any point on Earth is 5 days and this period is used in traditional Chinese acupuncture as Zi Wu Liu Zhu method.

Let's find the place of Schumann frequency 7.83 Hz in the solar spectrum.

The length of wave of frequency 7,83 Hz is defined by light velocity 299 792 458 meters per a second divided on 7.83 Hz and it is equal to 38 287 670,24 meters. When we'll divide this length of wave by  $2^{46}$  times, it is clear the frequency 7.83 Hz is associated with the light wave length 544 nanometers. This wave length is correlated to the area between Green and Yellow colour of visible solar spectrum and it is placed in the middle on the scale. The dark borders of visible spectrum also may be calculated and their volumes are stipulated by middle resonance of Earth – by 23.5 Hz. At the scale of solar spectrum the lower border is limited by wave length at 363 nanometers but upper border has value 725 nanometers. Frequencies from 363 to 725 nanometers represent the octave.

Now we should justify points of action of Yin and Yang vectors in the daily cycle (Fig. 1).

It is supposed the important coincidence is equivalence of the first harmonic of own resonance of the Earth (7.83 Hz) and central frequencies of solar spectrum between Green (Wind element in Chinese medicine) and Yellow (Earth element) colours. Nevertheless we must answer – why the period of Fire-Minister has magenta, but not a green colour? We suggest, that the term of Fire-Minister in Chinese philosophy has many meanings and it can be considered as initiator of some processes to create the order of following events. At given case at period of Fire-Minister the green colour may be pertinent under reasons as follow:

The reason № 1 –

At Fig. 1 the opposite sectors of the daily circulation have neighboring areas in the solar spectrum: elements Water and Metal are disposed in the left side of the spectrum at short lengths of waves, elements Fire and Wood (the dark red colour is supposed a Wood element if we follow the logic of Wu-Xing law in the spectrum – the order of mutual birth) are placed in the right side of the spectrum at long lengths of waves and Green and Yellow colours are in the middle of the spectrum. From point of view of physical processes this disposition of colours (lengths of waves) is absolutely correct – for Green and Yellow (Fire-Minister and Earth elements) lengths of waves the vector of motion of observer is perpendicular to the Yin and Yang vectors and there are no changes of energy wave parameters. At the same time the Doppler effect will decrease the length of waves in phases of Water and Metal (the observer moves to opposite direction relatively to energy waves). At period of Wood and Fire the observer will move at the same direction with waves of energy and relative lengths of energy waves is become longer in comparing with neutral position at Green and Yellow periods.

More over, at Indian Ayurveda there is dividing the time of day in 3 types of energies – Vata, Kapha, Pitta. If we try to make correlation of their colours in daily circulation with their places in spectrum, we also find some order (Fig. 5):

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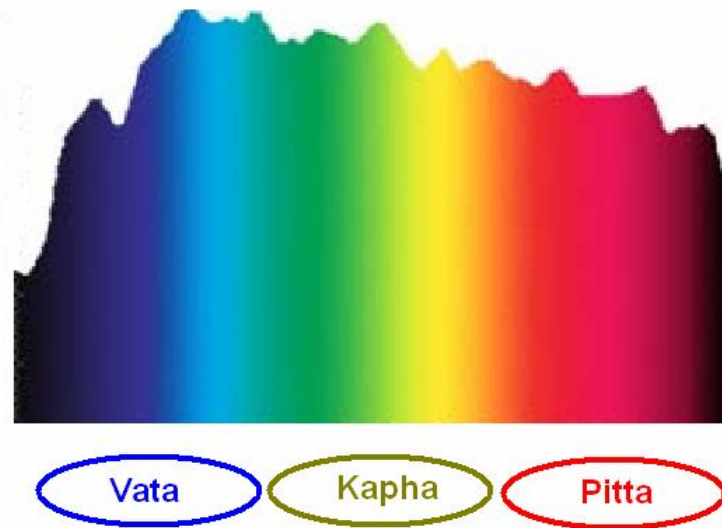


Fig. 5

The reason № 2 -

There is additive colour model in technique – so-called RGB cube. This cube allows create any colour in accordance with in some definite rules. If to be more mindful it easy to see in the RGB cube has two opposite vectors (White and Black colours). These vectors have projections in two independent orthogonal systems of White one (1,1,1 - axis of Cyan, Magenta and Yellow colours) and Black one (0,0,0 axis of Red, Green and Blue colour) vectors. Thus, the whole system consists of six vectors and it allows describe any condition of some point in three dimensional space as a result of counteraction of Black and White vectors.

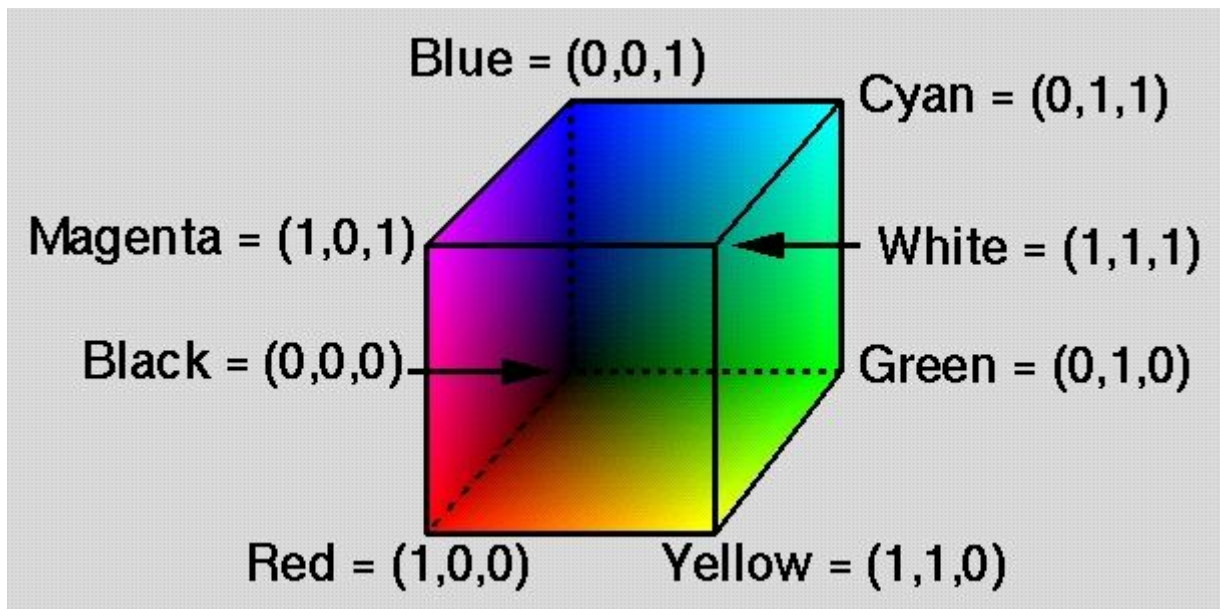


Fig.6.

If we'll make exchange of Green and Magenta colours at Fig.1, the daily circulation is divided into 2 parts, where colours are grouped into White and Black systems of coordinates of RGB cube, or in other words into Yang and Yin sectors (Fig. 7).

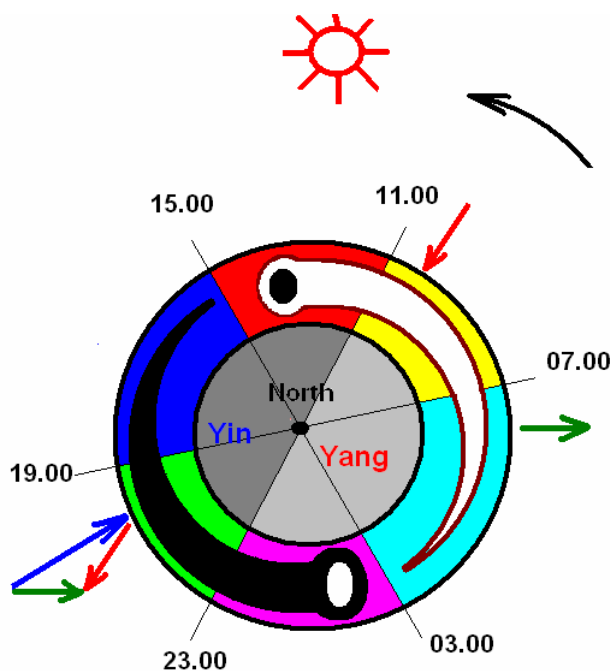


Fig. 7

Exactly this type of dividing of daily circulation is stated by Traditional Chinese Medicine and from the other side it is also proved by contemporary biophysics – the pH balance of blood is shifted towards acid reaction in the first part of day (the catabolic phase – Yang period from 23.00 to 11.00), in the second part of a day the blood has alkaline reaction (cells are in anabolic phase – Yin condition from 11.00 to 23.00).

Beside this it is clear the reason, why each Yin monad has Yang particle inside and Yang monad has the Yin one: If we'll place symbols of monads of Yin and Yang in the circle of daily circulation so, that the thickness of symbols is correlating with length of waves (the most thin part shows the most short wave), the two segments appear to reflect the two orders of wave's length decreasing - Red-Yellow-Cyan and Magenta-Green-Blue. The Yin and Yang monads stay at own sectors of daily circulation only at 2/3 part and their ends (the most thin parts) are placed in the beginning of other sectors (Yang monad has end in the beginning of Yin sector and Yin monad has end in the beginning of Yang one).

The obtained information allows us to look at the solar spectrum as at result of counteraction of two streams of energies – Black and White. It is clearly seen the structure of the spectrum where the point of energetic symmetry correlates with 1/3 frequency of main resonance of the Earth planet ( $7.83=23.5/3$  Hz) and this point represents the place in the spectrum, where Black and White streams of energies have the point of meeting (Fig. 8).

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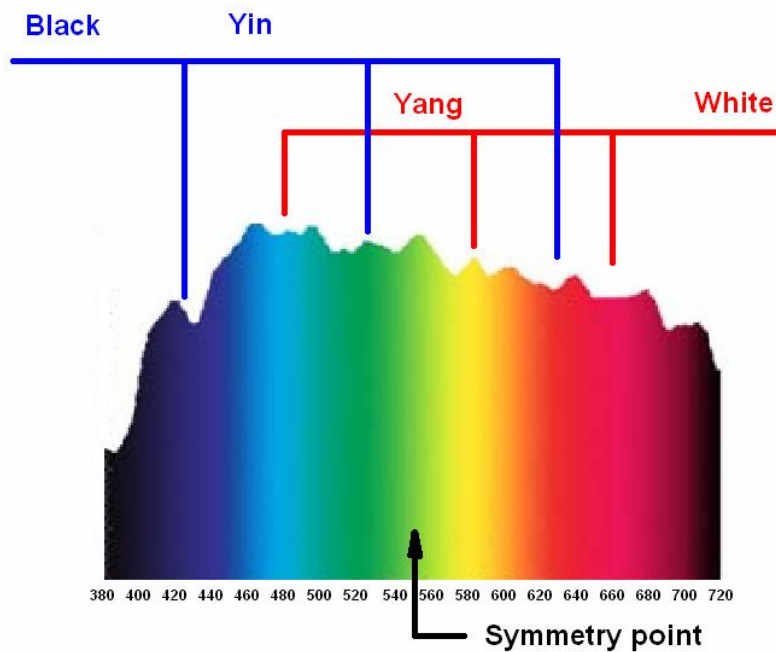


Fig. 8

Exactly at this reason, why the central resonance frequency also is manifested in the wave length equal to the diameter of the Earth spheroid. The surface of the Earth itself is vibrating in the horizon plane near the frequency of main resonance of 23.5 Hz decreased in number “Pi” (3.1415926). The sphere of equipotential surface of maximal compression and extension at 7.83 Hz frequency (the first harmonic of the Schuman resonance) is near the surface of the Earth at deep of 574 kilometers towards the Earth core (seismology proves there is some layer at the deep 710 kilometers, we can consider the difference between 710 and 574 kilometers is a result of difference between functional (effective) and visible diameters of the Earth) . Taking into account the principle of symmetry of Yin and Yang energies streams we can suggest the thickness of the crust is equal to  $574 \times 2 = 1148$  ( $710 \times 2 = 1420$ ) kilometers and it has only about 9-11% of diameter of the Earth planet. (Fig. 9).

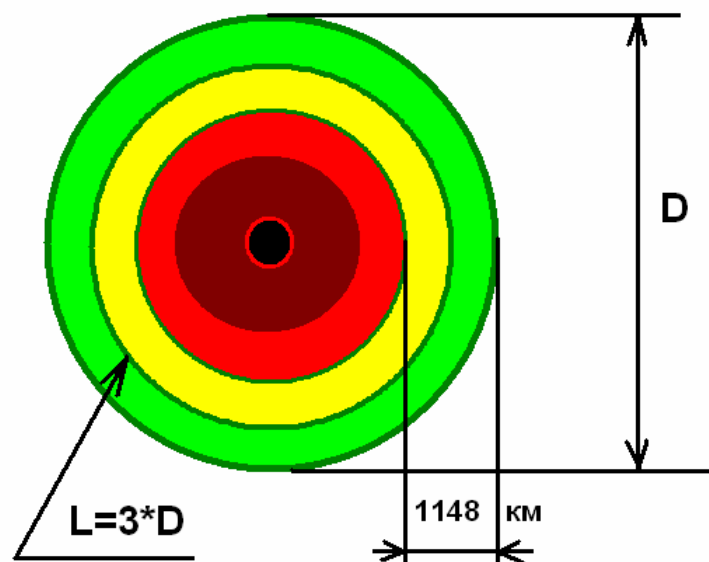


Fig. 9



It seems the Earth, as far as the other planets of Solar system, have similar to nut structure – they are empty! \*\*\*

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- We can also explain the existence of the second layer in seismology at about deepness of 2900 kilometers – the seismic waves from this deep are simply result of interference of standing seismic waves between planes of surface and 710, surface and 1410 kilometers.
- Apollo 12 placed the first seismometer on the Moon. NASA did not expect many Moon quakes. They expected the Moon to be seismically dead. To ensure some kind of seismic results they deliberately caused part of a rocket to crash into the Moon. When they did this, the results astounded all the theoreticians. The Moon's behaviour was quite unexpected. It "rang like a bell" for almost an hour!
- Many related information based on scientific facts you can find at blog <http://hollowplanet.blogspot.com>.
- Geologist Nikolay Martyanov in 1948 while trying to publish research material regarding the planet Earth pulsation and the effects of alternating contractions and dilations in geological sections of the mine workings has been sentenced to death. The sentence was replaced by the work in Kolyma's GULAG where he also had found evidence confirming his theory. His book, "Reflections on the pulsations of the Earth" was published only in 2003 in Krasnoyarsk (KNIIGiMS. 2003. 270).

The above stated conclusions allow to make some suggestions:

**A.** It is possible to assert that the solar photon is a moving point of interaction of two opposite forces (action causes equal counteraction – if we'll follow to the 3-d law of Newton). But as far as there is moving of the point – it is clear the forces are not balanced completely and the imbalance causes the shifting of the point (by other word – there is movement of some portion of energy).

In the space the photon must be a rotating object and oscillations in photon must submit to frequencies order in solar spectrum. The system of standing waves of different spectral frequencies form spheres around the central point of the photon. When photon encounters some inhomogeneity in the space (for example plane of prism), it sharply changes the velocity. The point of absorption of energy is created and then this point starts to reradiate the absorbed energy. Due to different diameter of spheres of standing waves the absorption and reradiation of different frequencies are scattered in the time. At the very beginning the most longer waves reradiate because they encounter obstacle first. Spheres of the most short waves will reach the obstacle later and their phase of rotation become different in comparing with a long waves at the moment of collision. Different rotation phases of waves are associated with different direction of reradiation.

We suppose that the point of view of present physics is wrong regarding difference of velocity of waves of different lengths in homogenous space. If it would be true – the wholeness of the moving photon's package of waves could not be observed because it will be desintegrated. The fact of desintegration is not known.

**B.** It is possible to assert the existence of common process in the solar system – it is a compression of the space. Only at this case the disposition of frequencies of solar spectrum may have a place in daily circulation cycle (Fig. 7). The theory of "Big Bang" is false to explain the effect of local compression in the solar system. Exactly local compression provides redshift effect of light coming from galaxies. It is obvious, during the local compression the observer is "running off" photons (the Doppler effect), moves alongside its trajectory. As a result the spectrum of photon become more long and redshift appears. Exactly prevail of forces of compression provide the gravitation (if to be more accurate it should be named as "snuggling up")

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force). Snuggling up forces provide keeping planets at their orbits and place bodies on the surfaces of planets.

Planets are centers of vortex concentration of energy. The particles of chemical elements are energy, condensed in groups of tiny vortexes. Vibrations of compression process define the ability of particles to absorb and radiate portions of energy. They work like synchronizers of all other processes during the space compression similar as a reference frequency oscillator in computer. This reference frequency oscillator provides quantization and mutual synchronization of ALL processes in the space and in our Solar system.

The daily circulation of Qi in Chinese medicine informs regarding significance of each period in relation with the functionality of proper systems in organism.

That is why it is possible to speak regarding the importance of solar spectrum for synchronization of all biological processes in our bodies. Under these circumstances, each frequency of the solar spectrum is associated with the functionality of a certain organ and certain biochemical reactions. Exactly vibration of the space defines the type of current chemical reactions at given timeframe.

The alternation of the spectrum of vibrations changes the type of metabolic reactions. Cyclic occurrence of vibrations in the space creates closed order of metabolic reactions and this cycle of metabolism arranges the very process of life.

DNA is a chain, where the image of metabolic processes is recorded on the background of frequencies picture in the space. It helps to keep the metabolic process in close relation with changes in the environment. The so-called "genetic garbage" are a records of alternative pathways of metabolic processes, which have been successful in the past in terms of survival of the organism. These DNA segments form a branching and merging areas. At a sharp change of frequencies patterns in the space, the most suitable piece of DNA is automatically selected to meet to frequencies in the space. Formation and dissipation of DNA is going constantly and it provides the necessary degree of compensation of frequencies of environment. Apparently, the volume of such "genetic garbage" determines the duration of life itself.

The mechanism of "genetic garbage" may prove the fact of failure of modern genetic engineering, when trying to create breeding object. It is obviously in the artificial program alternative passways of metabolic processes are "forgotten" and it can be critical for genetically modified organism (GMO) to adopt to changed parameters of environment in the next living cycle.

Any oscillation of energy has a resonance with specific frequencies of the solar spectrum, and, accordingly, it promotes mutual birth or suppression of specific metabolic processes. Interaction of frequencies in the spectrum is described by the Wu-Xing law in traditional Chinese medicine (Fig.10).

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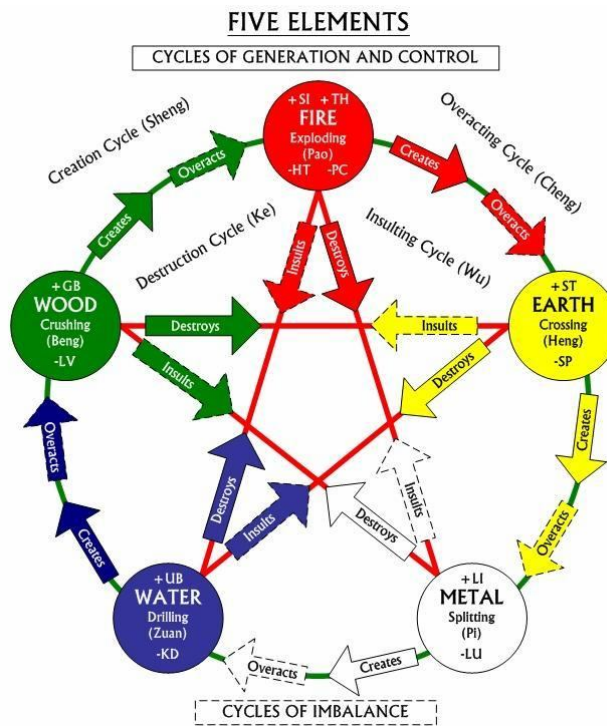


Fig. 10

In addition, each color in the spectrum has association with the functionality of certain systems (Blue - Kidney, Urinary Bladder, Turquoise - Lungs, Large Intestine, Yellow - Spleen, Stomach, Red - Heart, Small intestine, Raspberry - Liver, Gall Bladder). At the same time, each color is also some spectrum and it has the same structure as the main spectrum (Fig. 11):

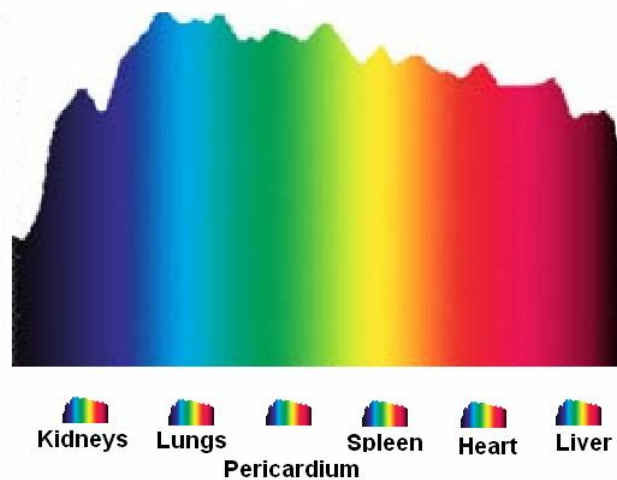


Fig. 11

Each functional system at some given period is under influenced of only one color (the local spectrum of oscillation). The order of frequencies changes is organizing the interrelation between functional system to save the whole spectrum at any timeframe and the cyclic changes of spectral frequencies in each functional system. This order is presented in the table at Fig. 12.

<b>System \ Time</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Liver</b>	Blue	Green	Yellow	Red	Dark Blue	Light Blue
<b>Heart</b>	Dark Blue	Blue	Green	Yellow	Red	Light Blue
<b>Spleen</b>	Red	Dark Blue	Blue	Green	Yellow	Light Blue
<b>Pericardium</b>	Yellow	Red	Dark Blue	Blue	Green	Light Blue
<b>Lungs</b>	Green	Yellow	Red	Dark Blue	Blue	Light Blue
<b>Kidneys</b>	Green	Yellow	Red	Dark Blue	Blue	Light Blue

Fig. 12

As far as it was mentioned above, the cyclic alternation of colors (frequencies of the local spectrum) in functional systems (meridians) contributes changing in type of chemical reactions and creates the continuity and integrity of metabolic cycle.

Only the even distribution of spectral energy of all colors in all functional systems provides the normal passage of pulse waves (and associated metabolic processes). Only the natural spectral balance (the huge numbers of balanced frequencies) is the sole point of rest of energy equilibrium of our bodies in three dimensional space. The spectral approach gives a true physical and mathematical approach to assessing the state of the organism, which is completely and uniquely determined by a set of spectral energies of 12 major functional systems. The approach also allows evaluate the direction of changes in the body and consciously take control actions to balance the spectrum of organism. It gives the true individual approach to settle problems of the body, completely eliminate the so-called "methods and treatment protocols". The "treatment protocol" is usually based on symptomatic approach and it does not takes into account the ongoing, ever-changing metabolic processes and personal peculiarities of patient's constitution at background of environmental changes.

With regard to methods of correction there is a huge freedom, since any object in nature has an own resonant frequency, the spectral structure and, therefore, can be used for the appropriate correction of the wave characteristics of organism:

- acupuncture - the usage of environment vibrations for the correction of the wave homeostasis at required time and at required areas of the body,
- magnetic puncture - the magnet works as lens of energy stream, it has the same vibrations like the environment. Magnetic puncture is used instead of acupuncture.
- warming - impact of long infrared waves, modulated by vibrations of the medium, usually warming is made by moxibition procedure.
- foods and herbs, lighting and color-therapy, music and sounds, smells and essential oils - all these products and methods have a certain spectrum of the emission and absorption of energy

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and it can be used for correction in accordance with Wu-Xing law and correct spectral diagnosis of main meridians,

- artificial electromagnetic waves at precise calculation of the phase, frequency and location of required frequencies of vibrations,
- geometry of space, which organizes the standing waves of a certain frequency (Feng-Shui).

Naturally, each control action must be appropriate, at consistent place in the body, at correct frequency range and at adequate period of time (phase). Only at this case you will be able to keep up and balance the vibrations of normal metabolic processes. This is an absolutely strict requirement to follow the terms of synchronous functionality of individual elements of the organism in order to maintain a holistic process of life in all its manifestations.

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