

No review (in the author's interpretation)...

FEDOTOV S.P.

## THE COSMIC MECHANISMS OF LIFE (THE GENETIC CODE AS A STRUCTURE OF ELEMENTS CHZHEN-TSZYU)

(INFORMATION 3)

Corresponding Member of the NGO National Academy of Natural Sciences of Ukraine (Department of the Far Eastern Academy pulse, St. Petersburg, Russia)

The article "Simple association of the genetic code and hexagrams of the Book of Changes (I-Ching)" is based on the provisions of previous paper "The genetic code as a structure of the Five elements in Chinese philosophy" where the hypothesis regarding the principles of formation of diarams and trigrams in Chinese philosophy are proposed. It allowed to suggest an idea of diarams and trigrams as a tool for description of DNA codons in the process of their interaction. each with others as an independent oscillator (objects. generating its own natural frequency). On the basis of this hypothesis it is considered the logic of structure of trigrams from the Book of Changes (I Ching), the properties Start and Stop codons, and the properties of their position in the general order of the King Wen. It is suggested that hexagrams order of King Wen describes a dynamic of pulse process in the human body as a process of interaction of amino acids which are programmed by codons on the base of frequency (wavelength) peculiarities. In addition, a comparative study of the properties between peptide products (manufactured on the base of research of Institute of Gerontology and Bio-regulation - St. Petersburg) and the scheme of daily activity of codons are represented. **Key words**: complementary medicine, acupuncture, reflexotherapy.

Стаття «Простий зв'язок генетичного коду з гексаграммами Книги Змін (І-Цзін)» з використанням положень зі статті «Генетичний код як структура стихій (елементом тов) китайської філософії» висуває гіпотезу про принципи формування діграмм і триграм китайської філософії. Це дає уявлення про діаграми і триграм як інструментах для опису кодонів ДНК і процесу їх взаємодії між собою як незалежних осциляторів (об'єктів, що генерують власні частоти). На основі цієї гіпотези розглядається структура триграм Книги Змін (І-Цзін), властивості Старт і Стоп кодонів і логіка їх розташування в загальному масиві порядку Вень-Вана. Висловлено припущення про зв'язок гексаграмм порядку Вень-Вана з описом пульсового процесу в організмі людини як процесу взаємодії амінокислот, програмованих кодонами на частотному (хвильовому) плані. Додатково проведено порівняльне дослідження властивостей пептидних препаратів Інституту геронтології та біорегуляції (Санкт-Петербург) і схеми добової хвильової активації кодонів.

Ключові слова: комплементарна медицина, акупунктура, рефлексотерапія.

Статья «Простая связь генетического кода с гексаграммами Книги Перемен (И-Цзин)» с использованием положений из статьи «Генетический код как структура стихий (элементов) китайской философии» выдвигает гипотезу о принципах формирования диграмм и триграмм китайской философии. Это дает представление о диаграммах и триграммах как инструментах для описания кодонов ДНК и процесса их взаимодействия между собой как независимых осцилляторов (объектов, генерирующих собственные частоты). На основе этой гипотезы рассматривается структура Триграмм Книги Перемен (И-Цзин), свойства Старт и Стоп кодонов и логика их расположения в общем массиве порядка Вэнь-Вана. Высказано предположение о связи гексаграмм порядка Вэнь-Вана с описанием пульсового процесса в организме человека как процесса взаимодействия аминокислот, программируемых кодонами на частотном (волновом) плане. Дополнительно проведено сравнительное исследование свойств пептидных препаратов Института геронтологии и биорегуляции (Санкт-Петербург) и схемы суточной волновой активации кодонов.

Ключевые слова: комплементарная медицина, акупунктура, рефлексотерапия.

#### Introduction

In our article "The genetic code as a structure of the Five elements in Chinese philosophy» [1] have introduced the scheme of DNA triplets in association with the natural frequencies of the twelve main meridians of acupuncture (Fig.1).

	С	Α	G	U
Senior nitroge- nous base	Pericardium	Large Intestine	Gall Bladder	Kidneys
Middle nitroge- nous base	Liver	Heart	Small Intestine	Stomach
Junior nitrogenous base	Urinary Bladder	Pancreas	Lungs	Triple Energizer

#### Fig. 1

Thus, senior bases in triplets have the lowest natural frequencies in comparing with the middle and junior bases. The middle nitrogenous bases have an average position of their natural frequencies between the senior and junior bases. It is exactly this frequency dis-

tribution that is the cause of the degeneracy of the genetic code, when the specification of the senior and middle nitrogenous bases has lower vibrations, and it determines the basic profile of the natural frequencies of the molecular structure of triplets as the entire object.

And, in addition, the hierarchical distribution of natural frequencies of bases easily explains the non-standard values of triplets, when during the translation the natural frequency of the targeted amino acid is slightly different (for example, marine alga Acetabularia translates the standard stop triplets UAG and UAA as the amino acid glycine - GGx rather than as a stop; fungus Candida interprets RNA CUG triplet not as leucine, but as serine - UCx).

## Table of twelve-minutes periods of activity of acupuncture meridians

In accordance with Fig.1, there are 120 twelve-minute segments during a day where the simultaneous activity of three acupuncture meridians creates the natural frequency of a definite triplet or amino acid. There are the following abbreviations contained herein (Fig.2).

$(\mathbf{I} \cdot \mathbf{I} \mathbf{g})$													
	ĸ		C-PC	C-LR	C-BL	Proline (Pro)		LI		G-GB	G-SI	G-LU	Glycine (Gly)
vv	1		C-PC	C-LR	A-SP	Proline (Pro)	м	ΑN		G-GB	G-SI	U-TE	Glycine (Gly)
0	D	18-19	C-PC	C-LR	G-LU	Proline (Pro)	E	RТ	06-07	G-GB	G-SI	C-BL	Glycine (Gly)
0	N		C-PC	C-LR	U-TE	Proline (Pro)	Т	GΕ		G-GB	G-SI	A-SP	Glycine (Gly)
D	E.		C-PC	C-LR	C-BL	Proline (Pro)	Α	ES.		G-GB	G-SI	G-LU	Glycine (Gly)
			C-PC	A-HT	A-SP	Glutamine (GIn)	L			G-GB	U-ST	U-TE	Valine (Val)
			C-PC	A-HT	G-LU	Glutamine (GIn)		S		G-GB	U-ST	C-BL	Valine (Val)
E	н	19-20	C-PC	A-HT	U-TE	Histidine (His)	Е	т	07-08		U-ST	A-SP	Valine (Val)
L	E		C-PC	A-HT	C-BL	Histidine (His)	Ē	Ó		G-GB	U-ST	G-LU	Valine (Val)
E	Ā		C-PC	A-HT	A-SP	Glutamine (Gln)	Ē	м		G-GB	U-ST	U-TE	Valine (Val)
м	R		C-PC	G-SI	G-LU	Arginine (Arg)	M	A		G-GB	C-LR	C-BL	Alanine (Ala)
E	T		C-PC	A-HT	A-SP	Glutamine (Gln)	E	ĉ		G-GB	U-ST	U-TE	Valine (Val)
N		20-21	C-PC	G-SI	G-LU	Arginine (Arg)	N	Ĥ	08-09	G-GB	C-LR	C-BL	Alanine (Ala)
Ť		20-21	C-PC	G-SI	U-TE	Arginine (Arg)	Ť		00-03	G-GB	C-LR	A-SP	Alanine (Ala)
			C-PC	G-SI	C-BL	Arginine (Arg)	1 C 1			G-GB	C-LR	G-LU	Alanine (Ala)
	ΤЕ		C-PC	G-SI	A-SP	Arginine (Arg)				G-GB	C-LR	U-TE	Alanine (Ala)
	RN		C-PC	G-SI				Р		G-GB	C-LR	C-BL	
		21-22	C-PC		G-LU U-TE	Arginine (Arg)			09-10		A-HT	A-SP	Alanine (Ala)
	I E P R	21-22				Leucine (Le)		A	09-10				Glutamic acid (Glu)
			C-PC	U-ST	C-BL	Leucine (Le)		N		G-GB	A-HT	G-LU	Glutamic acid (Glu)
	LG		C-PC	U-ST	A-SP	Leucine (Le)		С		G-GB	A-HT	U-TE	Aspartic acid (Asp)
	EI		C-PC	U-ST	G-LU	Leucine (Le)		R		G-GB	A-HT	C-BL	Aspartic acid (Asp)
	Z	22-23	C-PC	U-ST	U-TE	Leucine (Le)		E	10-11	G-GB	A-HT	A-SP	Glutamic acid (Glu)
	E		C-PC	C-LR	C-BL	Proline (Pro)		Α		G-GB	G-SI	G-LU	Glycine (Gly)
	R		C-PC	C-LR	A-SP	Proline (Pro)		S		G-GB	G-SI	U-TE	Glycine (Gly)
			C-PC		G-LU	Proline (Pro)				G-GB	G-SI	C-BL	Glycine (Gly)
			A-LI		A-SP	Lysine (Lys)				U-KI	U-ST	U-TE	Phenilalanine (Phe)
			A-LI		G-LU	Lysine (Lys)		Р		U-KI	U-ST	C-BL	Phenilalanine (Phe)
		23-00	A-LI		U-TE	Asparagine (Asn)		E	11-12	U-KI	U-ST	A-SP	Leucine (Leu)
	A L		A-LI		C-BL	Asparagine (Asn)		R		U-KI	U-ST	G-LU	Leucine (Leu)
	LΑ		A-LI	A-HT	A-SP	Lysine (Lys)		1.1		U-KI	U-ST	U-TE	Phenilalanine (Phe)
F	LD		A-LI		G-LU	Arginine (Arg)	w	С		U-KI	C-LR	C-BL	Serine (Ser)
	D		A-LI	A-HT	A-SP	Lysine (Lys)	Α	Α		U-KI	U-ST	U-TE	Phenilalanine (Phe)
R	E	00-01	A-LI	G-SI	G-LU	Arginine (Arg)	Т	R	12-13	U-KI	C-LR	C-BL	Serine (Ser)
E	R		A-LI	G-SI	U-TE	Serine (Ser)	E	D		U-KI	C-LR	A-SP	Serine (Ser)
			A-LI	G-SI	C-BL	Serine (Ser)	R			U-KI	C-LR	G-LU	Serine (Ser)
E			A-LI	G-SI	A-SP	Arginine (Arg)		S I		U-KI	C-LR	U-TE	Serine (Ser)
L			A-LI		G-LU	Arginine (Arg)	Е	ΜN		U-KI	C-LR	C-BL	Serine (Ser)
E	L	01-02	A-LI		U-TE	Isoleucine (IIe)	L	АТ	13-14	U-KI	A-HT	A-SP	(Stop)
м	1		A-LI		C-BL	Isoleucine (IIe)	Е	LE		U-KI	A-HT	G-LU	(Stop)
E	v		A-LI	_	A-SP	Isoleucine (IIe)	м	LS		U-KI	A-HT	U-TE	Tyrosine (Uyr)
N	E		A-LI		G-LU	Methionine (Met) Start	E	T		U-KI	A-HT	C-BL	Tyrosine (Uyr)
Т	R		A-LI		U-TE	Isoleucine (IIe)	N	Â		U-KI	A-HT	A-SP	(Stop)
		02-03	A-LI		C-BL	Threonine (Uhr)	Ť	Ñ	14-15	U-KI	G-SI	G-LU	Glycine (Gly)
			A-LI	_	U-TE	Isoleucine (IIe)		E		U-KI	A-HT	A-SP	(Stop)
			A-LI		C-BL	Threonine (Uhr)				U-KI	G-SI	G-LU	Tryptophan (Trp)
			A-LI		A-SP	Threonine (Uhr)				U-KI	G-SI	U-TE	Cysteine (Cys)
			A-LI		G-LU	Threonine (Uhr)		UВ		U-KI	G-SI	C-BL	Cysteine (Cys)
	L	03-04			U-TE	Threonine (Uhr)		RL	15-16	U-KI	G-SI	A-SP	(Stop)
	U	03-04	A-LI						13-10	U-KI	G-SI		
	N		A-LI A-LI							U-KI	U-ST	G-LU U-TE	Tryptophan (Trp)
			_		A-SP	Lysine (Lys)	ГГ						Phenilalanine (Phe)
	G		G-GE	_	G-LU	Glycine (Gly)	FE	AD		C-PC	C-LR	C-BL	Proline (Pro)
	S	04.05	G-GE		U-TE	Glycine (Gly)	I L	RE	40.47	C-PC	C-LR	A-SP	Proline (Pro)
EE		04-05			C-BL	Glycine (Gly)	RE	YR	16-17	C-PC	C-LR	G-LU	Proline (Pro)
A L			G-GE				EM			C-PC	C-LR	U-TE	Proline (Pro)
RΕ			G-GE		G-LU	Glycine (Gly)	E			C-PC	C-LR	C-BL	Proline (Pro)
тм	LI		A-LI		A-SP	Lysine (Lys)	M N	ĸ		U-KI	U-ST	U-TE	Phenilalanine (Phe)
ΗE	ΑN		A-LI		G-LU	Lysine (Lys)	ΙТ	1		U-KI	U-ST	C-BL	Phenilalanine (Phe)
Т	RТ	05-06	A-LI			Ν		D 17-18	U-KI	U-ST	A-SP	Phenilalanine (Phe)	
	GΕ		A-LI		C-BL	Asparagine (Asn)	1	N		U-KI	U-ST	G-LU	Phenilalanine (Phe)
	ES.		A-LI	A-HT	A-SP	Lysine (Lys)	S	Ε.		U-KI	U-ST	U-TE	Phenilalanine (Phe)
												-	

Fig.2 Wood Element: Yin Wood – Liver – LR; Yang Wood – Gall Bladder – GB; Fire Element: Yin Fire – Heart – HT; - Yang Fire – Small Intestine – SI; Earth Element: Yin Earth – Pancreas – SP - Yang Earth – Stomach – ST; Metal Element: Yin Metal – Lungs – LU; - Yang Metal – Large Intestine – LI; Water Element: Yin Water – Kidneys – KI; Yang Water – Urinary Bladder - BL; Fire Minister Element: Yin Fire-Minister – Pericardium – PC; Yang Fire-Minister – Triple Energizer – TE

The simultaneous participation of the natural frequencies of only three meridians in the oscillatory process of triplets is stipulated by the three-dimensionality of our space. An instant force vector of cyclic tensile and compression of the environment within the local space of a triplet has decomposition into only three mutually orthogonal vectors, and it determines the dynamic stereometry of the molecular structure. Descriptions of such molecular DNA constructs are currently developing by V.A. Karasev [3] in his theory of "Molecular vector machine". Considering the above, the dependence of the DNA geometry on the external order of frequency fluctuations becomes evident. We literally are result or products of the external cosmic vibrations. A regular change in frequency on the habitat background due to Doppler Effect (please see our article "The Elements of life" [2]) determines the spatial structure of the molecular complexes. Accordingly, the wholeness and interrelations of all parts of the body is provided by a predetermined cyclic sequence of vibrations in the environment. As soon as the vibrations of an organism are out of resonance with cosmic vibrations, tensile or compressive forces arise in molecular structures, which at the physical level disintegrate tissues and damage cells of the body.

From this perspective, sickness and aging are merely the result of a mismatch of the body's rhythms with the natural rhythms of environment: the energy of inner oscillations is simply being lost without support of the natural vibrations. And without vibrations the life itself is impossible, because there will be no possibility of cellular structures to maintain their normal sequence of anabolic and catabolic phases. Indeed, you know that the collective existence of cells, in its turn, is the core and essence of the life process.

Thus, the most proper task of healing of patients is a restoration of the normal balance in the entire spectrum of rhythms of oscillatory processes in the body. The result of the pulse diagnosis software (Pulse Metabolic Analysis (PMA)) is exactly the profile of rhythms balance, where each vibration is associated with one of the twelve acupuncture meridians. Each meridian is a manifestation of the power of an instantaneous vector that is involved in the formation of the tensor of the body as a point of space in Universe (6 vectors converging to the center of the body and 6 vectors providing a reaction against the external compression).

#### How to control the DNA triplets activity by acupuncture meridians

On the basis of pulse data analysis, taking into account the correspondences shown in Fig.1 and Fig.2 of this article, we have the possibility to work out the preventive correction of oscillatory processes in order to equalize the energy of all twelve meridians. Obviously, if the correction is not be made, the systems of the body with a deficiency of oscillatory energy are damaged from point of view of their functional activity. The proper DNA triplets will be simply not represented in the space quantitatively, and as a consequence, certain proteins will not be able to provide synthesis, and the life process itself starts gradually fading.

Here is a sample how to use the table presented in Fig.2 herein. Assume that the PMA analysis has shown a lack of energy on the Heart (HT) meridian. Activity of the Heart meridian is associated with the middle nitrogenous base in triplets of DNA. Referring to the table given in Figure 2 herein we find that the frequency of the Heart meridian (HT) is involved in the following periods: 19-21 hours, while there is activity of Glutamine

(AAx); 23-01 hours, while there is activity of Lysine and Asparagine (AAx); 03-04 hours, while there is activity of Lysine (AAA; AAG); 05-06 hours, while there is activity of Lysine and Asparagine (AAx); 09-11 hours, while there is activity of Glutamic and Aspartic acid (GAx); 13-15 hours, while there is activity of Tyrosine and stop triplets UAA and UAG.

Accordingly, all systems of the body, associated with the function of the above mentioned amino acids, are violated, including the performance of the Stop triplets, which presumably are related to the uncontrolled proliferation of cancer cells in case of the Stop-triplet damage (apparently, that is why the cancer of the Heart is a rare disease due to the fact that death from heart failure develops more rapidly due to general violation of the circulation of oxygen and nutrients than the violation of the DNA replication order in cardiomyocytes).

In this situation, the deficiency of Heart (HT) frequencies should be compensated by glutamine, lysine, asparagine, glutamic and aspartic acid, tyrosine (they are materials to carry natural frequencies of the Heart (HT) meridian) and with the help of acupuncture method of PC-9 point activation at any time, when the adenosine (A) is active at the middle position of any triplet (it is a field of ethereal structure of the oscillation processes, accompanied by electromagnetic phenomena). Besides, the treatment of acupuncture point PC-9 described in the given case, we can use the ability of Uracil (U) to suppress Adenosine (A) vibrations in the middle position of triplet. Uracil has eigenfrequencies of Stomach (ST) in systems that demonstrate a shift of 180 degrees in daily circulation relatively to the activity of adenosine (A) of the Heart meridian, i.e. it is usage of regular acupuncture rule "day-midnight".

In accordance with the precepts of Chinese traditional medicine, we can use point ST-45 to suppress the activity of the Stomach (ST) meridian frequency. If an excess of oscillatory energy on the Heart (HT) meridian is available, then we should use the PC-7 point (sedation of the Heart (HT) meridian during periods of activity of adenosine in the middle position in triplets) and the ST-41 point (toning the Stomach (ST) meridian in the periods of Uracil activity also in the middle position of triplets).

### Correlation of DNA triplets with hexagrams of Fu Xi order in Chinese philosophy

Many researchers have been trying to establish associations of DNA triplets with hexagrams of the Chinese philosophy since the time when the genetic code has been discovered. The combinatorial similarity of 6 lines in hexagrams to the four types of nitrogenous bases have pushed researchers to a conclusion that between hexagrams and DNA triplets there is a definite correlation available: both systems have the same number of conjunctions equal to 64. In our opinion, nobody of the authors has yet created the true model of association of triplets with hexagrams (there is no practical result of any model application).

The reason for this situation is the ignoring of the physical properties of the fundamental oscillatory process - the Doppler Effect. Only the Doppler Effect can explain regular changes in natural vibrations on the Earth surface during a day. Actually, the vibrations are result of the changes of Aether compression: a higher compression in of the environment causes higher natural frequencies at a given place. This effect is well known to divers: their tone of voice is elevated when the pressure is increased. Sometimes divers have to use special equipment to convert speech octaves with high frequency to normal levels of perception by the human ear. For the object we are researching it is supposed that, any numerical system must have a specific physical meaning, i.e. a mathematical apparatus should be used as a digital model of a physical process, but not vice versa, when somebody tries to pull the properties of a certain mathematical structure on peculiarities of a physical process, even without having a clue about what this process is in essence. An example of this fail is the abstract mathematical description of a set of Fu-Xi system of hexagrams by Dr. Phys.-Math. Sci. Sergey V. Petoukhov [4]. In accordance with suggestions by Dr. Petoukhov, the binary values have the compliance with the Fu Xi system of hexagrams as it is shown at Fig.3.

Obviously, the Author of the scheme of the correlation given in Fig.3 herein, apparently, is a hostage of formal logic of some quality of binary sequence of numbers. Due to scientific interests of the said Author in the field of symmetries, he has forced the order of Fu Xi hexagrams to fit the beautiful symmetrical disposition of triplets.

However, we hold a differing point of view and

consider the binary system of hexagrams and the quaternion system of nitrogenous bases simply as a notation of some physical parameter. In our case, we estimate that natural frequencies are directly proportional to the pressure of the Aether at a specified point of space (**Fig. 4**).

Thus, each position in the triplet has the rank (senior, middle and junior), and each category of nitrogenous bases has one of four values that form the following hierarchy in terms of the values of natural frequencies in the order of elevation: C, A, G, U, i.e. Cytosine (C) has the lowest natural frequency, but Uracil (U) is in possession of the highest one. Adenine) and Guanine (G) are located at intermediate positions. If we represent the value of each nitrogenous base in the

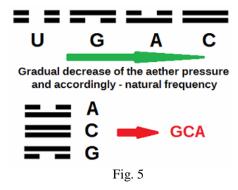
	111	110	101	100	011	010	001	000
111	CCC	CCA	CAC	CAA	ACC	ACA	AAC	AAA
	111111	111110	111101	111100	111011	111010	111001	111000
	<u>63</u>	62	61	60	59	58	57	56
110	CCU	CCG	CAU	CAG	ACU	ACG	AAU	AAG
	110111	110110	110101	110100	110011	110010	110001	110000
	55	54	<i>53</i>	52	51	50	49	<b>48</b>
101	CUC	CUA	CGC	CGA	AUC	AUA	AGC	AGA
	101111	101110	101101	101100	101011	101010	101001	101000
	47	46	45	44	43	42	41	40
100	CUU	CUG	CGU	CGG	AUU	AUG	AGU	AGG
	100111	100110	100101	100100	100011	100010	100001	100000
	39	<u>38</u>	37	36	35	34	33	32
<i>011</i>	UCC	UCA	UAC	UAA	GCC	GCA	GAC	GAA
	011111	011110	011101	011100	011011	011010	011001	011000
	31	30	29	28	27	26	25	24
010	UCU	UCG	UAU	UAG	GCU	GCG	GAU	GAG
	010111	010110	010101	010100	010011	010010	010001	010000
	23	22	21	20	19	18	17	<i>16</i>
001	UUC	UUA	UGC	UGA	GUC	GUA	GGC	GGA
	001111	001110	001101	001100	001011	001010	001001	001000
	15	14	13	12	11	10	9	8
000	UUU	UUG	UGU	UGG	GUU	GUG	GGU	GGG
	000111	000110	000101	000100	000011	000010	000001	000000
	7	6	5	4	3	2	1	0

Fig. 3

Upper Lower	Qián Heaven	110 Duì Lake	101 Kǎn Water	100 Zhèn Thunder	011 Xùn Wind	010 Lí Flame	001 Gèn Mountain	000 Kūn Earth
111	111111	111110	111101	111100	111011	111010	111001	111000
Heaven	63	62	61	60	59	58	57	56
110	110111	110110	110101	110100	110011	110010	110001	110000
Lake	55	54	53	52	51	50	49	<b>1</b> 48
101	101111	101110	101101	101100	101011	101010	101001	101000
101 Water	47	<b>1</b> 46	45	<b>H</b> 44	<b>H</b> 43	<b>H</b> 42	41	<b>H</b> 40
100	100111	100110	100101	100100	100011		100001	
100 Thunder	39	100110	37	36	100011	100010 34	<b>1</b> 33	100000
011	011111	011110	011101	011100	011011	011010	011001	011000
011 Wind	31	30	29	<b>1</b> 28	27		25	<b>H</b> 24
010	010111	010110	010101	010100	010011	010010	010001	010000
010 Flame	23	22	21	<b>1</b> 20	19	18	17	16
001	001111	001110	001101	001100	001011	001010	001001	001000
Mountain	15	14	13	<b>H</b> 12	<b>H</b> <sub>11</sub>	<b>H</b> <sub>10</sub>	<b>1</b> 9	
000	000111	000110	000101	000100	000011	000010	000001	000000
Earth	7		5	<b>1</b> 4				

Fig. 4

binary form of hexagrams, we obtain the following scheme of correlations (the least sig-



nificant bit of hexagrams is the upper-most line).

The formation process for the binary system of hexagrams from tetrad recording system of triples is shown in Fig.5 herein. In accordance with the rules in traditional Chinese philosophy, the hexagram should be read from the bottom up, from the senior (low value of natural frequency) level to the junior one (high natural frequency). Thus, it becomes easy and simple to identify the correlation between the trigrams of Fu Xi and the triplets of DNA.

On the physical level, the sequence of the Fu Xi Trigrams is simply a diagram of monotonic increase of the Aether pressure (and, accordingly, natural frequencies) in the space from the lowest value (hexagram Qian - Heaven  $\blacksquare$  - white, the lowest density of the medium) to the very high frequency (hexagram Kun - Earth  $\blacksquare$  - black, maximum density of the medium, the black hole). Naturally, the properties of amino acids of triplets will depend on their positions on the pressure scale exhibited in Fig.6 herein.

High Aether pressure contributes to the displacement of electrons from the given part of space into the environment, and it is a manifestation of the acidic properties of the material particles. Oxidation processes are activated with heat energy release. Oxidation is also stimulated by heating of the environment (compressed materials experience heating). It is a period of predominance of catabolic phase of cell metabolism.

Low Aether pressure provides conditions for inflow of electrons to the given part of space, activates recovery processes and heat energy absorption (also it is amplified by expanding bodies and cooling). It is the phase of anabolic processes. Please look at the disposition of acidic and basic amino acids in the following Table at Fig.7.

Upper Down	III	Ξ	Ξ	E.	11	Ш	III	=		Upper Down	III	H	EI	ш	=	38	Ξ	
Ξ		CCA	CCG	CCU	CAC 9	CAA	CAG 26		97 	Ξ		CCA	CCG	CCU	CAC	CAA	CAG 26	
Ξ	CGC	CGA 58	CGG 38		CUC 61	CUA 60	the second se	CUU 19		Ξ	CGC	CGA 58	CGG 38	CGU 54		CUA 60		CUU 19
H	ACC	ACA	ACG 30	ACU 55	AAC 37	AAA 63	AAG 22	AAU 36		Ш	ACC	ACA	ACG 30	ACU 55	AAC 37	AAA 63	AAG 22	AAU 36
≝	AGC	AGA	AGG 21	AGU 51	AUC 42	AUA	AUG 27	AUU 24		≘	AGC	AGA	AGG 21	AGU 51	AUC 42	AUA	AUG 27	AUU 24
≡	GCC 44	GCA 28	GCG 50	GCU 32	The second second	GAA 48		GAU 46		H	GCC	GCA 28	GCG	GCU 32	GAC	GAA 48		GAU 46
=	GGC	GGA 47	GGG 64	GGU 40	GUC	GUA 29	GUG 4	GUU 7		III	GGC	GGA 47	GGG 64	GGU 40		GUA 29	GUG	GUU 7
E		UCA 31	UCG 56	UCU 62	UAC 53	UAA 39	UAG 52	UAU 15		II		UCA 31	UCG 56		UAC 53	UAA 39	UAG 52	UAU 15
<b>=</b>	UGC	UGA 45	UGG 35	UGU 16	UUC 20	UUA 8	UUG 23	000		88	UGC	UGA 45	UGG 35	UGU 16	UUC 20	UUA 8	UUG 23	000
				Fig. 6										Fig. 7				

As you can see in Fig.7 herein, the theoretical assumption regarding the place of acid (marked in red) and alkaline (marked in blue) triplets is brilliantly confirmed. The first half of the table is characterized by low Aether pressure and an essential influx of electrons, which pre-determine the excess negative charge. In the second part of the table,

expulsion of electrons due to an excessive Aether pressure, amino acids losing some electrons demonstrate their more acid character (they become positively charged).

## Meaning of the King Wen order of hexagrams from the Book of Changes (I-Ching)

The theme of hexagrams from the Book of Changes has been described by thousands of tons of literature, but up to now without any physical sense and appropriate benefit. We suppose our studies give a reason to believe that the order of King Wen describes the transients of oscillatory energy in a closed system between 64 types of oscillators. It means that each hexagram and triplet in the Fu Xi order is a representation of a physical oscillator with definite parameters [5-8]. In our opinion, the King Wen order of hexagrams is some kind of a time scale, and its number indicates the most active oscillator interacts with all the others considering the absorption and emission of oscillatory energy.

Therefore, in the order King Wen should be found a specific law of the triplets excitation in a such way so that the potential of the interaction to be maximized is maintained, i.e. an alternation of triplets with the high and low frequencies must be traced. This alternation, in fact, will stimulate the flow of energy from the high-frequency oscillators (where the pressure is higher) to the low frequency oscillators (where the pressure is lower). Let's try to consider the order of King Wen from the point of view of the pressure distribution (and accordingly from the point of view of vibrations accompanying the processes of Aether compression).

This sequence of monotonically varying parameters of density of the Fu Xi order should be divided into two groups referring to the point in the middle (zero value for the whole system). In this case, a zero density of the system is located between triplets AAU and GCC (shown in Fig.8 below with yellow lines).

Upper Down		=	Ш	Ш	II	Ħ	=	ΞΞ
Ξ		CCA 31 43	CCG 30 14	CCU 29 34	CAC 28	CAA 27 5	CAG 26 26	CAU 25 11
Ш	CGC	CGA	CGG	CGU	CUC	CUA	CUG	CUU
	24	23	22	21	20	19	18	17
	10	58	38	54	61	60	41	19
E	ACC	ACA	ACG	ACU	AAC	AAA	AAG	AAU
	16	15	14	13	12	11	10	9
	13	49	30	55	37	63	22	36
=	AGC 8 25	AGA 7 17	AGG 6 21	AGU 5 51	AUC 4 42	AUA 3 3	AUG 2 27	
≡	GCC	GCA	GCG	GCU	GAC	GAA	GAG	GAU
	-1	-2	-3	-4	-5	-6	-7	-8
	44	28	50	32	57	48	18	46
H	GGC	GGA	GGG	GGU	GUC	GUA	GUG	GUU
	-9	-10	-11	-12	-13	-14	-15	-16
	6	47	64	40	59	29	4	7
==	UCC	UCA	UCG	UCU	UAC	UAA	UAG	UAU
	-17	-18	-19	-20	-21	-22	-23	-24
	33		56	62	53	39	52	15
EE	UGC -25 12	UGA -26 45	UGG -27 35	UGU -28 16	UUC -29 20	UUA -30 8	UUG -31 23	-32 2
				Fig. 8				

Let's assign to each hexagram a value of the pressure referred to the zero point in a such way so that all hexagrams are divided in a positive field with values from 1 to 32, and in a negative field values from -1 to -32, as it is shown in black numbers in Figure 8 below herein. Red figures are numbered by the rule of the King Wen order of hexagrams from the Book of Changes.

As noted long ago by researchers of the I-Ching, the hexagrams in the order of King Wen are paired on the basis of some principles [9, 10]. Let's take into account systems of the odd (Yang) and

even (Yin) numbers that is typical in the ancient Chinese philosophy [11, 12]. In this case the sequence of paired hexagrams has formed a specific order.

This order will become clear if we assign to each hexagram a value of pressure from Fig.8 as illustrated below herein at Fig.9.

NN	Name of hexagrame	Number of odd (Yang) hexagram	Pressure (Yang)	Pressure (Yin)	Number of even (Yin) hexagrame	Name of hexagram	Level of mutual compensation		
1	The Creative, Heaven	1	32	-32	2	The Receptive, Earth	0		
2	Difficulty At The Beginning	3	3	-15	4	Youthful Folly	-12		
3	Waiting	5	27	.9	6	Conflict	18		
4	The Army	7	-16	-30	8	Holding Together	-46		
5	The Taming Power of the Small	9	28	24	10	Treading (Conduct)	52	<u> </u>	
6	Peace	11	25	-25	12	Standstill (Stagnation)	0		
7	Fellowship with Men	13	16	30	14	Possession in Great Measure	46	+	
8	Modesty	15	-24	-28	16	Enthusiasm	-52		
9	Following	17	7	.7	18	Work On What Has Been Spoiled	0		
10	Approach	19	17	-29	20	Contemplation (View)	-12		
11	Biting Through	21	6	10	22	Grace	16	-	
12	Splitting Apart	23	-31	1	24	Return (The Turning Point)	-30		
13	Innocence (The Unexpected)	25	8	26	26	The Taming Power of the Great	34	-	D
14	Providing Nourishment	27	2	-2	28	Preponderance Of The Great	0		
15	The Abysmal (Water)	29	-14	14	30	The Clinging, Fire	0		
16	Influence (Wooing)	31	-18	-4	32	Duration	-22	++	
17	Retreat	33	-17	29	34	The Power of the Great	12	ノ	
18	Progress	35	-27	9	36	Brilliance Injured	-18	-	
19	The Family (The Clan)	37	12	22	38	Opposition	34		ΠI
20	Obstruction	39	-22	-12	40	Deliverance	-34	$\downarrow$	
21	Decrease	41	18	4	42	Increase	22	-	2111
22	Break-Through (Resoluteness)	43	31	.1	44	Coming To Meet	30		$-\mu$
23	Gathering Together (Massing)	45	-26	-8	46	Pushing Upward	-34	5	V
24	Oppression (Exhaustion)	47	-10	-6	48	The Well	-16	-	
25	Revolution (Molting)	49	15	.3	50	The Cauldron	12	1	
26	The Arousing (Shock, Thunder)	51	5	-23	52	Keeping Still, Mountain	-18	+	
27	Development (Gradual Progress)	53	-21	21	54	The Marrying Maiden	0		
28	Abundance	55	13	-19	56	The Wanderer	-6		
29	The Gentle (The Penetrating)	57	-5	23	58	The Joyous, Lake	18	-	/
30	Dispersion (Dissolution)	59	-13	19	60	Limitation	6		
31	Inner Truth	61	20	-20	62	Preponderance of the Small	0		
32	After Completion	63	11	-11	64	Before Completion	0		
1	The Creative, Heaven	1	32	-32	2	The Receptive, Earth	0		
2	Difficulty At The Beginning	3	3	-15	4	Youthful Folly	-12	)	
3	Waiting	5	27	.9	6	Conflict	18	$\sim$	

Fig. 9

In column "Levels of mutual compensation" in Fig. 9, there are results as the summations of the pressure readings between the paired hexagrams in the King Wen order. As it can be seen, 8 pairs of hexagrams have got instant full mutual compensation (referred to the zero point between the yellow cells). It is a sign of complete independence of the given oscillators on other part of the closed system. These oscillators show the maximum stability, and it is supposed they work like a frame of the whole oscillatory process.

The unity of eight pairs of the oscillators is perfectly clear if we mark them in the field

Upper Down	≡	Ш	Ξ	Ш	II	Ħ	==	ΞΞ	
Ξ		CCA 31 43	CCG 30 14	CCU 29 34	CAC 28 9	CAA 27 5	CAG 26 26		
Ξ	CGC 24 10	CGA 23 58	CGG 22 38	CGU 21 54	CUC 20 61	CUA 19 60	CUG 18 41	17 19	
H	ACC 16 13	ACA 15 49	ACG 14 30	ACU 13 55	AAC 12 37	AAA 11 63	AAG 10 22	AAU 9 36	
==	AGC 8 25	AGA 7	AGG 6 21	AGU 5 51	AUC 4 42		AUG 2 27		
☴	GCC -1 44	GCA -2 28	GCG -3 50	GCU -4 32	GAC -5 57	GAA -6 48	GAG -7 18	GAU -8 46	
=	GGC 9	GGA -10 47	GGG -11 64	GGU -12 40	GUC -13 59	GUA -14 29	-15 4	GUU -16 7	
==	UCC -17 33	UCA -18 31	UCG -19 56		UAC -21 53	-22 -22 39	UAG -23 52	UAU -24 15	
ΞΞ	UGC -25 12	UGA -26 45	UGG -27 35	UGU -28 16	-29 20	UUA -30 8	UUG -31 23	-32 2	
	Fig. 10								

of hexagrams. In Fig.10 herein between the hexagrams in yellow squares there is the zero point of the system's density. It is obvious the system of 16 oscillators has a definite inner structure based on some common resonance parameters.

It is interesting that the group of 16 oscillators includes the most notable hexagrams which are known as a manifestation of pure elements: Wind (CCC – No. 1); Fire (AAA – No. 63); Metal (GGG – No. 64); Water (UUU – No. 2).

Other oscillators of the system are fully compensated only at the level of the synchronous interaction of the 4 oscillators only, and periods of the compensation are shown in the right part in Figure 9 by connective lines. The connection with the largest gap in time (shown as red connective line) is represented by hexagrams No.21 (Biting Through), No. 22 (Grace), No. 47 (Exhaustion) and No. 48 (The Well), and all of them by themselves according to the interpretation of the Book of Changes carry mainly negative connotation. It is not a stable relationship of the mutual compensation, and the transfer of oscillatory energy between the given oscillators (triplets AAG, AGG, GAA and GGA) can be easily broken. There is not surprising, as these two pairs demonstrate their activity closely to the zero point of the whole system; changes of density are not considerable, but there all types of the ambient noise are concentrated. Thus, the King Wen order demonstrates the dynamic performance of the functionally closed system of the oscillators, where the processes of emission and absorption of energy between the oscillators are perfectly balanced within the excitation cycle.

## Notable properties of Yin and Yang in the King Wen order of hexagrams

Let's analyze a diagram of Aether pressure for Yin (even) and Yang (odd) hexagrams of the King Wen order.

What wonderful things can we find in Fig.11?

- Super resonance of the system at the end and at the beginning of the King Wen order. It is the maximum expression of the four main elements activity: Wood (triplet CCC), Fire (triplet AAA), Metal



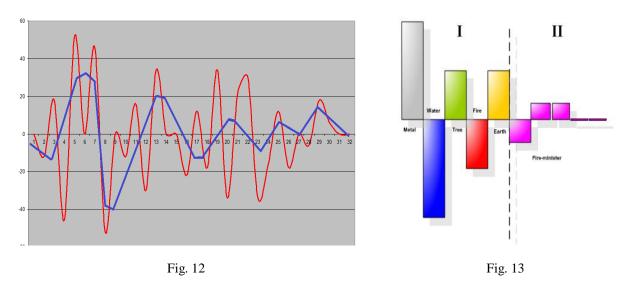
Fig. 11

(triplet GGG), and Water (triplet UUU). This mutual compensation of the AAA and GGG triplets generates basic (alkaline) base of the system, but the CCC and UUU triplets produce acid part. It means that between No. 64 and No.1 in the Hexagrams there is the maximum of interaction between the acidic and the basic patterns of the system when the quantity and speed of energy movement is the highest for the whole cycle.

- In the middle of the sequence of the oscillatory process there is a quiet window, where an abrupt change of pressure polarity is absent both for the Yang and the Yin sequence of the oscillators. It turns out that this is the only time when the DNA is capable of successfully replicating without a risk of damage due to sharp changes of environmental parameters.

### The physical process of the King Wen order

Let's summarize the Yin and Yang graphics sequences displayed in Fig.11 herein and flatten them like it is made at Fig.12.



The smoothed blue line is exactly similar to the theoretical form of a pulse wave which has been already applying in our pulse metabolic analysis (PMA) during the last two decades (see Fig.12):

# Additional confirmation of daily circulation allegiance given in Fig.2 in the context of DNA triplets

By a chance, we have got Guidelines [13] prepared by the St. Petersburg Institute of Bio-regulation and Gerontology. This training manual describes the amino acid composition of some products developed by the research staff of the Institute. We have compared compositions of the products in order to determine whether the amino acids show any relations with the organs and systems in accordance with our correlation model given in Fig.2 of the present article. It is noteworthy that each product contains glutamic acid (GAU, GAG) and aspartic acid (GAG, GAU).

In Fig.7 above, we have shown that these amino acids have acidic properties. Consequently, any other amino acid can form with the above mentioned amino acids rather stable conjugates. It technically allows using positively charged amino acids as a carrier for other amino acids. The result of comparison is represented in the following table below at Fig.14.

No.	Name, aim of cure, amino acids	Interpretation of the properties of products in accordance with the
	composition	DNA triplets and meridians correlation in Fig.2
1	Vezugen (increase of functional activity of blood vessels). Composition: ly- sine, glutamic ac- id, aspartic acid	Lysine (AAA, AAA, AA, AAU): for the senior and middle ni- trogenous bases in a triplet there are activities of meridians Large Intestine and Heart, which are associated with the Fire element; for the junior base it is activity of the Urinary bladder, Pancreas, Lungs and Triple Energizer meridians. In Fig. 2 lysine resonates with Gall bladder activity (from 23.00 to 01.00). In the Gall bladder, Lysine stimulates anabolic phase, thereby releasing the load from the Heart (the Gall bladder is a part of the same system of the meridians, which include the Heart, and it is found in the order of generation exactly after the Heart). Conclusion: lysine is able to normalize the function of the Heart. However, to prefer the selection of histidine would be more effective, since it is activated just in the anabolic phase of the Heart directly at 19.00-20.00: the high efficiency of histidine to re- store Heart function and the cardiovascular system is discovered by the relevant studies [14].
2	Ovagen (in- crease of the functional activity of Liver). Com- position: Leucine, Glutamic Acid, Aspartic Acid.	Leucine (CUC, CUA, CUNG, CUU): for the senior and middle ni- trogenous bases in a triplet there are activity of the Pericardium and Stomach meridians; for the junior base it is activity of the Urinary bladder, Pancreas, Lungs and Triple Energizer meridians. In the daily cycle, leucine is active in the period 21.00-23.00 in the meridian of Triple Energizer. Triple Energizer is included into the same system of meridians as it is the case with the Liver, and it is placed exactly before the Liver in the cycle of the mutual birth (Triple Energizer birth Liver) in accordance with the canons of ancient Chinese medi- cine. In addition, Leucine for the middle and junior nitrogenous base is similar to isoleucine (its activity is just during the period of the Liver performance 01.003.00), and the first base in leucine - C(Cytosine) - by the order of the mutual birth gives the possibility to be converted into to the base A (Adenine) of isoleucine. Thus, leu- cine can improve the Liver function, but it is supposed isoleucine will work directly and more powerfully. Alanine (GCC, GCA, GCG, GCA) - for senior and middle nitrog-
3	Kartalaks (Increase of the functional ac- tivity of carti- lage). Composi- tion: Alanine, Glutamic Acid, Aspartic Acid	enous bases in a triplet there are activity of the Gallbladder and Liver meridians; for the junior base it is activity of the Urinary bladder, Pancreas, Lungs and Triple Energizer meridians. In the daily circula- tion, Alanine resonates with the period of Stomach and Pancreas me- ridians activity. Vibrations of the Stomach and Pancreas (blue and green) meridians form a vibration of Metal element (turquoise col- our). One of the Metal peculiarities in the ancient Chinese medicine is responsible for generation of body fluid like slime (mucins is a special subclass of glycoproteins). This slime forms a basis of carti- lage tissue. The amino acid composition of mucins has predominance of five amino acids as follows: Alanine, Glycine, Proline, Serine and Threonine. Conclusion: the functional effect of the given product is confirmed as it is the declared, but, apparently, the use of the entire spectrum of the five above mentioned amino acids would make the product more effective.
4	Pinealon (In- crease of func- tional activity of brain). Composi- tion: arginine, glutamic acid, aspartic acid	Arginine (CCG, CGA, CGG, CGG): for the senior and middle ni- trogenous bases in a triplet, there are activity of the Pericardium and Small Intestine meridians; for the junior base it is activity of the Uri- nary bladder, Pancreas, Lungs and Triple Energizer meridians. In the daily circulation according to the diagram in Fig. 2 Arginine is in- volved into catabolic function of the Heart meridian. Also, the first and second nitrogenous base of the Arginine triplet (Pericardium - Fire Minister and Small Intestine - Yang Fire element) are associated with the blood circulation system. In accordance with the canons of the ancient Chinese medicine «The pericardium governs blood, and houses the mind" that is similar to the Fire Element. The second fact is that the Western medicine study reported an increase in blood ni- tric oxide as a result of taking the arginine. Conclusion: when taking this product, general circulation is improved with an emphasis on the

		brain: it causes the correct metabolism of brain tissues. Thus, the
		product meets the declared properties. Proline (CCC, CCA, CCU, CCU): for the senior and middle ni-
5	Kristagen (normalization of the immune sys- tem). Composi- tion: Proline, Glu- tamic Acid, As- partic Acid	trogenous bases in a triplet there are activity of the Pericardium and Liver meridians; for the junior base it is activity of the Urinary blad- der, Pancreas, Lungs and Triple Energizer meridians. Proline in our model shown in Fig. 2 operates between 18.00 and 19.00 in the Re- nal activity period. Kidneys in Chinese medicine are associated with the bone function, including the bone marrow. A bone marrow is a body of immunopoiesis, i.e. it is the system, which produces immune cells. Conclusion: the product meets the declared properties.
6	Honluten (normalization of bronchial muco- sa). Composition: Glycine, Glutam- ic Acid, Aspartic Acid	Glycine (GGC, GGA, GGG, GGA): for the senior and middle ni- trogenous bases in a triplet there are activity of the Gall bladder and Small Intestine meridians; for the junior base it is activity of the Uri- nary bladder, Pancreas, Lungs and Triple Energizer meridians. Gly- cine is an amino acid responsible for stimulation of mucins produc- tion in an organism together with four others: Alanine, Proline, Ser- ine and Threonine. On the other hand, according to the diagram giv- en in Fig. 2, Glycine is associated with activity of the Lungs within the period 04.00-05.00, and this fact stipulates the objective function of exactly glycine. Accordingly, the effect of the product on the func- tion of the mucus metabolism of the bronchi has a clear base.

#### Fig. 14

Thus, we can argue that the Table depicted in Fig.2 herein is true and useful. It allows us working out some targeted methods of treatment for the respective organs and systems with amino acids, select the proper acupuncture meridians for governing at the appropriate time. We now can clearly understand that the human health is nothing more than the normal dynamic balance of oscillating processes in the body.

Finally, let's consider the meanings of triplets in the context of functional activity of Stomach meridian. The Stomach is a Yang system, and it has blue frequency of the Water element. The Water element in ancient Chinese philosophy is a manifestation of destruction and death. Please see the interesting meaning of the triplets of Stomach in our Table shown in Figure 2 herein in correspondence with trigrams of the Book of Changes (I-Ching) as displayed in Fig.8 herein: Legend GUU - The Army; GUC - Dispersion (Dissolution); GUA - The Abysmal (Repetition of danger); GUG - Youthful Folly; GUU - The Army; GCC - Coming To Meet; GUU - The Army; GCC - Coming To Meet; GCG - The Cauldron.

As you can see, 9 of 10 triplets carry the sense of death and destruction of some grade, but the last one GCG has the following meaning: The Cauldron, The Vessel, Rejuvenation, Cosmic Order, The Alchemical Vessel, "A complete transformation of a person or circumstance" (D.F. Hook).

Is it not a result from a digestion process?

Considering the background of I-Ching interpretation, basing on Fig.8 hereof for START triplet AUG (hexagram No. 27 - Providing Nourishment) and for STOP triplet UAA (hexagram No. 39 – Obstruction) and taking into account the above comments regarding peculiarities of products offered by the St. Petersburg Institute of Bio-regulation and Gerontology, we can be fully sure that all the evidence supports the validity of our model of correlation between the amino acids, the acupuncture meridians and DNA triplets.

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