

Mathematical Model of Cell Division

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Abstract—The development of the human embryo starts after fertilization through the union of the two reproductive cells. The common information of the two reproductive cells is the result of the parallel intertwining of the two information sources: the information from the paternal side and the information from the maternal side. Considering the fact that the DNA molecule does not possess the ability to replicate itself, multiply or evolve on its own, it needs a „mechanism” that can generate and control an evolutionary algorithm. This article describes such a mechanism. The mechanism itself is depicted through a „generator” responsible both for the veridicality of the structured information and for maintaining a good functioning of the cellular division algorithm in such a way that at the end of the six steps, each cell will comprise the total quantity of information needed by a living organism to evolve and grow.

Keywords - evolution; information; string; generator; DNA; algorithm; mathematical models.

I. INTRODUCTION

The first scholar to meditate about the human body, about nature and their interdependence was king Fu Xi, the ruler of the early Chinese Kingdom. He established a code containing combinations of three lines, structured within eight figures, called trigrams. These combinations signify combinations of continuous lines (Yang) and/or dotted lines (Yin) that can, without a doubt, be asserted to the binary, respectively, to the ternary system.

King Wu then continued this philosophy, by associating the trigrams two by two, creating the 64 hexagrams.

A hexagram is the result of associating two trigrams by multiplying 64 by 6, thus resulting the number 384, which represents the total of acupuncture points.

Each hexagram was termed, being shortly described. Each hexagram defines a state and represents a complex of information. The hexagrams were placed within a square, named after king Wu and are part of the magic squares (fig. 2a). These later became the fundament of Oriental wisdom, written down in the most famous book, the “I Ching” or “The book of changes”. Many believe that the book comprises the fundamental principles of the universe.

The string theory attests that nature manifest within a binary base as an instrument with six cords, thus $2^6=64$ stages. It can be said that any line or vibrating cord from an atom or from a hexagram exists in two states, thus:

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Yin-Yang

The inactive state, Yin – represented by the dotted line “—”;
 The active state, Yang - represented by the uninterrupted line “—”.

Fig. 1

The two states are being described by the respiratory science, the Tattva philosophy and are comprised within the Sanskrit language, stating that the vibrations, expressed through by the two states: inhalation-aspiration without discontinuity, represent life itself. The vibrations lay at the foundation of the five perceptive abilities that we possess. Within the evolutionary process, this is known as the process of dividing by five or the ether of Pancikarana, through which, their numerous combinations, represent all possible manifestations of life.

The Yin/Yang symbol (Fig. 1), represents the eternal interaction between the two primary aspects of power: active and passive, action and reaction. Yin is the manifestation of the stable matter, being able to condense. Yang symbolizes the active force, being able to expand. At first, the reaction appears only as a dot, while being a potential state for action or for developing throughout time. The antique emblem of Yin and Yang describes the ongoing evolution of the two fundamental states. Within their course, every time the Yang state increases, the Yin state decreases proportionally and vice versa.

The undulate character of these two principles marks the foundation of all natural phenomena. In this sense, this theory holds a central spot in explaining both physiological and pathological phenomena.

The I Ching Matrix can also be named the Matrix of Science because it comprises in its structure all necessary elements of complete understanding, such as: the human cellular division system, DNA/RNA; Pascal’s triangle, including constructions of Newton’s Binomial Theorem, the Fibonacci string, the golden number, Sierpinski’s triangle that lies at the foundation of the fractional theory, as well as W. Russell and J. Wheeler’s discoveries in Physics.

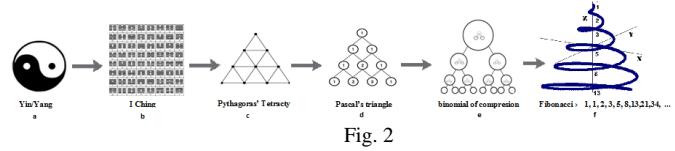


Fig. 2

We can attest that by dividing the 64 hexagrams of the I Ching onto simple arithmetic models, specific to the magic square, a new order is defined. Deciphering these models is the key to the balance of the physical health. Such a model is within an abstract view, the continuous generator that represents the law of nature or the perpetual change.

II. SUCH A GENERATOR IS THE HUMAN CELL.

The mechanism of evolution is sustained by cellular division. For this mechanism to function within normal parameters, two tasks must be fulfilled: survival and perpetuation. For the survival task to function, optimal conditions regarding environmental and food must be given. This task lies at the base of creation and evolution of the digestive system. For the perpetual task to be completed, the attraction system must function. The attraction system generates models capable of retaining and saving information, creating the so-called “conscience of matter”. The need to save and process information is the fundament of the creation and evolution of the nervous system and thus, of the brain. Thanks to the quality of synchronicity that is part of a non-linear dimension, the attraction fields of conscience can influence multiple events with the help of the index function. This function can operate both in a two-dimensional space (matrix), as well as within a multi-dimensional space, being able to return a value or a reference (pointer) to a value. The main differences between the two forms are as follows:

- The matrix form returns the value or the reference to an element from a chart or a matrix selected through the index number of rows and columns. Here we mention that the matrix form can return more than one value at a time.
- The reference form returns the address of the cell to the pointer, which lies at the intersection of a row with a column. A pointer is a variant form, which stocks the address of a date, not the value of the date. The pointer can be used to refer to certain dates or data structures. We mention that by changing the saved address of a pointer, information situated in different memory locations can be manipulated.

Referring to the I Ching matrix in fig. 2b, we will create a mathematic model capable of demonstrating, step by step, the process of cell division and evolution mechanism of the elements from within the embryotic nucleus from the first five days of pregnancy: the informational development, the relations and the hierarchy established between the cells due to the multiple relational operators and the ternary operators. The function of the cellular division mechanism is determined by the ability of the cell to retain information.

For a better understanding of the cellular division process, we suggest the same understanding towards the characters „0” and “—”, respectively „1” and „—”.

III. THE MICRO MODEL OF THE CELLULAR DIVISION, OR THE DIVISION BY 2.

From the moment of insemination, the spermatozoon, on its way to the ovum, requires a few hours for its enzymes to reach the capacity needed to penetrate the pellucid area and the cytoplasm of the ovum. Therefore, from a biological point of view, this process is meant to create the original cell (the zygote). The development of the human embryo starts after fertilization by merging in of the reproductive cells. These cells contain a full set of genes including information and instructions capable of controlling the shape, development and function of the human body.

The genes are located on filiform structures called chromosomes. The human race has two sets of chromosomes containing each 23 chromosomes, meaning 46 chromosomes in most of the cells. We thus have 23 „pairs” of chromosomes. Each one of us inherits chromosomes from both parents: 23 from the maternal side and 23 from the paternal side. Because the chromosomes are made out of genes, we inherit two copies of most genes, meaning a copy from each parent.

The parallel formation of the two spirals, made out of the 23 pairs of chromosomes, represents the matrix of the DNA. Deciphering this matrix can be explained through a neurolinguistic language. This neurolinguistic language is a universal language of an alphabet made out of 64 characters that represents the genetic archetype, capable of composing a finite number of words.

The connections between the spirals resemble “*the letters*” of an alphabet and their specific order is the one that gives the information. Thus, by associating “letters” onto meaningful “words”, the genes are created. These words are able to resonate with certain frequencies. They are able to program genes through high-frequency electromagnetic waves.

The 64 characters, seen through the I Ching matrix, compose the fundamental tetrahedral structure that lies at the very base of the space-time concept. The matrix, through the keys of the 64 hexagrams, is an integrating part of mathematics, physics, chemistry, biology, architecture and most of human sciences. Anywhere we look, we see the same fractal type, starting from the cellular structure up onto the rhythm and motion of celestial bodies.

The DNA cell is a translator of light and a portal, attracting and radiating light at the same time. We must mention that in the polarized light plane, the rotation course to the right is also called *dextrogir* course and is noted with „+”, while the rotation course to the left is called *levogir* course and is noted with „-“.

The human body is made out of hundreds of trillion cells. Each cell is made out of three basic elements: the exterior membrane, cytoplasm and nucleus. Each cell has a specific role and responsibility. The outer membrane is a protective layer equipped with highly receptive sensors that transmit information to the cellular nucleus. The cytoplasm comprises

the functional mechanism of the cell and the nucleus contains the cellular DNA and its instructions. Depending on the information received within the nucleus, the characteristically mechanisms are activated. The double helix is a good natural electrical converter and highly sensitive to electromagnetic waves.

During our lifetime, the cells regenerate through a so-called controlled program of „programmed cell death”. This program has an essential role regarding the function, development and good maintenance of the human body.

Thus, the fertilized ovum or the human egg will contain genetic material from both parents. The pregnancy, with the current medical techniques, can only be confirmed after 24 hours after insemination by detecting a hormone in the mother's blood referred to as „early pregnancy factor”. After this hormone emerges, throughout the whole period of migration of the embryo until its stabilization on the uterus wall, the process of segmentation or cellular separation starts. This process is also called the division by 2 in which on the 5th day from insemination, through the division process by 2 we count 32 cells, meaning: $2^0, 2^1, 2^2, 2^3, 2^4, 2^5 = 32$.

The cellular segmentation has three features: it is total, sub-equal and have an asynchronous type. The first division plan is vertical, resulting in two cells called blastomeres. The blastomeres are not equal. Some cells are small, those are called micromeres and others, much larger are called macromeres. The small ones can be found within the outer layer of the ovum, forming a membrane called trophoblast that secures the egg onto the uterus and assures the nutrition of the embryo. The macromeres lay within the inside of the egg, forming the embryoblast or the embryotic bud, from which the future organism will develop. By constructing the cellular division tree, throughout this process, the maintenance of the balance of the informational system can be observed.

The information generating mechanism is done according to the following algorithm:

- We start from the premise that the information from the mother cell at the moment of fecundation is unique to everyone and represents the reference matrix of every developing human body. This cell will contain the common information (111111/000000), whereby „111111” represents the information-baggage received from the paternal side and „000000” represents the information-baggage received from the maternal side. Constructing the cellular division algorithm is done upon the information from the string from the mother-cell fig. 3a by using the information generating process or the „generator” fig. 3b.

position	1	2	3	4	5	6	position	1	2
string	1	1	1	1	1	1	the generator	1	0
mold	0	0	0	0	0	0	generator	0	1

a b
Fig. 3

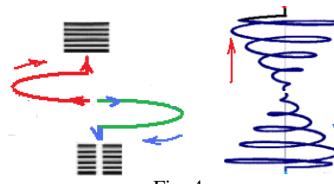


Fig. 4

Within the cell division process, the informational construction algorithm will acknowledge at all time the preceding information from the *mold string*.

The level of cell division does not coincides with the position of the string mold elements: position=6,...,1 and $i=1,...,6$. For constructing the cellular division tree on the six levels, the generator will advance step by step within the *mold string* for each level. The verification advance for the cell division tree construction is being done within a *mold string*, from right to left, starting with the position 6, through which the first division level is being generated. The algorithm continues to position 5 of the mold string that will generate the second division and the process continues until position 2 of the mold string that will generate the fifth level of cell division. Step by step, this process creates the possibility of building an information model unique for every cell that is about to be generated. We mention that until the fifth level, meaning from $i=1$ to $i=5$, the information level for each cell is unique and starting from the sixth level, respectively $i=6$, the information system of the cells generated by the division mechanism, starts to repeat itself.

Within every step from the mold string, the first generator functions is to verify by overlapping if the information created are identical to the ones found within the mold string. The only exception is the first cell division level where $i=1$, where by overlapping it is verified if the information about the positions 6 of the mold string coincide with the position 1 from the generator.

Starting with the second level of the cellular division up until the end where $i=2,3,4,5$; by overlapping it is being verified at every step whether the mold string information is identical to the one from the generator;

- o If so, the information system of the elements from the mold string modifies as follows: in the first instance the information from the i level change, after which the ones from the $i-1$ level, as follows: if the information is „1” it is being changed into „0” and where information is „0” it is being changed into „1”,
- o In contrary case, the algorithm stops.

On each division level of i , where $i=2,3,4,5$, from the mold string four cells will be created: two as a result from the mold string containing information from the paternal line

„111111” and two as a result from the mold string containing information from the maternal line „000000”.

As a binary value of the cells resulted from the mold string:

- The information from the first step will decrease in comparison to the value from the mold string with the value 2^{i-1} for the cell that contains information from the paternal line „111111” and for the other devised cell the binary value rises by 2^{i-1} for the cell that contains information from the maternal line „000000”;
- The information from the second step, increases by 2^{i-2} in comparison to the value of the cell newly created on the first step containing information from the paternal side „111111” and for the other cell the value decreases by 2^{i-2} in comparison to the value of the cell newly created on the first step containing information from the maternal side „000000”.

Following the construction of the division tree step by step, we observe how the information balance is maintained.

We must mention that, through the cell division mechanism, from the *i*step, changing the information from „0” to „1”, by using the torsion movement created, the cell is given an ascending course, a *dextrogir* (+); and by changing the information from „1” to „0”, the torsion movement creates a type levogir (-) type of movement to the cell. Hence, by constructing this process into six steps, an information system, capable of recognising within every step, both the information generated upon that moment, as well as the ones that are about to be generated. In other words, thanks to this mechanism, in each step the past, present and future are known.

The principle of the ternary operator implies pointing the original structure onto the destination structure, present and future, thus creating the relational structure between any of them. The ternary operator has three values: positional, qualitative-dimensional and hierarchical.

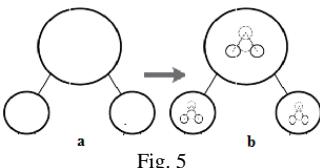


Fig. 5

1) The first cellular division. $i=1$

Considering that the information from the *mother-cell* at the moment of fecundation are the ones represented in Fig. 6a, the informational construction of the two strings onto six bits, by using the generating mechanism or „the generator” represented in Fig. 6c, starts with the position 1 from the mold string. The helix of the *mother cell* is represented in Fig. 6b.

position	1	2	3	4	5	6
string	1	1	1	1	1	1
mold	0	0	0	0	0	0

position	1	2
the	1	0
generator	0	1

Fig. 6

For the first cellular division to take place, the „generator” will act only onto the sixth position of the basic string model. The progress of the *generator* is being done step by step from the left to each level of the cellular division. In order for the first cell division to occur, the generator will act only within the position $j=1$, $\{j=1,2\}$ upon the 6 position from the mold string, as follows:

position	1	2	3	4	5	6
string	1	1	1	1	1	1
mold	0	0	0	0	0	0

position	1	2
the	1	0
generator	0	1

Fig. 7

The *generator* verifies, by overlapping, whether the information from the mold string from the 6 position are identical to its own from the position $j=1$.

IF affirmative:

- Step 1: change the information from the informational model of the string onto the position $i=6$, both for the string „111111”, as well as for the string „000000”. The information from the first string will become „111110” and for the second „000001”.

IF negative: STOP.

It is known that the first level of cell division is vertical and that after the first cellular division two cells are generated. The division mechanism can be observed in Fig. 8.

	old	new
		step 1
string	111111	111110
mold	000000	000001
decimal value	63	62
I Ching value	1	43
decimal value	0	1

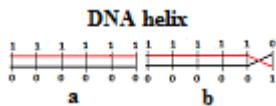


Fig. 9

Cell division tree

level cell	I Ching values	decimal values
	1	63
I	43	62
I	23	1
	2	0

Fig. 10

Vortex development

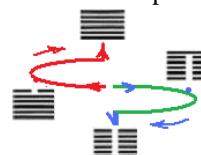


Fig. 12

DNA chain construction

	decimal	63	62
value	binary	111111	111110
	I Ching	1	43
	2	23	
value	binary	000000	000001
	decimal	0	1

Fig. 13

2) The second cellular division. $i=2$

After the first cellular division took place:

position	1	2	3	4	5	6
string	1	1	1	1	1	0
mold	0	0	0	0	0	1

position	1	2
the	1	0
generator	0	1

will advance one step to the left within the informational model of the newly created mold string, onto the 5 position. Here, the generator, verifies by overlapping whether the information from the string mold on 5 and 6 positions are identical with its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	1	1	0
mold	0	0	0	0	0	1

position	1	2
the	1	0
generator	0	1

Fig. 14

IF affirmative:

- Step 1: change the information from the informational model of the string onto the position 5 both for the string „111110”, as well as for the string „000001”. The information from the first string will become „111100” and for the second string „000011”.
- Step 2: change the information from the resulted string from the informational model from Step 1 onto the position 6 both for the string „111100”, as well as for the string „000011”. The information from the first string will become „111101” and for the second string „000010”.

IF negative: STOP.

The division mechanism can be observed in Fig. 15.

	old	new	
		step 1	step 2
string	111110	111100	111101
mold	000001	000011	000010
decimal value	62	60	61
I Ching value	43	34	14
	23	20	8

Fig. 15

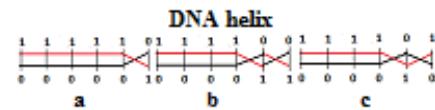


Fig. 16

Cell division tree

level	I Ching values	decimal values
	1	63
I	43	62
II	34	60
II	20	2
I	23	1
	2	0

Fig. 17

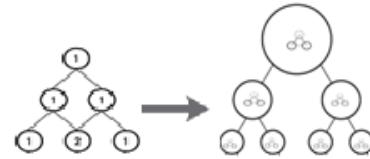


Fig. 18

DNA chain construction

	decimal	63	62	61	60
value	binary	111111	111110	111101	111100
	I Ching	1	43	14	34
	2	23	8	20	
value	binary	000000	000001	000010	000011
	decimal	0	1	2	3

Fig. 19

3) The third cellular division. $i=3$

Considering that on the second level of the cellular division two mold string have been created, as seen in fig. 18, the division algorithm for the two mold strings will be identical, as in the second level.

position	1	2	3	4	5	6
string	1	1	1	1	0	0
mold	0	0	0	0	1	1

position	1	2
string	1	1
mold	0	0

a) Fig. 20

a) We analyze the first mold string (fig. 20a).

The generator verifies by overlapping whether the information from the mold string from the positions 4 and 5 are identical with its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	1	0	0
mold	0	0	0	0	1	1

position	1	2
the	1	0
generator	0	1

Fig. 21

IF affirmative:

- Step 1: change the information from the informational model of the string on the second position 4 both for the string „111100”, as well as for the string „000011”. The information of the first string will become „111000” and of the second „000111”.
- Step 2: change the information from the string, resulted from the informational model, newly created in step 1, on the position 5 both for the string „111000”, as well as for the string „000111”. The information of the first string will become „111010” and for the second „000101”.

IF negative: STOP.

The division mechanism can be observed in Fig. 22.

	old		new	
	step 1	step 2	step 1	step 2
string	111100	111000	111010	
mold	000011	000111	000101	
binary value	60	56	58	
I Ching value	3	7	5	
decimal value	20	12	35	

Fig. 22

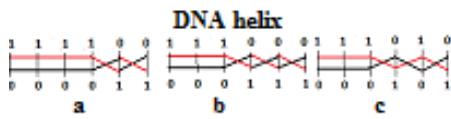


Fig. 23

b) We analyze the second mold string (fig. 20b).

The generator verifies by overlapping if the information from the mold string from the positions 4 and 5 are identical to its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	1	0	1
mold	0	0	0	0	1	0

position	1	2
the generator	1	0

Fig. 24

IF affirmative:

- Step 1: change the information from the informational model of the string on the second position 4 both for the string „111101”, as well as for the string „000010”. The information of the first string will become „111001” and of the second „000110”.
- Step 2: change the information from the string, resulted from the informational model, newly created in step 1, on the position 5 both for the string „111001”, as well as

for the string „000110”. The information of the first string will become „111011” and for the second „000110”.

IF negative: STOP.

The division mechanism can be observed in Fig. 25.

	old		new	
	step 1	step 2	step 1	step 2
string	111101	111001	111011	
mold	000010	000110	000100	
decimal value	61	57	59	
I Ching value	14	26	9	
decimal value	8	45	16	

Fig. 25

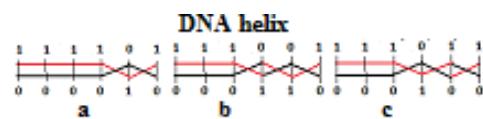


Fig. 26

By constructing the division tree we can observe how the informational balance is being maintained.

Cell division tree

level cell	I Ching values				decimal values			
	1	43	14	60	63	62	61	59
I								
II	34				60		61	
III	11	5	26	9	56	58	57	59
III	12	35	45	16	7	5	6	4
II	20		8		3		2	
I		23				1		
		2				0		



Fig. 27

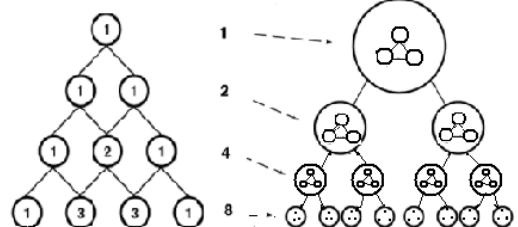


Fig. 28

DNA chain construction

value	decimal	63	62	61	60	59	58	57	56
	binary	111111	111110	111101	111100	111011	111010	111001	111000
	I Ching	1	43	14	34	9	5	26	11
	decimal	2	23	8	20	16	35	45	12
	binary	000000	000001	000010	000011	000100	000101	000110	000111
	decimal	0	1	2	3	4	5	6	7

Fig. 29

4) The fourth cellular division. $i=4$

Considering that on the third level of the cellular division, four mold strings have been created, as seen on Fig. 30, we mention that the division algorithm for the four mold strings will be the one from the second level.

position	1	2	3	4	5	6
string	1	1	1	0	0	0
mold	0	0	0	1	1	1

position	1	2	3	4	5	6
string	1	1	1	0	1	0
mold	0	0	0	1	0	1

position	1	2	3	4	5	6
string	1	1	1	0	0	1
mold	0	0	0	1	1	0

a₁

Fig. 30

a₂

b₁

b₂

The generator verifies by overlapping whether the information from the mold strings from the positions 3 and 4 are identical to its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	0	0	0
mold	0	0	0	1	1	1

position	1	2
the	1	0
generator	0	1

Fig. 31

IF affirmative:

- Step 1: change the information from the informational string from the position 3 both for the string „111000”, as well as for the string „000111”. The information from the first string will become „110000” and from the second string „001111”.
- Step 2: change the information from the string resulted from the informational model in step 1 onto the position 4 both for the string „110000”, as well as for the string „001111”. The information from the first string will become „110100” and from the second string „001011”.

IF negative: STOP.

The division mechanism can be observed in Fig. 32.

string	old		new	
	step 1	step 2	step 1	step 2
string	111000	110000	110100	
mold	000111	001111	001011	
decimal value	56	48	52	
I Ching value	11	19	54	
	12	33	53	

Fig. 32

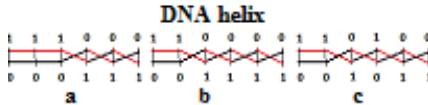


Fig. 33

b) We analyze the second mold string (fig. 30a₂).

The generator verifies by overlapping whether the information from the mold strings from the positions 3 and 4 are identical to its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	0	1	0
mold	0	0	0	1	0	1

position	1	2
the	1	0
generator	0	1

Fig. 34

IF affirmative:

- Step 1: change the information from the informational string from the position 3 both for the string „111010”, as well as for the string „000101”. The information from the first string will become „110010” and from the second string „001101”.
- Step 2: change the information from the string resulted from the informational model from step 1 onto the position 4 both for the string „110010”, as well as for the string „001101”. The information from the first string will become „110110” and from the second string „001001”.

IF negative: STOP.

The division mechanism can be observed in Fig. 35.

string	old		new	
	step 1	step 2	step 1	step 2
string	111010	110010	110110	
mold	000101	001101	001001	
decimal value	58	50	54	
I Ching value	5	13	9	
	35	56	52	

Fig. 35

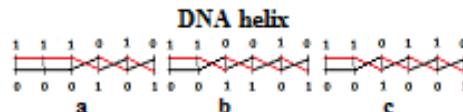


Fig. 36

c) We analyze the third mold string (fig. 30b₁).

The generator verifies by overlapping whether the information from the mold strings from the positions 3 and 4 are identical to its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6
string	1	1	1	0	0	1
mold	0	0	0	1	1	0
position	1	2				
the	1	0				
generator	0	1				

Fig. 37

IF affirmative:

- Step 1: change the information from the informational string from the position 3 both for the string „111001”, as well as for the string „000110”. The information from the first string will become „110001” and from the second string „001110”.
- Step 2: change the information from the string resulted from the informational model from step 1 onto the position 4 both for the string „110001”, as well as for the string „001110”. The information from the first string will become „110101” and from the second string „001010”.

IF negative: STOP.

The division mechanism can be observed in Fig. 38.

old	new		
	step 1	step 2	
string	111001	110001	110101
mold	000110	001110	001010
decimal value	57	49	53
I Ching value	6	14	10
value	45	31	39

Fig. 38

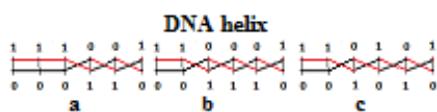


Fig. 39

d) We analyze the fourth mold string (fig. 30b₂).

The generator verifies by overlapping whether the information from the mold strings from the positions 3 and 4 are identical to its own from the positions j=1 and j=2, thus:

position	1	2	3	4	5	6
string	1	1	1	0	1	1
mold	0	0	0	1	0	0
position	1	2				
the	1	0				
generator	0	1				

Fig. 40

IF affirmative:

- Step 1: change the information from the informational string from the position 3 both for the string „111011”, as well as for the string „000100”. The information from the first string will become „110011” and from the second „001100”.

- Step 2: change the information from the string resulted from the informational model from step 1 onto the position 4 both for the string „110011”, as well as for the string „001100”. The information from the first string will become „110111” and from the second string „001000”.

IF negative: STOP.

The division mechanism can be observed in Fig. 41.

old	new		
	step 1	step 2	
string	111011	110011	110111
mold	000100	001100	001000
decimal value	59	51	55
I Ching value	9	61	10
value	16	62	15

Fig. 41

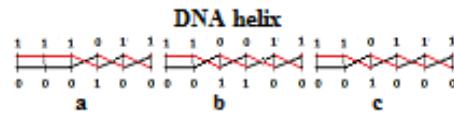


Fig. 42

By constructing the division tree we can observe how the informational balance is being maintained.

Cell division tree:

level cell	I Ching values	decimal values
I	43	63
II		62
III	11 34 5 26 9	56 58 57 59
IV	19 54 60 58 41 38 61 10	48 52 50 54 49 53 51 55
IV	33 53 56 52 31 39 62 15	15 11 13 9 14 10 12 8
III	12 20 35 45 16	7 5 6 4
II	23	1
I	2	0



Fig. 43

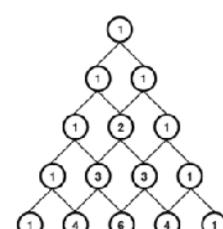
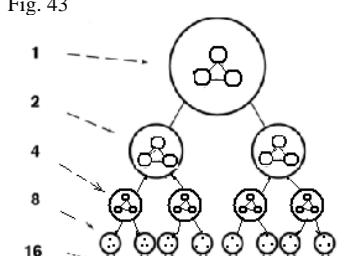


Fig. 44



DNA chain construction

decimal	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48
binary	111111	111110	111101	111100	111011	111010	111000	110111	110110	110101	110100	110011	110010	110001	110000	
I Ching	1	43	14	34	9	5	26	11	10	38	38	54	61	60	41	19
value	2	23	8	20	16	35	45	12	15	52	39	53	62	56	31	33
decimal	000000	000001	000010	000011	000100	000101	000110	000111	001000	001001	001010	001011	001100	001101	001110	001111
binary	000000	000001	000010	000011	000100	000101	000110	000111	001000	001001	001010	001011	001100	001101	001110	001111
decimal	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Fig. 45

5) The fifth cellular division .i=5

Considering that on the fourth level of cellular division, eight mold strings have occurred, as seen in Fig. 46, we mention that the division algorithm for the eight mold strings will be identical within the second level.

position	1	2	3	4	5	6	position	1	2	3	4	5	6	position	1	2	3	4	5	6
string	1	1	0	1	1	1	string	1	1	0	1	1	0	string	1	1	0	1	0	0
mold	0	0	1	0	0	0	mold	0	0	1	0	0	1	mold	0	0	1	0	1	0
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	

Fig. 46

a) We analyze the mold strings (Fig. 46 a-h).

The generator verifies by overlapping whether the information from the mold strings from the positions 3 and 4 are identical to its own from the positions $j=1$ and $j=2$, thus:

position	1	2	3	4	5	6	position	1	2	3	4	5	6	position	1	2	3	4	5	6
string	1	1	0	1	1	1	string	1	1	0	1	1	0	string	1	1	0	1	0	0
mold	0	0	1	0	0	0	mold	0	0	1	0	0	1	mold	0	0	1	0	1	0
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	
position	1	2	3	4	5	6	position	1	2	3	4	5	6	position	1	2	3	4	5	6
string	1	1	0	1	0	1	string	1	1	0	1	0	0	string	1	1	0	1	0	0
mold	0	0	1	0	1	0	mold	0	0	1	0	1	1	mold	0	0	1	0	1	0
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	
position	1	2	3	4	5	6	position	1	2	3	4	5	6	position	1	2	3	4	5	6
string	1	1	0	0	1	1	string	1	1	0	0	1	0	string	1	1	0	0	1	0
mold	0	0	1	1	0	0	mold	0	0	1	1	0	1	mold	0	0	1	1	0	0
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	
position	1	2	3	4	5	6	position	1	2	3	4	5	6	position	1	2	3	4	5	6
string	1	1	0	0	0	1	string	1	1	0	0	0	0	string	1	1	0	0	0	0
mold	0	0	1	1	1	0	mold	0	0	1	1	1	1	mold	0	0	1	1	1	1
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	

Fig. 47

The division mechanism can be observed in Fig. 48 a-h.

string mold	old		new		string mold	old		new	
	step 1	step 2	step 1	step 2		step 1	step 2	step 1	step 2
a	110111	101111	101111	101111	b	110110	100110	101110	101110
c	110101	100101	101101	101101	d	110100	100100	101100	101100
e	110011	100011	101011	101011	f	110010	100010	101010	101010
g	110001	100001	101001	101001	h	110000	100000	101000	101000

Fig. 48

Cell division tree:

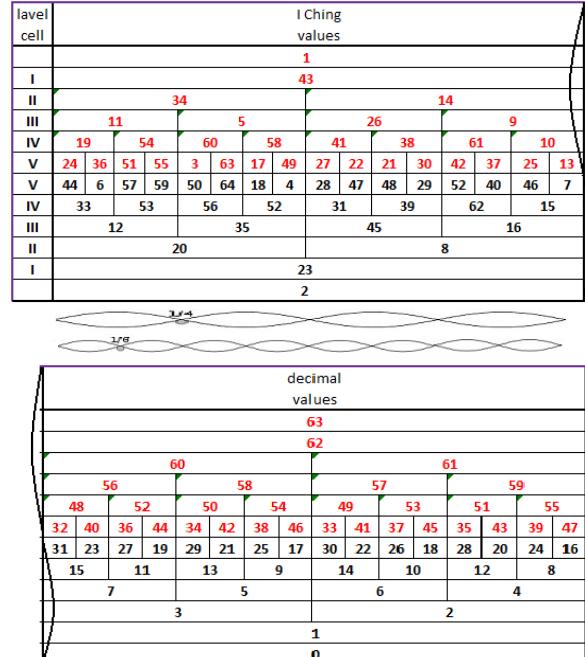


Fig. 49

DNA chain construction

Fig. 50

And so it has come to the DNA matrix, Fig 51.

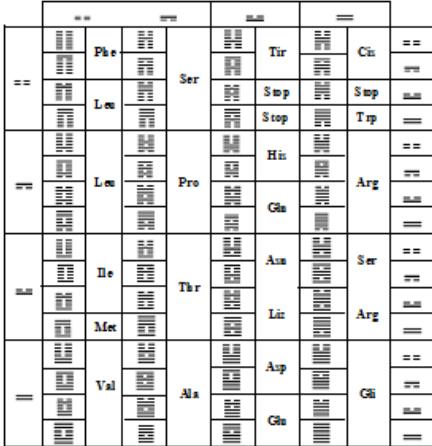


Fig. 51

The division mechanism responsible for every single mold string can be observed in Fig. 52.

Also, by constructing the division tree, we can observe how the information balance is being maintained .

We repeat what was mentioned regarding the division mechanism onto six steps: up to the fifth level, meaning from $i=1$ to $i=5$, the informational system for each cell is unique and starting from the sixth level, meaning from $i=6$, the informational cells system, resulted from the division mechanism starts to repeat itself. The random beginning of the next start, depending of the START and the STOP world of STATE. Fig. 52-53.

	old	new			old	new	
		step 1	step 2			step 1	step 2
string mold	100111	000111	010111	string mold	101111	001111	011111
	011000	111000	101000		010000	110000	100000
decimal value	39	7	23	decimal value	47	15	31
	24	56	40		16	48	32
I Ching value	25	12	6	I Ching value	13	33	44
	46	11	36		7	19	24
a1				a2			
	old	new			old	new	
		step 1	step 2			step 1	step 2
string mold	100110	000110	010110	string mold	101110	001110	011110
	011001	111001	101001		010001	110001	100001
decimal value	38	6	22	decimal value	46	14	30
	25	57	41		17	49	33
I Ching value	17	45	47	I Ching value	49	31	28
	18	26	22		4	41	27
b1				b2			

	old	new			old	new	
		step 1	step 2			step 1	step 2
string mold	100101	000101	010101	string mold	100101	000101	010101
	011010	111010	101010		011010	111010	101010
decimal value	37	5	21	decimal value	26	5	21
	26	58	42		37	58	42
I Ching value	21	35	64	I Ching value	48	35	64
	48	5	63		21	5	63

	old		new			old		new	
	step 1	step 2	step 1	step 2		step 1	step 2	step 1	step 2
string mold	100100	000100	010100		string mold	101100	001100	011100	
	011011	111011	101011			010011	110011	100011	
decimal value	36	4	20		decimal value	44	12	28	
	27	59	43			19	51	35	
I Ching value	51	16	40		I Ching value	55	62	32	
	57	9	37			59	61	42	

d1			d2		
	old		new		
	step 1	step 2	step 1	step 2	
string	100011	000011	010011	101011	001011
mold	011100	111100	101100	010100	110100
decimal	35	3	19	43	11
value	28	60	44	20	52
I Ching	42	20	59	37	53
value	32	34	55	40	51

		old		new				old		new	
				step 1	step 2					step 1	step 2
string mold	100010	000010	010010			101010	001010	011010			
	011010	111010	101101			010101	110101	100101			
decimal value	34	2	18			42	10	26			
	29	61	45			21	53	37			
I Ching value	3	8	29			63	39	48			
	50	14	30			64	38	21			

	old	new			old	new	
		step 1	step 2			step 1	step 2
string	100001	000001	010001	string	101001	001001	011001
mold	011110	111110	101110	mold	010110	110110	001110
decimal	33	1	17	decimal	41	9	25
value	30	62	46	value	22	54	38
I Ching	27	23	4	I Ching	22	52	18
value	28	43	49	value	47	58	17

	old	new			old	new	
		step 1	step 2			step 1	step 2
string	100000	000000	010000	string	101000	001000	011000
mold	011111	111111	101111	mold	010111	110111	100111
decimal	32	0	16	decimal	40	8	24
value	31	63	47	value	23	55	39
I Ching	24	2	7	I Ching	36	15	46
value	44	1	13	value	6	10	25

Fig. 52.

Fig. 53

CONCLUSION

There is more than just one principle of linear movement for each division point in space. For each dimension we encounter an axis of movement, combined with torsion onto each direction of movement. Actually, within the 3D space, there are two such undulling principles for each axis within the ascending sense (+) and three undulling principles for each axis within the descending sense (-). Thus, an n-dimensional factor is a quantity in space, defined onto each direction of movement by two connected aspects: movement and torsion. As we have seen, the 3 dimensional Physical Space Division Structure operates on 3 directions with 3 dimensional operator, Density and Linear Perception of Time and Space. The Matter Result, as 3 dimensional Structure of Perception for the human being Trinity System Mind-Conscience-Spirit is by itself Source-Creator and Creation.

The software programming is capable of generating matrix created by the algorithm DNA.

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