

The Concordance of Ezekiel's Vision with DNA

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Abstract

A 2500-year old enigma, Ezekiel's Vision, recorded a mysterious thing in a "mirage": the "four living creatures" were imagining an image of human in a "whirlwind". Exegetes tried to explain what it was in that vision, but all was so difficult. We compared the Ezekiel's Vision (Ezekiel 1:4 to 3:6, consecutive 1000-word paragraphs) with the molecular biological discoveries (DNA structure and functions) and gained the surprising results: both of "Ezekiel's Vision" and biological scientists described the same event, human DNA is right-handed double helical molecule that composed by four kinds of nucleotides encoding the human biological body and basic emotion, even though they had different "civilization" and used different "terminological words". This study verified the concordance of Ezekiel's Vision with DNA from its major figure, characters to details. Our thesis suggested that the source of Ezekiel's Vision was a dream or hallucination that provides important clues for further researching what dreams may come. **Keywords:** Bible; Ezekiel; DNA; nucleotide; dream

Introduction

In 571 B.C., a man, Ezekiel, recorded a mysterious thing he saw in a marvelous scene: "The heavens were opened and I saw visions of God. I looked, and I saw a windstorm (whirlwind) coming out of the north an immense cloud with flashing lightning and surrounded by brilliant light. The center of the fire looked like glowing metal, and in the fire was what looked like four living creatures. In appearance their form was that of a man." (Ezekiel 1:4-6. Ezekiel, B. C. 571). That called "Ezekiel's Vision" (figure 1a).

The old lection was embodied the Old Testament. Its author Ezekiel (Malick 2004) used the words, "a whirlwind", "from north", "a flashing lightning", "glowing metal", "four living creatures" and "likeness of a man" to describe and define the characteristics of the mysterious things in the scene he saw.

2500-year passed, exegetes tried to find the meaning of the Ezekiel's Vision, but all seem so difficult. In 1897, Matthew George Easton commented the Book of Ezekiel in famous *Easton's Bible Dictionary*: Ezekiel's prophecies are characterized by symbolical and allegorical representations, "unfolding a rich series of majestic visions and of colossal symbols." There are a great many

also of "symbolical actions embodying vivid conceptions on the part of the prophet". They are obscure and enigmatical. A cloudy mystery overhangs them which it is almost impossible to penetrate. Jerome calls the book 'a labyrinth of the mysteries of God.' It was because of this obscurity that the Jews forbade any one to read it till he had attained the age of thirty." (Easton 1897). Until now, it still is a challenge to human wisdom to decode the true meaning of the Ezekiel Vision and how he got the vision and why it has been presented as "a cloudy mystery" in Bible for 2500 years.

Beyond all doubts, the unique thing in the image was not a real whirlwind or windstorm. What was it then? This study first hypothesized that the Ezekiel's Vision was an image of an entity that exists in the world. The image formed in his dream or visual hallucination. We compare the Ezekiel's Vision with the molecular biological definitions and gained following results.

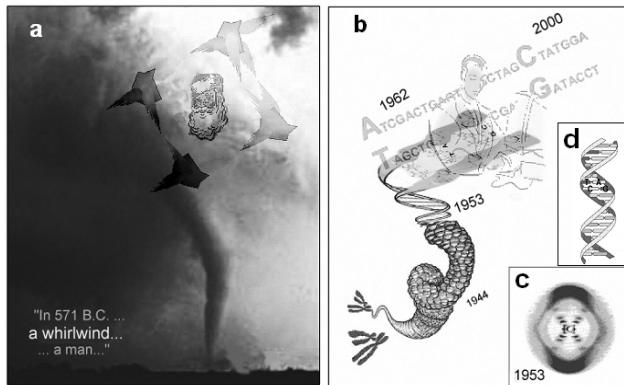
Analysis and Results

Compare the Book of Ezekiel 1:4 to 3:6, consecutive 1000-word paragraphs with biological definition of DNA we found following facts.

The “whirlwind from north” corresponded to “right-handed helix”

Ezekiel: “I saw a windstorm (whirlwind) coming out of the north an immense cloud with flashing lightning and surrounded by brilliant light”. Obviously, Ezekiel saw a right-handed helical whirlwind with energy releasing. In fact, when a whirlwind or tornado occurs in the northern hemisphere, its helical-direction is always counterclockwise just like the right-handed helix. If it occurs in the southern hemisphere the helical-direction must be left-handed helix. Two thousand five hundred years ago, the author used “north” but “south” to emphasize that helical-direction of the “whirlwind” was a right-handed.

The modern biological scientist discovered that DNA molecule is a right-handed double helical long-chain (Watson and Crick 1953, figure 1d). The characteristics of DNA (right-handed helix) match the first characteristic of Ezekiel’s Vision (whirlwind coming out of the north, figure 1a). Thus, we can see that the right-handed “whirlwind” is awfully like the illustrations of an overview of DNA molecule in biological textbooks (Campbell and Reece 2002; Marieb 1991, figure 1b).



The “whirlwind from north” and “right-handed helix DNA”: (a) The image in Ezekiel’s Vision: A whirlwind coming out of the north and in the center was what looked like four living creatures their form was that of a man. (b) Human chromosome and a right-handed double helix DNA made from four nucleotides A-T-C-G that encoding human biological body and basic emotion. (c) The X-ray diffraction photograph of DNA taken by a scientist Franklin in 1953. (d) Obviously double helix DNA is a real “twister”.

Let us review the most well-known photograph, X-ray diffraction photograph of DNA by Franklin and Gosling in 1953 (Franklin and Gosling 1953, figure 1c),

the first correct model of a right-handed double helix DNA by Watson and Crick in 1953 (Watson and Crick 1953, figure 1d) and an illustration of chromosome structure in a college biology text-book (Campbell and Reece 2002; Marieb 1991, figure 1b). These examinations may allow us to see that the similarity between the structure of DNA molecule and a whirlwind. DNA molecule is extremely like a right-handed twister, a tornado or a whirlwind that is composed of four compounds.

For DNA replication, transcription and repair, DNA polymerase, helicases and NTPase coupling the hydrolysis of deoxynucleoside triphosphate (dNTP) catalyze unwinding of duplex DNA to generate single-stranded templates. In these reactions, energy releasing and certain metals, such as magnesium, are required (Patel and Picha 2000). Ezekiel used “flashing lightning and surrounded by brilliant light” to indicate the energy releasing is as a concomitant phenomenon. And “glowing metal in the center of the whirlwind” to indicate magnesium was a concomitant too. The appearance of a strong white light is like the burning reaction of magnesium, which gives off very strong bright light, and this is a major chemical characteristic of magnesium; thus, magnesium is indeed a “glowing metal”. Until unwinding of duplex DNA to generate single-stranded templates, the details of its component and structure appear as follows.

The “four living creatures” correspond to the four nucleotides

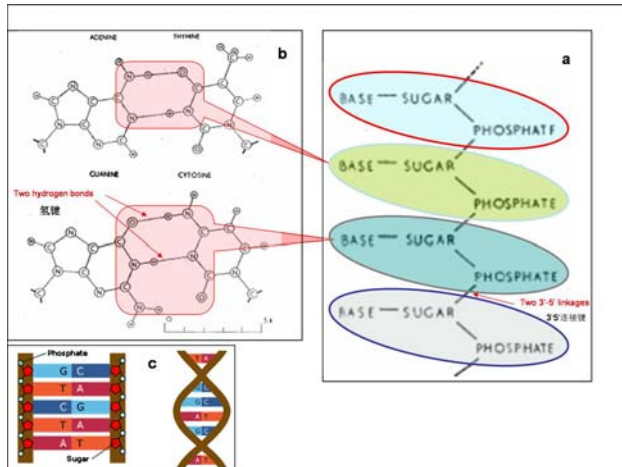
“in the fire was what looked like four living creatures. In appearance their form was that of a man.”

When the “whirlwind” were correspond to a DNA, the “four living creatures” in must be the four nucleotides. The “form was that of a man” must correspond to the primary function of DNA for encoding the human biological body by four nucleotides. The biological scientist definite that human DNA molecule is a right-handed double helical long-chain that is composed by four kinds of nucleotides that they encoding the human biological body (figure 1d). Thus a biologist wrote: “How amazing it is that ‘six feet of DNA’ coiled into a single cell can summon an adult human being into existence” (McNeill 1996).

The “one touching the wing of another creature” correspond to main chemical bonds between nucleotides

Ezekiel described the relationship among the four living creatures: “Their wings were spread out upward; each had two wings, one touching the wing of another creature on either side.” (Ezekiel 1:11). “Under the expanse their wings were stretched out one toward the other, and each had two wings covering its body” (Ezekiel 1:23). In which, there were two kinds of “wings” that were responsible for two different functions; one was for linking each other and another for covering the body.

To correspond to the four nucleotides in a DNA molecule: there are two kinds of chemical bond between nucleotides that are responsible for two different linking



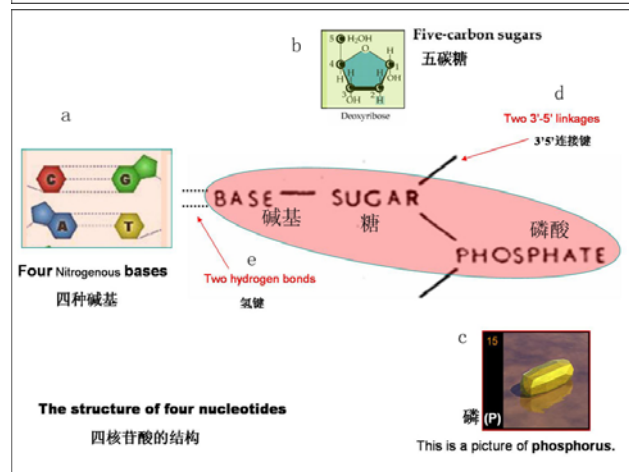
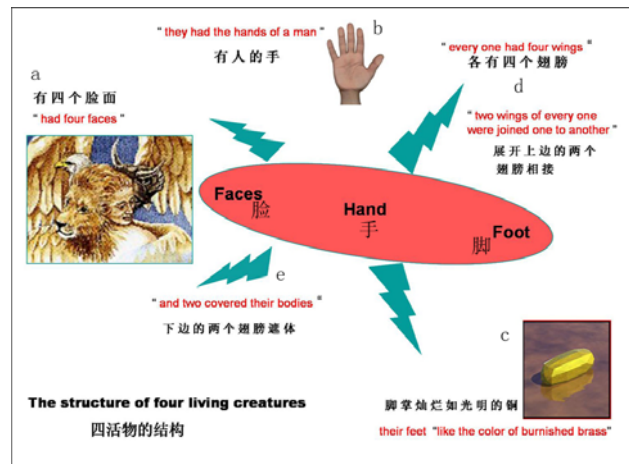
functions respectively too. One kind of the chemical bonds is between the phosphates and the sugars to form sugar-phosphate backbone for linking one nucleotide to the next in the DNA strand. Another kind of chemical bonds is hydrogen bonds between complementary nucleotides (A-T, C-G), responsible for establishing and preserving DNA’s special structure and functions, such as,

1. The bases are largely buried in the interior of the DNA and are kept away from water.
2. Two chains are held together to form double helix.
3. Hydrogen bonds of complementary nucleotides, A-T (two bonds), C-G (three bonds), assure the proper sequence of each daughter DNA strand during DNA replication (semiconservative model of replication). It was very appropriate that the three special functions of the hydrogen bonds were summarized as “covering its body”.

The component of “living creature” corresponded to the chemical groups of nucleotide

Ezekiel described the structure of the four living creatures: “each of them had four faces and four wings. Their legs were straight; their feet were like those of a calf and gleamed like burnished bronze. Under their wings on their four sides they had the hands of a man.” (Ezekiel 1: 6).

According to our analysis, each “living creature” had these four parts, “feet”, “hands”, “faces” and “wings”. Correspondingly, a nucleotide in DNA has four major parts, too: one phosphate group, a five-carbon-atom sugar



group, a nitrogenous base and chemical bonds for linking nucleotides. Indeed, the color of crystal phosphate is bright yellow just like the “burnished bronze”, there was phosphate in the “feet”. Opening up a five-fingered hand indicates the number “five”; “hand” demonstrated precisely the unique characteristics of deoxyribose (five-carbon structure). In fact, the four nucleotides have four different nitrogenous bases identified as A, T, C and

G (faces) respectively. These attributes are consistent with Ezekiel's metaphorical description.

The "living creatures like burning coals of fire" corresponded to "high-energy bonds contained deoxynucleoside triphosphate"

Ezekiel also described another phenomenon of the four living creatures: "The appearance of the living creatures was like burning coals of fire or like torches. Fire moved back and forth among the creatures; it was bright, and lightning flashed out of it. The creatures sped back and forth like flashes of lightning." (Ezekiel 1: 13).

The "living creatures were like burning coals of fire" corresponds to four deoxynucleoside triphosphate (dNTP) in a living cell. The dNTP (dATP, dCTP, dGTP and dTTP) contain three phosphate-groups with high-energy bonds for driving the polymerization of nucleotides to form new DNA strands. During DNA replication, activating large quantity of raw material, dNTP, is needed. Energy transfers to dNDP for generating dNTP by NTPase. A lot of dNTP are moved to the "work stations" hydrolysis and releasing energy when they are assembled to form a new DNA strand with a rate of 500 nucleotides per second in bacteria and a rate of 50 per second in human. A total of 6 billions nucleotides is needed for the formation of daughter strands in a human cell. All these are consistent with Ezekiel's metaphorical description. The biochemical reactions just like "Fire moved back and forth among the creatures (nucleotides); it was bright, and lightning flashed out of it. The creatures sped back and forth like flashes of lightning."

What were the "four living creatures" that exhibited in the "mirage" 2500-year ago? According to our analysis, the "four living creatures" is corresponding to the four nucleotides A, T, C and G.

The "wheels" corresponds to the NTP-driven ring-shaped proteins

DNA, nucleotides and dNTP cannot function without preexisting proteins, their activations should be coupled with proteins.

Ezekiel described a close concomitant of living creatures, wheels: "As I looked at the living creatures, I saw a wheel on the ground beside each creature with its

four faces; As they moved, they would go in any one of the four directions the creatures faced; the wheels did not turn about as the creatures went; When the living creatures moved, the wheels beside them moved; and when the living creatures rose from the ground, the wheels also rose; because the spirit of the living creatures was in the wheels" (Ezekiel 1: 15, 17, 19-20).

The "wheels" must be the ring-shaped proteins. Following is an example to describe the relationship of a ring-shaped protein and nucleotide. Biological scientists discovered that ring-shaped enzymes involved in DNA metabolism vary greatly in sequence, structure and function, they bind DNA and catalytically active on DNA. Helicases is one of ring-shaped proteins that play a role in DNA replication and transcription. Studies have revealed that helicases are NTP-driven motor proteins that couple the hydrolysis of nucleoside triphosphate to directionally movement on DNA strand and to unwind nucleic acid. The structural of helicases has been identified to assemble into multisubunit ring-shaped hexamers. In most, hexamer formation requires nucleotide binding. NTP binding stimulates hexamer formation, and hexamer formation and NTP binding are necessary for DNA binding. Details of the NTP-linked hexamerization process are unclear (Patel and Picha 2000; Manju and O'Donnell 1998). This discovery emphasizes that hexmer-ring (wheel) cannot be formed and not move on DNA (either 5' to 3' or 3' to 5' direction) without binding NTP (living creatures) because the helicases are NTP-driven motor proteins. Just like Ezekiel emphasized the relationship of "wheels" and "four living creatures": the wheels did not turn about as the creatures went. When the living creatures moved, the wheels beside them moved.

The "wheel intersecting a wheel" corresponds to the multisubunit ring-shaped proteins

Ezekiel: "This was the appearance and structure of the wheels: They sparkled like chrysolite, and all four looked alike. Each appeared to be made like a wheel intersecting a wheel. Their rims were high and awesome, and all four rims were full of eyes all around." (Ezekiel 1:16). Only based on above words of Ezekiel it is impossibility to imagine the exactly structures of the "wheel intersect wheel" and "rims were full of eyes all around"

and it power supply.

Proteins are the particular compound with complex functions and control the metabolism of nucleic acid. Structures of proteins are more complex and larger than nucleotides and there are always more than two subunits joining together in one protein molecule. Polymerase and helicases is like a huge sphere wrapping the nucleotides at its center. Helicases and ATPase have the characteristic multisubunit ring-shaped structures. For example, F-ATPase, found by Paul Boyer and John Walker, the Nobel laureates of 1997 (Yoshida and Muneyuki *et al* 2001). They described it: ATP synthase is a large protein complex (-500kDa) with a complicated structure. It is composed of two linked multi-subunit (22-27 subunits) complexes, called F_0 and F_1 . In binding-change model, F_0 and F_1 function as a pair of rotary motors liked by a central rotor and a peripheral stator. Rotation of the ring of c-subunit in F_0 is proposed to allow protons to be carried; A prominent part of the F_0 motor consists of an oligomeric c-subunit assembly in the shape of a ring, which consists of 10 to 15 monomers (Cross 2004). The structure of the main part of the ATP synthase show the tiny motor made from 3,500 amino acids is remarkably reminiscent of man-made motor (Yoshida and Muneyuki *et al* 2001). The ATP synthase lays claim to being nature's smallest rotary motor (Cross 2004; Block 1997; Dimroth, Ballmoos *et al* 2006).

Read the biological words, did it let you clearly imagine that structure of the ATPase? Yes?, it is a complex rotary machine that made from many wheel-like parts (22-27 subunits) with complex connecting.

We considered the relationship between the “living creatures” and the complex “wheels” is corresponding to the relationship between nucleotides and dNTP-driven proteins, such as Helicases, ATPase and DNA polymerase.

Ezekiel: “Then there came a voice from above the expanse over their heads as they stood with lowered wings.” (Ezekiel 1:24). We believe that is a command (molecular signal) come from the receptors on the cellular membrane which convey outside signals into cell. The signal as a “dictate” trigger or stop certain biochemical reactions.

The “expanse sparkling like ice” corresponds to cytoplasm and lipid bilayer membrane

In a living cell, the biochemical reactions always occur inside of cell where is full of aqueous solutions that surround by a bio-membrane. Whether the “living creatures” was flying in a limited space that full of water or air? Ezekiel clearly described: “Spread out above the heads of the living creatures was what looked like an expanse, sparkling like ice, and awesome. When the creatures moved, I heard the sound of their wings, like the roar of rushing waters; then there came a voice from above the expanse over their heads as they stood with lowered wings.” (Ezekiel 1: 22).

This paragraph described what he saw and heard in a space around the “living creatures”: There was a distinct space with strange structures above them; all actions of the “living creatures” occurred inside this space, which was full of water; the signal outside the space could control the behavior of the “living creatures”.

According to the biological books, the membrane separates the cell from the outside world. The membrane architecture is a lipid bilayer and proteins embedded in the bilayer. The “space” inside of cell under the membrane called “cytoplasm”. The structure of membrane looked like “ice” or “crystal” from cytoplasm toward outside. The entire cell including nucleus is full of water and also the enzyme-catalyzed reactions take place in aqueous solutions. The reactions of replication, transcription and translation are controlled by the molecular signals. During these reactions the water-generate and energy-release just like the “rainbow in the clouds on a rainy day”.

The “space” around the “living creatures” is corresponding to “cytoplasm”.

The “words in a scroll” correspond to gene in genomic DNA

If Ezekiel as an audience saw the DNA and nucleotides, usually the teacher should further tell him what was the primary roles of the unique things. He wrote: “I saw a hand stretched out to me. In it was a scroll (roll), which he unrolled before me. On both sides of it were written words of lament and mourning and woe” (Ezekiel 2: 9).

What was the truth of the “scroll” (roll), “unrolled”,

“both sides”, “words”, “lament and mourning and woe” that Ezekiel saw. According to the characteristics of genome and genes, the length of a human DNA molecule twines into a “roll” of chromosome. Both strands (both sides) of DNA are sequenced with A, T, C, and G (words), one is up side another is down side. The genome include about 35 thousands genes (“sentences), some of them determine human basic behaviors and emotions (such as lament, mourning and woe) when its expression (unrolled).

A genomic DNA is a “book”, the genes are the “words or sentences” (a chemical language, a “strange language”), which compose an integrated story by all paragraphs and chapters. Biological discoveries let us know that genes in DNA encode the entire human biological body and determine some human basic behaviors and emotions ((Schulkin 2005; Deussing 2005; Gross 2006).

How to demonstrate that “scroll” was DNA but a common book made from wood, silk, cloth, paper or stone? Ezekiel recorded: “Then he said to me, ‘Son of man, eat this scroll I am giving you and fill your stomach with it.’ So I ate it, and it tasted as sweet as honey in my mouth.” (Ezekiel 3:3). The unique way, eating or tasting, let him understand that the scroll was not a real book. The DNA, a unique biological material, certainly can be eaten and contains sugar (pentose sugar), “sweet” indeed.

When and who would uncover the Ezekiel’s Vision?

Ezekiel recorded: “He then said to me: “Son of man, go now to the house of Israel and speak my words to them. You are not being sent to a people of obscure speech and difficult language, but to the house of Israel, not to many peoples of obscure speech and difficult language, whose words you cannot understand. Surely if I had sent you to them, they would have listened to you. But the house of Israel is not willing to listen to you because they are not willing to listen to me.” (Ezekiel 3:4-7).

In the description, there were tow groups of people, group of who “is not willing to listen to”, another group of who “would have listened to” and have “difficult language”. We believed the “difficult language” implied “series of biological knowledge, terminological words and insight ability”. Only the people who possess the “difficult

language” can understand the truth in the Ezekiel’s Vision. The “many peoples of obscure speech and difficult language” are the residents they are living in 21st century. The “house of Israel” implied an alliance, a union or a population who are not willing to face “super-intelligence” and the truth of the Ezekiel’s Vision. The initial means of word “Israel” was “struggle with God” (Genesis 32:28, footnote a).

Discussion

Face the facts of Ezekiel’s Vision and biological scientific discoveries, we first conformed the concordance of the Ezekiel’s Vision to DNA. The major figure, characters and details in the 2500-year old image exactly matched the structures and functions of DNA and nucleotides. It is impertinency if adjudicate it as a coincidence by accident. If produce a carton movie according to the consecutive 1000-word paragraphs that might be a nice teaching-film for introducing DNA to public.

The beginning scene he saw was a summary that showed him whirlwind (a double helix DNA) from far to near, let him clearly saw the four living creatures (four nucleotides) connecting each other with their wings (phosphodiester bonds) and covering their body with wings (hydrogen bonds). Then the detail of four living creatures’ structure shown: “faces” (nitrogenous base), “hands” (pentose sugar), “feet” (phosphate group) and “wings” (chemical bonds for linking them) and the major functions, form of a man (code human biological body). The “fire infolding” (energy releasing) and “glowing metal” (magnesium) was as a concomitant. The “living creatures like burning coals of fire” (dATP, dCTP, dGTP and dTTP molecules carried high-energy) were described that distinguish from the nucleotides on the DNA molecules. They exchanged energy and moved as quickly as thought for reactions lifelike in DNA metabolism.

The image also showed him that all above reactions were completely controlled by complexes “wheels” (proteins) that were carrier of the invisible “spirit” (biological signals). The end of the show given him a panorama or overview (complex cytoplasm scene): a very busyness, orderly and flourishing status (molecular society), where the replication, transcription, translation,

energy metabolism and other reactions were occurring that were commanded by certain signals.

After the “movie”, the “operator” met him and unrolled him the “scroll” (genome of human). He only recognized several words that related to human emotions from countless words (genes) on the both sides (two strands of DNA) of the scroll. Obeyed the order he tasted the “scroll” (DNA) and clear understanding the scroll was unusual book that was not made from paper, wood, silk, cloth or stone. He was not able to describe the material of the scroll except “sweet”. Finally he was reminded that a people speaking “difficult language” (molecular biological knowledge) will uncover the Vision (Ezekiel 3:5-6).

The trustworthy of Ezekiel’s description

Ezekiel’s story is intact. First, the original book written 2500-years ago and the English translation version published at least hundreds year ago, both are not adapted by modern authors for any religion purpose. The initial author declared that was his description to record what he saw and heard, but not his thinking or opinion. He did not add any figure or scenery into the paragraph because he indeed did not know what would be the real intention of the Vision. So, he just said: “The heavens were opened and I saw visions of God.” Ezekiel’s Vision only used more common words and short paragraphs to tell readers the key figure, characters and details in the vision. We consider his description is conceivability and believable, lost some details hard to avoid. We understanding that were not easy to transcribe a visual feeling or unusual scenery into common words and short of paragraphs, especially describing a bizarre and fantastic scene like a dream or a hallucination.

DNA as the carrier of inheritance information of life was uncovered by Avery in 1944 (Avery, MacLeod *et al* 1944), Watson and Crick discovered DNA as double helix structure in 1953 (Watson and Crick 1953) and Nirenberg was the first to elucidate the genetic code in 1963 (Nirenberg 1963). Above discoveries are the brilliant and wonderful evidence to inadvertently verify that the mysterious things in the Ezekiel’s Vision were DNA and nucleotides, that also are side notes to verified Ezekiel’ words were intact. In the human history, Ezekiel’s words were the first description of DNA and nucleotides in

metaphor but scientific term.

The source of Ezekiel’s Vision

Is it a miracle? It seems to be extremely unbelievable that the most important systems in a living cell, DNA and nucleotides, was seen and described in a 2500-year old book. It is difficult to repeat Ezekiel how got the vision.

We hypotheses that there were possible ways to form Ezekiel’s Vision: a real living things on his eyes; a concoction of the author; a plagiarism from other literatures; a dream or a hallucination in the author’s brain; or a living image that shown through an unknown way by someone, like a 3-D movie.

Our study do not support that was real living things Ezekiel saw. There was not the similar system found since then to now. That just was the image or a simulation of certain events, DNA and nucleotides, because those belong to microcosmic world that could not be directly seen by nude-eye of human. It is impossible that Ezekiel’s story was fabricated depend on his imagination and intellectual talent, because no any historical record indicated he was a scientific fiction composer. Our study conformed again that he was the greatest prophet. If Ezekiel’s Vision was plagiarized from other’s literature, the initial authors and books should be more valuable. When it is found in future which maybe include more predicts on biological science details.

It was the most possible that the vision was Ezekiel’s dream or hallucination. One’s feeling from his dream or hallucination merely is personal experiences that only through his describing let other people to understand what he saw, heard and felt. If he did not express it, any other one could not know the content of the dream or hallucination. Because did not find any historical data that indicated someone including his family and colleagues seen the vision with Ezekiel together, we believed that the vision of Ezekiel was his dream or hallucination. It still is a mystery that who and how make the dream, secretly imaging and information, into his brain.

Even though dreams always happen in every one’s brain at every sleeping night, the essence of dream is still unknown. Recent advances in brain imaging, cellular and molecular neurobiology data, have given us a remarkably

clear picture of the differences in brain activity between waking and activated states of sleep, such as rapid eye movement (REM), when intense dreaming most commonly occurs. One of the important causes of dream hallucinations is the general and widespread activation of the brain that occurs in conjunction with a blockade of external sensory inputs and motor outputs in REM sleep. When the mind is dominated by internally generated images, as it is in dreaming, the capacity to generate thoughts is greatly weakened (Hobson 2004; Nielsen and Stenstrom 2005). This implied that a person could not control the content of dream by subjective desire or any other ways. Dream seems spontaneously and inevitably happening in brain during sleeping.

The idea that sleep can trigger the gain of insight is associated with the names of famous scientific discoverers, August Kekule, Otto Loewi and Dmitry Mendeleev (Mazzarello 2000; Maquet and Ruby 2004; Wagner, Gais *et al* 2004). If the Ezekiel's Vision is conformed that was a dream or a hallucination of his, our study provided another evidence that the dream of human are a kind of source for gaining correct information only if someone is able to identify its meaning. Once we know the memory, dream and hallucination how befallen in human brain, correctly decode human's dream and hallucination may become a novel way to acquire valuable knowledge.

It was a real miracle that a lifelike 3-D image was producing and showing in the sky just for single audience, Ezekiel. It is easy to understand that "operator" must be the Creator of life, because no person in human could know the microcosmic detail inside the living cell in 2500-year ago.

Our finding implied that both of science and theology might found the same event by their distinct methods. Scientific discoveries are an important key to find the true means of God's apocalypses in Bible, a priceless treasure.

The conclusion and future research direction

Our results implied that the Ezekiel's Vision, the oldest enigma, has been interpreted by biological discoveries, DNA is right-handed double helical molecule that composed by four kinds of nucleotides encoding the human biological body and basic emotion. In scientific

category, the Ezekiel's Vision was a dream or hallucination 2500-year ago. In theology, the Ezekiel's Vision was an apocalypse from God, the Creator. However, to find the truth of the way, and the mechanism of "internally generated images", would be a very useful for finding the essence of gene, protein, memory and dream that are the most difficult biological projects of human being. Our finding may become the evidence for studying the origin of life. The biological scientists are further searching the functions of genes on single DNA strand that how genes code human behavior, emotion, memory and thinking. They may hypothesize that the other strand hold some functions and will verify "On both sides of it were written words of" human emotion. Searching the "spirit of wheels", protein's dominators will be a new challenge to the future biological scientists.

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