

CREATION THROUGH THE LANGUAGE OF SCIENCES

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FOREWORD

WHY THE BOOK “*CREATION THROUGH THE LANGUAGE OF SCIENCES*”?

What shapes the future of a nation is education. The aim of education should be to bring up individuals who are loyal to their national and spiritual values and history, who regard their country and nation superior to their own interests, who have the spirit of unity and solidarity, and who are equipped with the sciences of the age in which they live.

The main duty of education is to equip man with good manners.

Man does not consist of only mind or only soul. Man is a whole with his matter and spirit. Therefore, the training to be given to man should be in accordance with it. In other words, it should be an education system that nurtures not only the mind but also the heart, conscience and spirit.

Yunus Emre, the poet, states the following regarding the issue:

Knowledge means a full grasp of knowledge:

Knowledge means to know yourself.

If you have failed to understand yourself,

What is the point of reading?

What is the purpose of reading?

So that Man can know the All-Powerful.

If you have read, but failed to understand,

Then your efforts are just a barren toil.

The spirit and essence of sciences is the science of belief. In other words, it is the knowledge of Allah. This is the main purpose of the mind attached to the spirit of man.

Yunus states concisely that the purpose of reading is to know Allah, and that if those sciences do not inform us about Allah, they are just a barren toil.

Indeed, the first commandment of the Quran is “*Read*” and we are ordered to read in the name of Allah. Therefore, the sciences to be taught should remind us of Allah. The books to be taught should be written based on this meaning.

In education, it is necessary to consider the mind and the heart, and knowledge and belief together. The basic objective of education should be to equip individuals with knowledge and wisdom, morality and virtue, and to direct their hearts and spirits, their minds and senses to sublime goals. The light of the mind, the light of the heart and the essence of virtue depend on science/knowledge. Science without spirituality leads to doubt and hesitation. Science without materiality leads to bigotry¹.

The survival and future of nations depend on the education that their members receive. Communities consisting of knowledgeable, virtuous and altruistic individuals who have the feelings of brotherhood, fraternity and social aid and who regard the interest of the nation superior to their own interests have a bright future.

In the last hundred years, we have moved away from all kinds of cultural and moral values to a great extent in the name of Westernization. We thought that we would acquire the science and technique of the Western world like that. Or, we were told so.

We have observed that individuals who are generally selfish, who regard their own interests superior to anything, who are lazy and wasteful, who are alienated from their state and nation and who are far away from adopting their essence and culture have been brought up with Western education.

With this education, individuals in the society were alienated from one another; mutual love, tolerance and affection decreased; high ethics was spoiled; reliance and loyalty among people disappeared, personal interest came before anything; the sole goal of individuals was to lead a good worldly life.

For all those reasons, it is necessary to reconsider education and to rebuild our education world in accordance with our religious and national principles by giving it the spirit of oneness and the message of oneness.

We saw at the end of the last century that as we move away from our own values, we, as a society, get stuck in the quagmire. We see that some of the youth

we raised for the welfare and peace of the country were made enemies of us and our country. We understand from it that there are some mistakes and deficiencies in education. The biggest mistake and deficiency is shaping our education system according to the education system of the Western world. We overlooked two issues when we imported the Western education system.

One was whether this education system was in compliance with our understanding of life, our traditions, our old cultural values and our view of the world and the hereafter.

The other was that we did not question how much this education system gave Western societies happiness and peace in terms of personal life, family structure, and mutual love, respect, cooperation in society, in short, social life style.

As we encountered the bitter fruits of this education for nearly 50 years, we tried to do something but we kept making the same mistake all the time. We searched how we could implement the Western education system better. Initially, we thought we could easily do this by buying a computer for every school. It did not work out. Then, we tried to give each student a computer and a tablet. However, we saw that it was getting worse.

Ultimately, it was understood that imitating others was a dead end.

We wavered between those ebbs and tides for decades. The push has virtually come to shove. There is an urgent for the reconstruction of our own National Education. *“The old state of affairs is impossible. Either a new state or annihilation.”*

Systems of Education are shaped based on the definition of man

Since the addressee in education is man, it is necessary to know the nature and abilities of man and to educate and train him accordingly.

What is man? Where did he come to the world from? Why was he sent to the world? Who sent him? What are his thoughts and expectations about the world and afterlife?

Education will be shaped according to the answers to those questions

Definition of Man According to Western Philosophy

Plato describes man as follows:

“Man is a featherless biped (a creature with two legs)”.

Diogenes stated that this definition of Plato’s does not represent man; he plucked a rooster, showed it to people and said, *“That is the human being Plato describes”*.

Aristotle describes man as follows:

“Man is a speaking animal”.

This description is far from showing the nature of man, his loftiness and the wisdom in his creation.

Darwin claimed that man was an animal that came into being by evolving from ape-like animals by chance.

As it can be seen, the philosophers who were not members of a true religion defined man as a featherless biped or a speaking animal.

The education system developed by the Western philosophy based on the definitions above was not in compliance with the natural structure of man; it did not address his certain feelings, emotions and thoughts, especially his desire for eternal life, and distanced him from ethical and human values. Consequently, it led the majority of humanity to oppression, contumacy, transgression, struggle, fight, conflict, and games and entertainment to satisfy the unending desires of his soul.

The Principles of the Education System of the Western Civilization

The education system of the Western civilization is based on the following five principles.

1- It accepts force/power as the point of support. It is based on the principle “The powerful is right”. However, the mark of force/power is aggression.

2-It takes as its aim benefits. Since the benefits are insufficient to meet all needs, conflict starts.

3- According to the Western civilization, life is a struggle. The mark of this struggle is collision.

4- It considers the bonds among the individuals of society as racialism and negative nationalism. The mark of this negative nationalism and racialism is aggression since it is based on feeding by swallowing others.

5- The purpose of this civilization is games and entertainments to satisfy the desires of the soul and to increase the needs of humanity.

By adopting those principles as a life style, the Western civilization provided only twenty percent of humanity with a kind of temporary bliss with its good aspects but dragged eighty percent to discomfort and misery.

The Principles of the Education System of Islamic Civilization

Islam has given man the highest authority by describing him as the most honorable creature and the vicegerent on earth.

The principles of its education system based on this description of man are as follows:

1. It accepts truth instead of force/power as the point of support. That is, it is based on the principle "*The right (truth) is powerful*". It enables justice and law to settle among people, which leads to peace and tranquility.
2. It is based on virtue and Allah's consent instead of benefit. It provides solidarity among people.
3. It accepts mutual assistance instead of struggle in life, which makes people help one another.
4. In the ties between communities, it accepts the bonds of religion, country and class instead of racialism and negative nationalism, which is conducive to fraternity, brotherhood, attraction and approaching.
5. Instead of fulfilling the desires of the soul only as the goal of life, it causes man to satisfy his sublime senses, to be a perfect person by assuming high ethics, which elevates him to real humanity. This prevents the evil desires of the soul, elevates the soul and makes man a peaceful and happy person in the world and in the hereafter².

Today, it is really necessary to reconstruct our own national education in accordance with those principles. Those principles should be taken into consideration when all sciences are presented to the youth.

Thus, the education to be given to man should be in a manner that will give him this consciousness and in a way that will enable him to fulfill the sublime duties assigned to him.

Therefore, truth, virtues, Allah's consent, solidarity, unity of religion, unity of the country, being perfect individuals with high ethics and elevated feelings, unity and solidarity are among the most important principles for the Anatolian people to

survive. This will be possible with the combination of science education, which is the light of the mind, and religious education, which is the light of the conscience. This issue is expressed as follows in the book called *Münazarat*:

"The light of the conscience is the religious sciences. The light of the mind is the exact sciences. The truth becomes manifest with their harmony. Through those two wings, students become successful. When they are separated, bigotry occurs in the former; cheating and doubt occur in the latter." (Nursi, B. S. *Münazaraat*).

The Young Turks, who could not understand the importance of the religion of Islam, which is like a spiritual battery for ensuring unity and solidarity in the community, in our social life, during the constitutional period, thought that life and religion were separate from each other. They thought progress and development could be through Western civilization. They thought it would happen by abandoning religion as in the West. However, they could not take into account that Islam and the distorted Christian religion of the West were completely different.

Badiuzzaman Said Nursi, who followed those developments closely at that time, pointed out this mistake and expressed what should be the right way as follows:

"Those who suppose religion and life can be separated are the cause of disaster

The mistake of the Young Turks:

*They did not know our religion is the basis of life;
they thought nation and Islam were different.*

*They imagined civilization would endure and always be dominant,
and saw happiness and prosperity to lie within it.*

*Now time has shown civilization's system ¹ to be corrupt and harmful;
incontrovertible experience has taught us this.*

Religion is the very life of life, its light and its basis.

This nation will be revived only through the revival of religion.

Islam understood this.

¹Footnote 1: It is a complete sign of the unknown. It is related to the cruel civilization in its deathbed.

Contrary to other religions, our nation has progressed to the extent we adhered to our religion.

And it has declined to the degree we neglected it.

This is an historical fact which occurred due to our feigned forgetfulness³.

So, the source of the mistake of the Young Turks was the idea that Western civilization would settle all kinds of issues and ensure the bliss of society, replacing the religion. The period of one century showed the corrupt and harmful aspects and shortcomings of that civilization system.

The real altruistic nationalists realized that this nation's survival and advancement would be possible through understanding the religion truly and reviving it. In other words, unlike other religions, they understood that the nation would develop based on the degree of clinging to and holding to the religion of Islam, and that it would decline as the religion would be neglected. Realizing this historical fact, which was overlooked, the altruistic people understood that it would be possible to get rid of this dilemma by considering man's material life, as well as his spiritual structure in education.

Administrators, non-governmental organizations and intellectuals, who saw the mistake the Young Turks, who could not understand the difference between Islam and Christianity, made at that time, who realized the deadlock in education and who felt the need for reconstruction and revival of education, have searched for various solutions for the last quarter century.

In this regard, very serious scientific meetings, open sessions, panel discussions and symposiums have been organized in various parts of Anatolia, in particular, since the 2000s.

One of them is **the International Congress of Creation in the Light of Science**, which was planned to be held annually after 2017. Some of the decisions that this congress adopted as a principle in the roadmap are as follows:

1- The religion of Islam does not conflict with real science. The idea "*Science and religion are separate*" is the product of positivist philosophy. What led them to such an idea was the practices of the Christian religion in the past. In other words, the realities of science and the realities of religion cannot be different. The fight between science and religion, and between intellect and revelation is not the fight of the Islamic civilization because the subject of science is the book of the

universe, which is the work of the power of Allah. The Quran is also the work of Allah's attribute Kalam (Speech). They are not at odds with each other. On the contrary, the Quran is a kind of interpretation of the book of the universe.

“Say: ‘Are those equal, those who know and those who do not know?’” (az-Zumar, 9) As it is understood from the verse of the Quran above and many other verses and hadiths, the religion of Islam gives great importance to science (knowledge) and scientists (scholars).

2- In understanding man and the universe, physics and metaphysics should be given together. Dealing with the cause-effect relationship alone in science is not enough to understand the universe and man; holistic thinking is necessary. It becomes possible through metaphysical thinking. Most of the education systems in the world have been shaped according to the positivist philosophical view for nearly two hundred years. The existence of the spirit in man is not taken into consideration in such a system of education. Man is a whole with its matter and spirituality. Metaphysics completes science by penetrating into and beyond things.

3- Knowledge obtained by scientific methods should be given not by chance and causes but with significant meaning, that is, from the perspective of oneness. A language that is compatible with our cultural values should be the language of science.

4- There is a confusion of concepts and information pollution of knowledge about evolution and creation. What everybody understands and means by evolution is different. The word evolution is used in place of almost thirty concepts and terms like perfection, change, change of state, metamorphosis and evolution. The terms like perfection, change, change of state and metamorphosis express change and differentiation. They are not theories but laws.

However, evolution in the sense of evolvment, which states that one species emerges from another, is a philosophical view that does not rely on any evidence. Since the views put forward for evolution in the sense of evolvment do not have sufficient scientific basis, it has been regarded appropriate to use the expression “**the view of Evolution**” instead of “**the theory of Evolution**” in educational and training institutions.

5- Another reason why the concepts of evolution and creation are understood differently is the differences in the perception of deity. There is a general understanding like this among scientists:

If the cause of the occurrence of a being is known, it is not God's work. According to them, God is the owner of the beings whose cause of existence and nature cannot be explained scientifically. However, Allah uses causes as a veil for His power. Causes do not have the power of plan, program and design. They do not have the attributes of intellect and will, knowledge, skill and creation.

6-We do not have to be subject to the values of positivist philosophy in science. We want to bring back the old values of our ancient culture and civilization. We will evaluate metaphysics as scientific knowledge along with physical thought from now on. We will interpret the data obtained from science and philosophy with the values of our own civilization. That is our responsibility as well as primary duty. We have already had the science and technique of the West. We will take it and add spirit and meaning to it. Thus, the truth of everything and the purpose of the creation of everything will emerge; man will rise again to the level of the most honorable creature.

While preparing this book, we benefited from the books called "**Creation through the Language of Sciences Series**", "**Creation in the Light of Sciences**" and "**Popular Science Series**", which were compiled from the papers presented at those congresses.

Nobel Laureate Pakistani physicist, Abdus Salam describes sciences as "*the art of examining the works of Allah in the universe*".

Science examines the beings in the universe. It tries to show the structure and nature of every form and being, as well as the wisdom and purposes of their creation.

There are two kinds of presentation of the sciences obtained from the beings in the universe.

The first one is the presentation by scientists and educators. In this kind of presentation, the Creator is generally hidden from the eyes due to the effect of the materialistic philosophy in general. The causes are presented directly as the doers and everything is shown as the work of nature or chance. In other words, the Creator is excluded and nature and causes are shown as God instead of the Creator. It is suggested that it is not scientific to attract attention to a creator and mention creation.

A young man who is brought up with such an education thinks that he is unattended and ownerless in the universe, that everything moves randomly and

that he has no responsibility toward anybody. This makes young people irreligious, unbelieving, miserable, naughty, disobedient, subject to the desires and ambitions of their souls.

The second way of presentation is the introduction of the Creator by each branch of science through its own language.

The Book called *Creation Through the Language of Sciences*, which you are holding now, shows clearly that the artistic, regular, neat, wise and purposeful creation in the universe is the work of a creator with infinite knowledge, will and power. It is also called significant meaning or view of oneness.

The young people who obtain this viewpoint and look at the beings on behalf of Allah will know from whom goodness comes, and they will nurture feelings of gratitude and appreciation toward Him. They will understand that they are not unattended, that they were created for a purpose and that they have duties and responsibilities toward their creator; hence, they will discipline their lives.

All sciences are based on a name of Allah and ...become... truth

The accumulation of knowledge and culture today's people have in the field of sciences is a summary and product of the knowledge and experience gained throughout the history of humanity. It is possible to date the beginning of this accumulation of knowledge back to Hz. Adam, the ancestor of all humanity because Allah tells us that He taught Adam names as follows:

“And He taught Adam the names of all things ...” (al-Baqara, 31).

It is stated in the interpretation of this verse that each branch of science is based on a name of Allah and is a mirror of it as follows:

“All attainments and perfections, all learning, all progress, and all sciences, have an elevated reality which is based on one of the Divine Names. On being based on the Name, which is concealed under numerous veils and has various manifestations and different spheres, the sciences and arts and attainments find their perfection and become reality. They are not some incomplete and deficient shadow.

For example, engineering is a science; its reality and final point reaches to Almighty God's Names of All-Just and Determiner, and observes with all their majesty the wise manifestation of those Names in the mirror of engineering.

And, for example, medicine is a science, and also an art; its final point and reality are based on the Absolutely Wise One's Name of Healer, and through observing

that Name's compassionate manifestations in the vast pharmacy of the earth, medicine finds its perfection and becomes reality.

And, for example, the natural sciences, which discuss the reality of beings; through seeing the regulating, nurturing supreme manifestations of Almighty God's (May His glory be exalted) Name of All-Wise in things, in their benefits and advantages, and through attaining to the Name, and being based on It, these sciences may contain true wisdom. Otherwise they are either transformed into superstition, or become nonsense, or open up the way to misguidance like Naturalist philosophy''⁴.

Thus, every science in the universe is based on one and sometimes more than one name of Allah and becomes a mirror to it. Each being becomes a mirror to the names of the Creator, who is the Knower of all and the Absolutely Wise, and reflect the manifestations of those names since the beings are created in a certain measure, system and order, and based on some aims and benefits.

Everything, from the wing of a fly to the stars in the sky, from atoms to galaxies, is so delicate and unique in quantity, shape and structure that they amaze people.

For instance, engineering and geometry show us Allah's names the All-Just and the Determiner, and become mirrors to the manifestation of those names.

If this delicate measure, which is seen in all beings in the universe, the purposeful, balanced, useful and wise creation, perfect administration, the current laws and the acts obeying those laws and regulations are not attributed to a name, everything will be attributed to coincidence and randomness, so-called nature, mindless and unconscious causes; all of those beauties will be condemned to vanity and chaos.

For instance, if we look at the universe from the viewpoint of the science of medicine, we will see that the universe was created in the form of a large pharmacy and a large hospital. It is seen that the cures for all material and spiritual troubles and needs are stacked and bestowed by the real Healer. All this clearly demonstrates the existence and oneness of the being who is the Healer in a wise way, His compassion for all things, His sacred and vast mercy, His beneficence, His pity, and the manifestation of His name the Healer, which sends cures to all sufferers.

For example, if the universe is viewed from the viewpoint of the sciences that search for the purposes of creation, it will be seen that all beings have a purpose and benefit of creation. Those benefits are either direct or indirect. This shows that Allah's name the Absolutely Wise is manifest on everything, that everything is in under His administration and control and that everything is created by Him. If those creations are not attributed to Him, superstitions will occur. That is, the occurrence of beings will be attributed to the mindless and unconscious nature, and random coincidence. Neither the mind nor reason can accept it.

In conclusion, the realities of all sciences are connected with the manifestation of a name of God Almighty, depend on that name, rely on it, and is a mirror to it. The more progress is made in science and the more beauties are shown, the more beauty and honor of the name to which it is connected will be shown.

The view of the scientists on the sciences in the universe and the name on which a branch of science relies and that is manifest on that science becomes divine knowledge. All research and studies in that science become meditation. In other words, all sciences are conducive to knowing Allah, seeing and understanding the manifestations of His management, will, power, and knowledge in the universe.

After all, can it be said that a religion that encourages people to explore the beings in the universe, to meditate on their creation, to think, to reason, to know their purpose of creation and the wisdom behind them, and to accept that it is conducive to a better understanding of Allah *contradicts science*? Can it be said that *religion and science are separate*? Is it possible to say that a religion that accepts working for science as worship is an obstacle to progression?

“How can a slave be an enemy of his master, a servant an enemy of his chief and a child an enemy of his father? In fact, Islam is the guide and master of sciences, and the chief and father of the real sciences”⁵.

However, unfortunately, the generations of Islam were intimidated because the religion of Islam, which is the gate to civilization and science, was shown to be against sciences through wrong understandings and delusions; they tried to instill the philosophy “*Science and religion are separate*”. This was caused by the atheist and materialist thought of the West, which consisted of imitators and the people who did not know the reality of Islam, and regarded Christianity and Islam to be similar.

Thus, physics and metaphysics must be handled together in order to understand and interpret the universe and man correctly. Such a method is a scientific behavior and thought.

The subjects in this book are handled together with physics and metaphysics and interpreted completely within the measurements of the mind, revelation and reason.

Effort is from us; success is from Allah.

Authors
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CHAPTER 1

1.THE FIRST CREATION OF MATTER AND THE UNIVERSE

1.1.CREATION IN STAGES⁶

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LEARNING OUTCOMES OF	PREPARATION QUESTIONS
1-The student learns how the first creation of the universe began. 2-He understands the conditions of the formation of subatomic particles like proton, neutron, neutrino, quark, pion and myon. 3-He understands at which stage of creation atoms and substances were created. 4-He learns the first six stages of creation 5-He knows how the universe is expanding.	1-Is the first beginning of the universe matter or energy? 2-What could be the reason why atoms did not form directly in the first creation? 3-With what forces might subatomic particles be held in the atomic structure? 4-What structure of the atom is tried to be achieved with the CERN experiment in Switzerland?

Is the universe really infinite or just too big? Where is its beginning and end? These are the questions that have preoccupied the minds of the thinking people most for ages. According to the materialistic understanding nourished by atheism, the universe does not have a beginning or an end. Until the early years of the twentieth century, it was a dominant idea that the universe was constant in time. However, these understandings were radically altered by developments in

science in the early 20th century. The universe was constantly expanding. The universe had a beginning as well as an end.

In the 1920s, space scientists were busy with examining the closest surroundings of space. Optical devices were not as advanced as they are today; electronics and computer had not been in our dictionaries yet. The lunar and solar eclipses were the high-level topics of astronomy at that time. It was believed that the universe consisted of only the Milky Way. In the US, the 2.5-meter diameter mirror telescope was the world's most advanced telescope. Dr. Hubble used it.

1.1.1. The First Seconds of Creation

It is definitely not possible to repeat the conditions of the moment of creation on earth. However, it is possible to prepare some conditions in the early stages of the universe by giving subatomic particles extremely high velocities and to observe the behavior of the particles under those conditions. Or, at least the incidents that cannot be observed can be predicted thanks to the calculations and formulas of the observable conditions. The first seconds of the Big Bang, the tables and explanations about its first years and first centuries are the results of those observations and calculations.

The expert scientists working at the 27 km long CERN accelerator station in Switzerland collided electron with anti-electron and eliminated both; then, they examined both the character and behavior of the light that was released. Based on the outcomes, they reached the results of the first creation of the universe. Very interesting results were obtained. First, they dealt with the time scale. Physics has three basic constants. They are; Planck Constant, Velocity of Light Constant and Gravitational Constant.

Using those three constants, it is now possible to calculate the tiniest "indivisible" part of time, space and energy.

Physics equations tell us that time will shrink to 10^{-43} seconds, which is the smallest possible time interval and that a time interval smaller than that cannot be found in the universe. This fact tells us that time intervals cannot be infinitely small and continuous no matter how small they are and that even the shortest time interval will be finite in mathematics. How can we comprehend the smallest time interval of 10^{-43} seconds? It is definitely not possible.

In the smallest period of time when creation started (10^{-43} of a second), the temperature was extremely high (10^{32} degrees). If we compare it to the highest

temperature that we can detect at the present time, which is billion (10^9) degrees, we can understand to some extent how high the temperature at the time of first creation was.

In the range of 10^{-43} seconds, the density is extraordinary, as is the gravitational force. It is the period in which everything resembles a dough between amorphous abstract and concrete. We call this period “*Planck circuit*”. If we move one more step and reach the 10^{-37} second of creation, the temperature is still extremely high (10^{29} degrees). There are no atoms yet. The strong core force, weak force and electromagnetic force, which are the basic forces that keep the universe alive, are not separated yet; they are integrated.

It is possible to watch what happens over a time period of 10^{-9} seconds, or one billionth of a second, in the famous CERN particle accelerator in Switzerland. Experts report that they obtained a high temperature of up to 10^{15} (1 000 trillion) degrees in the experiment. The electromagnetic force and the weak core force are about to separate from each other.

The stages above try to explain step by step the indeterminate and indescribable “characteristics” before the start of the creation process. In the periods that followed, we can say that the creation of the physical universe began to take shape. One of the best scientists who narrated the story of the creation of the universe is Steven Weinberg. In his book called “*The First Three Minutes*” Weinberg discusses the developments from the first explosion of creation to the period when galaxies began to form in six stages. Let us now follow the exciting stages of this creation together.

1.1.2. The First Six Days of Creation

The First Period: Creation starts with an exceptionally high temperature. In the first 10^{-2} seconds of creation, the temperature is 100 billion degrees. In this period, the “first universe” and the radiation energy are in the state of “cosmic soup”. Particles like protons and neutrons that make up the atomic nucleus are not visible yet but the process of creation has become evident. We see only the electron and

In the first 10^{-2} seconds of creation, the temperature is 100 billion degrees. In this period, the “first universe” and the radiation energy are in the state of “cosmic soup”.

its opposite positron (anti-electron). We are in a very small period of time, one hundredth of a second, but creation takes place so fast that energy, matter and density are physical quantities now. Matter is partially shaped and dimensioned. It is estimated by means of fine calculations that the universe at that time was expanded to 4 light-years. The density is exceptionally high like the temperature in the first moment of creation According to the calculations of experts with the formula $E=mc^2$, the density is 3.8 billion kilograms per liter.

The tiny nucleus of universe, which is extracted from the darkness of non-existence into the light of existence in a very short time, one hundredth of a second, grows so fast that it has reached 4 light years in that tiny period of time thanks to the hand of an infinite power

The Second Period: This phase includes the incidents that take place in a time period of a tenth of a second. Despite such a short period of time, the changes are sudden and dramatic. The temperature has dropped to 30 billion degrees; neutrons and protons, which are atomic particles, have started to appear. Electrons, positron, neutrinos and antineutrinos are in a state of mixture together with photons: 38 percent neutrons, 68 percent protons... With the emergence of protons and neutrons, it is understood that quarks and gluons have been created in the meantime.

The temperature has dropped to 30 billion degrees; neutrons and protons, which are atomic particles, have started to appear. Electrons, positron, neutrinos and antineutrinos are in a state of

The Third Period: In this period, when the first matter of the universe is very compact, the temperature value is quite high. Although it seems to have decreased compared to the second period, the temperature is 10 billion degrees now. Mass density is 380,000 times higher than that of water. Sufficient “coldness” to bring the neutrons and protons together to form the atom has not been obtained during this period.

Sufficient “coldness” to bring the neutrons and protons together to form the atom has not been reached during this period.

The Fourth Period: The most distinctive feature of this period is that the temperature has been reduced to 3 billion degrees by the Perfectly Wise Creator. The universe is now about 14 seconds old, and the expansion is still going on at an incredible pace. When electrons and positrons (anti-electrons) are brought together for a purpose, both of them are “destroyed” and “energy” emerges in the form of photons.

This is the period when stable atomic nuclei such as hydrogen and helium nuclei begin to be formed by the divine power. In other words, a proton and a neutron have been in an environment where they can stand side by side for the first time. With the formation of extraordinary attraction, the tendency to resist the great spreading speed has begun in those two particles, whose masses are between existence and non-existence. Since almost all of the mass in the atom gathers in the nucleus, the nucleus is the “representative of matter”. The atomic nucleus represents such a dense material structure that only one teaspoon of the substance (protons and neutrons) in the nucleus weighs one hundred million tons. Since the elements of the nucleus are “imprisoned” in a much smaller volume than electrons, their velocity is also unusually high compared to electrons. The nucleus particles have a velocity over 60,000 kilometers per second. The high speed of the protons and neutrons shows them in an unimaginable form of drops of a boiling and bubbling liquid.

As a result of the science-based experiments and research about atoms and their nuclei, the knowledge we obtain about matter reveal that matter is concentrated in small drops that are distant from one another. The proton and neutron, in other words, the structure of the nucleus, are likened to extremely dense foam droplets that constantly boil.

The next step after the creation of atomic nucleus particles, which consist of neutrons and protons, is to adjust the number of those particles. If that adjustment had not been made as a necessity of mercy and virtue, neutrons and protons created at very close proportions and all atomic nuclei in the universe could have been transformed into helium nuclei. The sun filled with helium would not have been able to shine in the sky and no lights of life could have been sent to this living planet, which is 150 million km away. For, helium is not fuel for the stars as large as the sun; it means the ash that remains. Much larger stars and powerful explosions are necessary to burn this ash.

As soon as one second has passed after the creation of the universe, the temperature has been reduced to 30 billion degrees; in the meantime, the stabilization process started and neutrons began to transform into protons rapidly. The hydrogen-helium ratio observed in the universe today corresponds to the calculations made regarding this balancing.

Fourteen seconds after the creation, the temperature was reduced to 3 billion degrees, and the process of the creation of electrons was completed. The positive electric force in the universe was stored in

Fourteen seconds after the creation, the temperature was reduced to 3 billion degrees, and the process of the creation of electrons was completed.

the protons created previously; the negative electric force was distributed to the electrons. Thus, the enormous electric force in the universe was completely neutralized; everything was arranged perfectly and in a wonderful balance. As many electrons as protons were created.

The Fifth Period: The temperature of the universe in this period was reduced to one billion degrees. This temperature is 60 times the current temperature of the center of the sun. The time period from the first period to this period is calculated as 3 minutes and 2 seconds. In this period, photons, neutrinos and anti-neutrinos were dominant.

The Sixth Period: Up to the 35th minute, when the temperature was decreased to three hundred million degrees, the raw material of everything in the universe was made ready. Temperature was no longer expressed in billions, but in millions. The decrease in temperature is the most distinctive characteristic of this period. Electrons were collided with positrons to generate photon energy. The rate of the existence of electrons is slightly higher than positrons. This surplus was arranged so that it would be equal to the number of protons afterwards.

From the first moment of the universe that started with the Big Bang to the period when it began to take shape, there are basically six different periods. The Quran states that the universe was created in six days as follows:

“Your Guardian-Lord is Allah, Who created the heavens and the earth in six days, and is firmly established on the throne (of authority): He draweth the night as a veil o’er the day, each seeking the other in rapid succession: He created the sun, the moon, and the stars, (all) governed by laws under His

command. Is it not His to create and to govern? Blessed be Allah, the Cherisher and Sustainer of the worlds.’’⁷

In this realm where the solar system and the earth had not been created yet and the term day also differed according to each celestial system, the term day means cycle, era and period.

On the one hand, the Quran explains the facts that regulate the deeds and behaviors of people; on the other hand, it draws attention to the secrets in the universe and asks people to read it like a book and to reveal the secrets in it by searching.

When we consider the “short history” of the universe from the first creation to the present day, basically six different phases or days draw our attention.⁸

1st Day

The first one billion years of the creation, the period from the time when matter and energy were separated to the time when the universe became transparent, constitutes the first day.

2nd Day

The period that lasted up to 3 billion years, when atomic nuclei heavier than clusters of matter were synthesized and the anterior galaxies were created, constitutes the second day.

3rd Day

The galaxies recorded by the Hubble Space Telescope in the Deep Field research came into being and the universe began to take shape gradually. On the third day of the universe, which reached 5 billion years, galaxies with heavier atomic nuclei similar to ours started to be created.

4th Day

This period continued until the universe became 10.3 billion years old. The process of the creation of galaxies similar to ours but with heavier atomic nuclei was completed in this period and the galaxies became quite distinct.

5th Day

At this stage, the creation of our solar system together with its planets of rotating around orbits began. This process lasted up to the age of 11.5 billion years of the universe.

6th Day

On the last and the sixth day of the universe, life began to be distinct and finally man was created.

The universe, which was originally created as a nucleus, was transformed from shape to shape with the power and wisdom of the Creator, who manifested himself in all things with His work, in billions of years. The evolution phases reached its target. It finally reached the fruit of life through the stages that required a highly sensitive plan and program. The universe and its contents were created in stages. The series of events from the simple to the perfect observed in all works of art became the stage of different manifestations of power in the march of existence. Yes, the universe was not created all of a sudden. The six-period creation of this tree of universe became manifest on man, who was its fruit. He also underwent six stages:

A ‘nutfah’ taking space in the womb, a sticky state called ‘alaqah’, a piece of chewed called ‘mudghah’ the bones (‘izam’) forming the skeleton of the body, the meat (‘lahm’) dressed on the bones, and finally ‘human being’, who was created with a completely different form.

In short, the universe and the guests in it were created stage by stage and they slowly move toward a point of perfection with a spiritual program called “predestination” (qadar) That is, they were created gradually. We understand the steps of this march when we talk about education and perfection. Perfection is the story of the amorphous energy dough forming the atomic system from phase to phase in the first creation of the universe, and from there to the stars and celestial systems, just like a fig seed becoming a fig through various stages.

It is not possible to fit “education” and “perfection”, which teach us many realities like knowledge, wisdom and mercy, into a soulless and faint word like “evolution”. Moreover, atheism, which tries to abuse the theory of evolution for

its ideology by using chance/coincidence as a basis for its philosophy, shows that it remains out of scientific data and thought by accepting the pre-eternity of matter like the atheist thinkers Before Christ.

1.1.3. How were the Earth and the Sky separated when they were adjacent?

Cosmology books liken all of the characteristics of the period after the first six stages of creation to the characteristics of the universe today. Matter was shaped at that time and the mutual and harmonious interaction of the atoms was initiated under high temperature. The formation of atoms helped to form molecules; with the combination of molecules, many substances filled the space; celestial bodies began to form under appropriate physical conditions; suns, worlds, planets were created by a divine power. The typical characteristic after the sixth period is the temperature up to 4,000 degrees. Under that temperature, the whole space was not as dark as it is today; it shone brightly.

Due to a requirement of wisdom, the density values increased with the condensation of matter in the form of gas and its cooling over time; and the planets that we know started to be shaped with wisdom from the solidifying matter. By the time the universe reached its first 700,000th year, it was presumably still a homogeneous cloud of hydrogen and helium. However, the universe did not collapse into a single point and turn into a single galaxy; billions of centers of galaxies were created. Why was the universe kept a gas cloud for a long time? Why was it not made collapse into a single point?

The typical characteristic after the sixth period is the temperature up to 4,000 degrees. Under that temperature, the whole space was not as dark as it is today; it shone

Cosmology asked itself this question for years; in 1973, Roger Penrose, a theoretical physicist and a black hole expert, tried to calculate the power of the first creation as “the Initial Uniqueness and Singularity”. He saw tiny dots smaller than a proton that occurred as a result of this ‘Big Bang’. They were not created by the collapse of stars like a black hole; they were created during the first creation. Although those black dots were smaller than an atom, it is understood

that they behaved like a black hole and swallowed the things that came before them and left their mark behind.

Clouds of hydrogen and helium gathered around those great attraction points; thus, the nuclei of billions of galaxies were formed. The universe opened from a point adjacent to a cosmic soup and a cloud of gas; then, it was shaped for a particular purpose. The Quran informs us about that great transformation as follows:

“Do not the Unbelievers see that the heavens and the earth were joined together (as one unit of creation), before we clove them asunder? We made from water every living being. Will they not then believe?”⁹

1.1.4. The Universe is Expanding

In physics, in the "Doppler event", the sound waves coming from the whistle of a train approaching a station reach an observer in the station at a smaller wavelength. Contrary to this, the number of the soundwaves coming from the whistle of a train distancing from a station decreases in unit of time. This decrease means the decrease of the frequency and the increase of the wavelength. According to the experiments, the light had the same characteristics as the sound waves.

Doppler Effect: Doppler effect relationship between velocity and wavelength is an experience that we encounter every day. Listen to a plane passing over your head; the sound of the engine is heard at a higher pitch; and when it passes and disappears, the pitch of the hearing decreases. The reason for this is as follows: When the airplane moves toward you and when the next wave peak is released, it is closer to you and it reduces the distance between the wave peaks. Similarly, as the plane moves away, the wavelengths increase and the sound pitch we perceive falls.

Doppler event was also valid for light waves. Hubble was watching the rays coming from the galaxies at the telescope. Once, something strange caught his attention when he was examining the spectrum analyses of the light passing through the micro lens systems of the telescope. There was a shift toward red in the wavelengths of the light coming from the galaxies. Under normal circumstances, there should be no change in spectral colors and they should remain constant. Hubble began to think about the main reason for the shift toward

red in spectral lines by taking into account the wavelengths. The red color represents the longest wavelength in the wavelength band "visible to the eye".

He wondered why the light from the galaxies was shifting toward red? Hubble soon established a connection between the shift toward red and the Doppler event. According to the Doppler event, the wavelength of the rays coming from a distancing light source got longer, and the lengthening wavelength represented red; so, there was only one explanation: the galaxies were moving away from us. The further galaxies were moving away from us faster. There could be only one interpretation of this distancing and escaping: the universe was expanding.

When the experts in charge of the world's largest telescope built in Mount Palomar in the USA applied the Hubble law for those distances in 1950, the distancing speeds of the galaxies were calculated. This time, it was found out that galaxies were moving away at a speed of 100,000 kilometers per second.

A galaxy 10 million light years away from us distances from us at a speed of 250 kilometers per second while a galaxy 10 billion light years away was calculated to be distancing from us at a speed of 250,000 kilometers per second.

NGC 6946, which is similar to the Milky Way galaxy we live in, is seen from the front with its splendor. This galaxy is close to us, just "10 million light years" away. The stars of the Milky Way seem like a tulle in front of the galaxy. The Milky Way is just one of the hundreds of billions of galaxies in the universe of which we are a part. There are hundreds of billions of suns in it.

What expands in a large-scale universe model is space. The galaxies on the space "surface" seem to move away from one another, and the galaxies farther away seem to move even faster. We can liken it to the spots on an inflated balloon. As the balloon inflates, the spots will be separated from one another. According to a certain point, distant spots appear to distance more than those that are close to that point.

We witness that the fact that the galaxies move away from one another at an incredible speed was explained in the Quran centuries ago:

*"With power and skill did We construct the Firmament: for it is We Who create the vastness of pace (We are expanding it)."*¹⁰

What would we see if we were to watch the space with extremely sharp eyes, in the depths of space, without any objects obstructing our vision? To take

such a photograph, the Hubble Space Telescope focused on a single dark spot of space; the lights from that spot were “accumulated” for exactly ten days. Even the lights that were four billion times weaker than the stars that could be seen with the naked eye were snapped. And so many galaxies hidden in one dark spot of space became apparent. We should not forget that each of these galaxies contains hundreds of billions of stars! (NASA)

EVALUATION QUESTIONS

- 1-How long after the beginning of the first creation were subatomic particles created?
- 2-How much time passed for the formation of the atom?
- 3-What is the most distinctive feature of the fourth period of the creation?
- 4-How did the nuclei of galaxies form?
- 5-When the temperature was reduced to how many degrees was the creation time of the electrons completed?
- 6-How would you explain the expansion of the universe?

1.2- LAW OF ENTROPY SHOWS THAT MATTER IS NOT PRE-ETERNAL¹¹

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"Everybody who is involved in science seriously, no matter in which branch, will read this writing on the door of the temple of science: "Believe!" Belief is a quality that a scientist cannot give up." Max Planck

LEARNING OUTCOMES OF	PREPARATION QUESTIONS
<p>1-The student knows what nanotechnology is and in which technique it is used.</p> <p>2-He understands the meaning of quantum physics.</p> <p>3-He learns that meaning and spirit are essential and that matter is like a veil on them.</p> <p>4-He understands the meaning of photon telepathy.</p>	<p>1-How would you interpret the statement <i>"According to quantum mechanics, everything in the universe is both present and absent at the same time"</i>?</p> <p>2-What does the following statement remind you? <i>"Matter is actually a thin veil covering the realm of spirit"</i>.</p> <p>3-What thesis of materialism did quantum refute?</p>

According to the hypothesis of materialism called eternity of matter, materialism regarded matter as the basis and dealt with abstract knowledge based on it; it tried to explain existence by attributing divinity to causes and laws of nature. The science of quantum and the fact that the universe that started to expand with the “Big Bang” would end one day upset the theoretical basis of materialism because there is no point in going to perfection in a finite, temporary and ultimately perishable structure.

In order to understand the invisible universe and the invisible universe, it is necessary to present evidence to the unknown acting upon the information that is known. The quantum realm has given us new information about the invisible universe; let us remember it quickly.

1.2.1. What is Nanotechnology?

Before nanotechnology, let us briefly mention the quantum physics, which led to this new technology. Quantum theory is a physics theory that explains the energy in atomic phenomena. When the word quantum is used alone, it refers to a small portion of the energy that a system can change. For example, photon is the quantum of electromagnetic radiation. Quantum theory explains in mathematical terms that energy is not continuous and has levels, and that those levels may change in small steps. For instance, the movement of electrons around the nucleus in their own orbits in an atom, black matter’s emitting heat in small amounts (Max Planck’s discovery of black-body radiation), photon’s electromagnetic radiation (Bohr theory), photoelectricity and the atomic spectrum can be explained by quantum theory. The studies on quantum theory are as follows: Planck’s radiation theory, wave and particle theory, atomic spectrum, wave mechanics, matrix mechanics, uncertainty principle.¹²

Nanotechnology is the science of controlling matter at subatomic levels.

Quantum theory is a physics theory that explains the energy in atomic phenomena.

The goal of Nanotechnology is to allow the molecules to be arranged by divine permission, without the human hand being

Nanotechnology is the science of controlling matter at subatomic levels. Nanotechnology works on the techniques of producing, searching and benefiting from extremely small structural materials. The word “nano” is derived from Greek and also means “dwarf”. A nanometer (nm) is one billionth of a meter, one millionth of a millimeter; it corresponds to the thickness of one thousandth of a human strand of hair. This term of length is used to describe the smallest distances within atoms and molecules. The purposeful structuring of atomic materials and the exploitation of such small structures have led to new opportunities in many areas. Some of those areas are Energy, Environmental Technology, Information Technology, Medicine, Pharmacy. etc. There is no limit between chemistry, biology and physics at the atomic level. Everything is combined in a cross-cutting technology, which means all boundaries will be eliminated in many branches. Nanotechnology manipulates molecules with electric current, magnetism and chemistry, allowing them to take a regular shape on their own. Nature itself is an example here like cells and their duties. In that case, the goal of Nanotechnology is to allow the molecules to be arranged by divine permission, without the human hand being involved.¹³

Nanotechnology has already been used in daily life. Carbon tubes are used in various surgical operations. Self-cleaning cotton fabrics were produced with nanotechnology. In addition to the fabrics that cleaned themselves when they were exposed to the sun and that did not necessitate washing, bulletproof and radiation protective fabrics were produced. This technology started to produce nano materials. The physicist Richard Feynman says, “There is a lot more space below”, indicating that there is a lot more place other than matter that is visible, that everything is not matter and that it started to be questioned.

This field of science examines matter at the nanoscale, where the effect of gravity decreases and the importance of weak forces increases. It tells us that there is a micro world in addition to the macro world but that it has different conditions. For instance, gold does not react with other substances in the macro world but it can react with other substances in the micro world in the nano system. This shows that the behavior of matter changes in the nano system. Water repellent fabric and fragrance releasing fabric can be produced thanks to nano technology.

All these developments emerged in the quantum mechanics of field theories that shook classical physics. The concepts of subatomic physics such as

the uncertainty principle in quantum electrodynamics, anti-matter body, Planck's constant, black-body radiation and wave theory entered into daily practice with nano system. According to the classical mechanical universe, when materialism questioned matter, it was essential in mechanical existence. According to materialism, which advocates the continuity of matter in the classical mechanical universe, no matter is lost and no matter is created. It is also pre-eternal and post-eternal. The classical physics, which advocated them, could not explain photoelectric and black-body radiation. Thereupon, scientists saw that the classical mechanical universe, which is the basis of materialism, was not explanatory. Thus, the concept of the eternity of matter began to be questioned in the 1920s.

1.2.2. The Terrible Truth

When a nucleus found in the atom, which was considered the smallest part of matter, materialists called it the "terrible truth" because there was nothing smaller than an atom. It was as if a new world had been discovered. In 1923, a Frenchman called Louis de Broglie studied the oscillation of light and its wave property in his doctoral thesis. He claimed that light consisted of photons transmitted as waves. According to him, electrons and other atomic particles moved with waves. In 1925, Erwin Schrödinger took the wave part of this claim and applied it to Newton's mechanics. According to this new wave mechanics, electrons appeared not as particles but as diffuse waves in a hypothetical mathematical space. Those assumptions were taken seriously since they showed Planck's oscillations to explain the quantum behavior, the spectrum of the hydrogen atom, and to directly reveal very important quantum numbers. Subsequent experiments also showed the existence of De Broglie's matter waves.¹⁴

The double-slit experiment proved the wave property of electrons, that is, their ability to oscillate.

The double-slit experiment proved the wave property of electrons, that is, their ability to oscillate. According to this experiment, the light is passed through two thin slits and projected onto the screen behind the slits. Light passing through the upper slot and then the lower slot passes through the slot and reflects on the opposite side according to the wavelength. Light appears at the top and at the

bottom according to its passage through the slot. A particle passes from the top of the wave and then from the bottom by burning. Then, it is understood that it does not go straight. The screen shows a pattern of light and dark lines, called interference pattern. It is understood through this experiment that light does not go straight and that it has sinusoidal waves. The same result was obtained when the same experiment was carried out with electrons, protons and neutrons known as particles in classical physics. In 1927, Clinton Davisson and Lester Germer proved that electrons had wave properties too.¹⁵

When it was understood that matter had a wave property, it caused a revolution in physics. Planck's constant was formulated in the 1925s. Erwin Schrödinger's wave theory experiment was conducted and Werner Heisenberg described matrix mechanics.

The use of laser in our daily life and the invention of PED and MRI devices used in medicine were achieved thanks to quantum. The MRI device consists of electron motions. Very short-term radio waves are sent to the human body from outside. The electrons collected in a certain direction are sent by radio frequency waves (RF). The radio waves hitting the hydrogen atoms in the body make spin rotation movement. They absorb energy and return to their previous state. They take a photograph of the tissue by measuring the reaction of water molecules. In other words, the MR of the tissue is taken by measuring the density of the hydrogen molecules in the body. Since the rate of the hydrogen distribution gives the liquid distribution rate in the tissues, an MR image showing which region has less water and which region has more water appears. These magnetic changes are made by measuring the energy change. MR can be said to be the quantum in dressed form.

According quantum theory, the universe consists of waves and particles. For instance, matter consists of oscillation and vibration. Everything in the universe consists of waves and particles. They are based on a name of Allah.

MR is the implementation of quantum. Therefore, those who say that quantum theory is a completed theory are right. According to this theory, the universe consists of waves and particles. For instance, matter consists of oscillation and vibration. Everything in the universe consists of waves and

particles. Their formula emerges with energy, speed and position. When we measure them, we measure the wave function; and the formula of the universe appears. Tolerating small changes in the universe is called perturbation theory. This theory is a theory that contains mathematical methods to obtain an approximate solution for a problem that cannot be solved fully acting upon another problem related to this problem.

Thus, the whole material world is a manifestation and reflection of Allah's name an-Nur (the Luminous Light). That is, all beings are based on a name of Allah.

1.2.3. The Structure of Atom

It is necessary to understand the structure of the atom in order to understand the issue of particle better. There are various forces in the universe that can be called Divine Law: electromagnetic force, weak core force, strong core force, gravitational force. The strong core force is weak at short distances and powerful at long distances. In other words, it becomes intense when it is far away and weak at close range. The gravitational force is called graviton. This force holds all the planets together in the universe. Gluon is one of the fundamental particles of particle physics. They combine with quarks to form basic particles. Gluons interact strongly with quarks. In particle physics, subatomic particles affected by core force are called hadrons. Hadrons are not basic particles but are compound particles composed of fermions called quark and anti-quark and bosons called gluons. Gluons are the carriers of strong interaction that holds quarks together. In the hadron collider experiment conducted in Switzerland, the aim is to generate energy by the breaking down subatomic particles. In addition, another aim is to understand the atom, particle and matter by finding anti-matter in those experiments.

1.2.4. Photon Telepathy or Power of Thought

According to quantum leap, energy transfer occurs as information transfer. To achieve this, subatomic particles are activated. In the experiment conducted in CERN, Switzerland, the aim is to find the

When one of the subatomic particles is moved, an energy like atomic energy emerges.

missing link called subatomic particle. When the missing link is reached, the formula of subatomic particles will be found. Nuclear energy is just one of the subatomic particles; when all subatomic particles come together, an atom is formed. Each subatomic particle forms a separate energy band. The main aim in subatomic particle physics is to try to find the particle that goes faster than the speed of light. For this purpose, the Hadron collider experiment was conducted in Switzerland.

A twenty-seven-kilometer-long tunnel with a diameter of 3.8 meters was dug a hundred meters below the ground for the Great Hadron Collider experiment in Cern, Switzerland. The photons were collided at a speed close to the speed of light by using lead ions in the magnetic field with special helium cooler. Subatomic particles were attained as a result of this experiment, which was likely to form a black hole. When one of the subatomic particles is moved, an energy like atomic energy emerges. The aim of this study is to find a powerful energy source.

In the Hadron Collider experiment, a phenomenon called photon telepathy emerged. An incredible incident took place in the experiment in Cern. The same experiment was conducted at a location ten kilometers from Cern and in a headquarters in Chicago. Similar photons were produced in all three locations. The photon in Cern was analyzed and moved. It was observed that the photon in ten kilometers away and the one in Chicago moved in the same direction and at the same time though the same experiment was not conducted in either of those places. In this experiment carried out in three different places in subatomic particle physics, it was revealed that the particles were connected with each other and there was a simultaneous relationship between them. Particles in the same magnetic field do the same motion even if they are thousands of kilometers away. It was revealed by experiments conducted at different locations that particles are interconnected in subatomic particle physics. This experiment shows that there is a speed faster than the speed of light.

The wonders that were revealed in the research on subatomic particles show that atoms and subatomic particles are subject to a divine system and that they are controlled wonderfully from a single source.

The experiment is conducted as follows: The light emitted from the laser is passed through a special crystal. As it passes through the crystal, the photon is divided into two. Two low-energy photons are produced. On the other hand, a semi-reflective mirror is placed against the photon. A part of the photon is reflected on the mirror and a part passes through the mirror. When this experiment is conducted, the photons in other places behave in the same way at the same time. Until this experiment, according to the thesis of physics, no signal could go faster than light. They said if there was a speed faster than light, physics would end. The thesis "*No signal can go faster than light*" was turned upside down. The marked photons performed the same behavior simultaneously, independent of time. When one of them moved toward a direction, the others turned toward the same direction. This astonishing incident was called the incredible experiment.

All this shows that atoms and subatomic particles are subject to a divine system and that they are controlled wonderfully from a single source.

The Experiment That Upset the Principle of Causality

Acting upon this experiment, theoretical physicists developed the thesis "*Knowledge goes faster than light*". This upset the principle of causality. In the principle of causality, a result (effect) occurred based on cause. The lamp would not go on if you did not turn on the switch. If the causality principle were not valid, it would be possible to turn on the lamp by thinking and without turning on the switch. The schizophrenic claim "I turned on the light with thought" suggests that it can be realized experimentally.

Information transmission experiments started to be conducted after it was understood that information or imagination traveled faster than light. An astronaut experiment is conducted theoretically. In this experiment, there is an astronaut on a planet a light year away. If some information is sent to him from a laboratory in the world, it will reach him after a light year. However, a fiber optic circle is made and photons are rotated in the circle. The same system is built next to the astronaut, where photons rotate inside a fiber optic tube. When those two devices move at the same time, when the information is sent by moving the direction of the photons of the device in the world, the direction of the photons next to the astronaut one light year away will be changed. When the astronaut sees it, he will know that there is a message. The message will be sent with a system like the

Morse code. According to this thesis, the theory has been accepted and has become a hypothesis. A language is formed according to quantum harmony.

4% of the universe is matter and 96% is dark energy. It is thought to be energy, but it is described as dark because it is not seen. It is energy that is independent of light and that does not work like photons. Scientists are trying to find that dark matter. 96% of the universe is now oscillating and vibrating from this dark matter. In quantum dynamics, they are all wave functions.

1.2.5.Introduction of the Physics of Creation

When atomic nuclei are broken down and a faster particle is found, that particle will be defined. When physics first started, it was thought that physics would end where the speed of sound ended. Then, it was said that physics would end where the speed of light ended. Particles faster than light were found in theoretical physics and subatomic particle physics, which in turn means the emergence of a new field of physics. In a sense, this will be physics of creation. The particles that travel faster than light in the world may serve to show the existence of luminous, that is, spiritual beings and angels.

Can a great source of energy like nuclear energy be found and used for the future of humanity? Or will it become a weapon? Research continues along with these questions.

In order to understand the issue of the transformation of atoms from one state into another, it is necessary to know the point physics has reached.

An example for the transformation of atoms from one state into another is the formation of water. Water forms by the combination of oxygen and hydrogen atoms. Initially, the hydrogen atom is

Particles faster than light were found in theoretical physics and subatomic particle physics, which in turn means the emergence of a new field of physics. In a sense, this will be physics of creation. The particles that travel faster than light in the world may serve to show the presence luminous, that is, spiritual beings and angels.

flammable and the oxygen atom causes burning. When those two elements come together and form the blessing of water, which is the source of life, their state changes.

Similarly, the reactions of chlorine (Cl^-) and sodium (Na^{++}) elements can be given as an example. The sodium chloride (NaCl_2), that is, table salt, is formed when they are brought together and their state changes. The chlorine and sodium ions change state and the formation of a blessing with a new and different reaction is provided.

Thus, when elements are changed from one state to another, some existing properties are eliminated and some non-existing properties are created due to some wisdom.

The transformation of elements from one state into another and their formation within the framework of certain laws show clearly the existence and oneness of a being who controls all elements with His power and changes them from one state to another with His knowledge, will and power.

1.2.6. Quantum Electrodynamics and Man's Free Mind

The brain is constantly in dynamic relationship with quantum resonance. The physicist Sir Roger Penrose, the author of *The Emperor's New Mind*, is the one who suggested the connection between the mind and quantum mechanics. Hammeroff (2003), on the other hand, made expansions about the quantum consciousness model proposed by Nick Herbert in 1993. He put forward that microchannels in brain nerve cells could work like computer networks and that they would display the work performance of the brain with the movement of voltage-dependent ion channels. Quantum mechanics explains that man has a personality with a free mind and will rather than being an automatic and biomechanical creature.

According to quantum electro dynamics, the universe is a single and indivisible whole like a hologram. The smallest part has the characteristics of the big part. Quantum leaps, which come in the form of quantum-like general thinking and inspiration, are

According to quantum electro dynamics, the universe is a single and indivisible whole like a hologram. The smallest part has the characteristics of the

big part. Quantum leaps, which come in the form of quantum-like general thinking and inspiration, are reasonable.

In conclusion, there is neither a mind separate from matter, nor matter separate from the mind. Matter is only a showcase. The spirit can be a wave function. Ten nanometer-long proteins consisting of mini proteins carry chemicals. Emotions such as love, anger, hate, fear and trust have chemical equivalents. Probably Divine Power has commanded to our consciousness to carry the relevant chemicals in quantum electrodynamics through subatomic particles. According to brain measurements, man's "free mind and free will" acts with the do-undo paradigm.

All alternative choices are kept together in a brain that is operated according to quantum principles. When an appropriate stimulant arrives, one of the options is preferred. The rejection-acceptation and build-do paradigm in man's decisions and preferences can be defined with quantum mechanics.¹⁶

Matter is actually a thin lace veil strewn over the inner and spiritual realms.

Man makes his choice in every deed of his when basic energy comes, not when energy is gone. Man decides whether to do or not to do something. Accordingly, energy continues after that. Quantum keeps all of the alternative choices in man together, and when an appropriate stimulus comes, man chooses one of the options. That is how man makes his decisions and choices. In other words, decisions are made by the will, which is the selection mechanism placed in man by the Perfectly Wise Creator.

Classical physicists argued that nothing could go faster than sound. Physicists like Hawking argued that nothing could go faster than light. However, according to the latest information in quantum, the view that information travels faster than light has emerged. The brain is a closed system containing energy and information, but it is also an open system that produces symbols and meanings because it is in open communication with the universe. According to quantum mechanics, everything in the universe is both existent and non-existent at the same time. When it is viewed as a subjective observer, it exists and it disappears when it is not viewed as a subjective observer. It is related to the perception within the nano system. One can either see something or not. That he does not see

something does not mean that it does not exist. That system also exists outside that person; so, nothing is non-existent. It is related to man's being an observer.

1.2.7. Materialists Thought They Would Reach the Secret of the Universe as Matter diminished

The materialists thought that they would reach the secret of the universe as matter diminished but they were disappointed. Stephen Hawking thought he could find a formula to explain the whole secret of the universe, but he found that as matter got smaller, it got more complicated. A large world of energy was discovered as atom, which was thought to be indivisible and unbreakable, was disintegrated, and subatomic particles were analyzed. As details were examined, rules and laws became more complex and richer. Downsizing did not cause information to be reduced and simplified, but to increase.

A large world of energy was discovered as subatomic particles were analyzed. As details were examined, rules and laws became more complex and richer. Downsizing did not cause information to be reduced and simplified, but to increase.

Badiuzzaman Said Nursi describes it as the increase of the intensity of the spirit and states the following: *“Should it be ascribed only to matter and the motion of matter, and be explained by it? God forbid! Absolutely not! These innumerable distillations and flashes demonstrate that this material and manifest world is but a lace veil strewn over the inner and spirit worlds.”*¹⁷

Matter is actually a thin lace veil strewn over the inner and spiritual realms.

1.2.8- Spirituality is Essential, not Matter

Materialism, which is based on matter, said that the essence emerged later, that is, abstract knowledge was reflected from matter. Research has shown that matter is not essential. Matter is a veil on the spirit. We can explain

The value of a computer is determined based on its software part, not the hardware part. Likewise, the value of matter is the information written in in. The meaning in matter is important. What makes a fig important is the information written in its seed.

that matter is a veil on the spirit by giving the computer as an example. What makes a computer valuable is not its case, electronic circuits, monitor, keyboard, accessories. What makes a computer special and important is the card and software part of it. The value of a computer is determined based on its software part, not the hardware part. Likewise, the value of matter is the information written in it. The meaning in matter is important. What makes a fig important is the information written in its seed because that information is very valuable and needs serious protection. If it is not protected, the species of fig will end. For instance, when a company produces a device, it protects the production information with special red codes to prevent it from being imitated. If it gives the information, it will have given the copyright; in that case, it will lose its value and control. What makes matter valuable is the information written in it. Materialism, which accepts matter as the basis, accepts information as the result of matter. However, as it is seen in the example of computer, it is explained that the universe is a software according to quantum dynamics and that matter can be converted into digital format. That all materials such as stone, earth, pencil and paint can be converted into digital format indicates that matter is not essential and that what is converted into digital format is meaning. Matter is a shell that is placed over science and software as packaging material. Thus, the source of matter is meaning, which proves that meaning is essential. Thus, quantum refutes the thesis of materialism that “matter is essential”.

When a person dies, his body disappears but his spirit is preserved. All of the information inside a computer can be saved to a flash memory and the computer can be discarded. When a person dies,

Although the cells in the human body change at certain periods, the information stored in man’s memory throughout his life remains unchanged, which shows that information is loaded onto the spirit, not the cells.

In the 1920s, when neither computer technology nor electromagnetic waves were known, Badiuzzaman Said Nursi stated seriously that matter was not the essence but the result in creation under the name spirit, life and meaning, that spirit was the meaning and that spirit was preserved when man died though his body was destroyed:

“If anyone studies his own life and self, he perceives an immortal spirit. Indeed, in the course of occupying its body for a number of years the spirit causes the body to change considerably, yet the spirit self-evidently remains constant. In which case, although the body is ephemeral, it does not affect the spirit’s permanence, nor spoil its nature, even though the spirit is completely naked at death. However, in the course of life, the spirit gradually changes its body-clothes, and at the time of death, it is suddenly undressed.

It has been established through certain conjecture, indeed, through observation, that the body subsists through the spirit; in which case, the spirit does not subsist through the body. Rather, since the spirit subsists and is dominant of itself, the body may be dispersed and gathered together again as it wishes; it will not infringe the spirit’s independence.

In fact, the body is the spirit’s house, it is its home; it is not its clothes. What clothes the spirit is a subtle, fine sheath, something which may be likened to a body, which is to some extent constant, and is ethereal and appropriate for the spirit. At the time of death, then, the spirit is not completely naked, it leaves its home dressed in its body-like sheath”¹⁸.

All of the information inside a computer can be saved to a flash memory and the computer can be discarded. When a person dies, his body is buried under the ground, but the information he developed throughout his life can be kept in the flow of the universe as a file of meaning. Therefore, the survival of the spirit is possible. The computer does not consist of the case, the monitor and the keyboard, that is, its visible material part; it also has software; similarly, man also has a part related to meaning. That part is his spirit, his life and his consciousness.

Another Feature in the Universe is That it Has the Inclination to Develop

Perfection, that is, to go to perfection, to achieve maturity is in question in the whole universe. In other words, the law of gradual perfection prevails in the universe. All beings are gradually perfected in themselves through a divine law wisely.

Man has a tendency to evolve, to go to perfection, to achieve maturity. His emotions, thoughts and feelings also go to perfection. Man also has an inclination toward happiness, that is, pleasure and the pursuit of entertainment.

The factor that makes the reward-punishment system work in the brain is not the expected rewards or salary but surprises. Unexpected rewards make the

reward-punishment system in the brain work more. As a requirement of wisdom, there is a system that works in the form of turning toward rewards and avoiding punishment in the brain.

There is nothing wasted in the universe. Many inclinations in man such as inclination to bliss, perfection and eternity indicate the existence of an eternal life.

Man has the characteristic of choosing and preferring the shortest way, the closest aspect, the lightest form and the most beautiful quality. Efficiency and perfection, lack of vanity and waste are a feature seen in the universe. If there is no hereafter, all this created perfection and works of art will be wasted when the universe comes to an end.

If the Creator gives man an inclination toward perfection and happiness and destroys him after sixty years, it means either the power of the Creator is limited or it has a different meaning. However, all attributes of the Creator are infinite like His will, power and knowledge. Since the Creator declares that He will send man from this limited world life to an eternal realm, it is necessary to listen to that glad tiding and act accordingly. In fact, the feelings like the desire for eternal love and affection, the desire to have eternal property in man also indicate eternal life.

For example, if a person who builds a skyscraper does not make plans for the long life of the building, it is contrary to the investment; it shows that he has no power. If he had power, he would want the skyscraper to survive until Doomsday. If he builds a skyscraper that can endure for fifty years for a life of only ten years, it means he is wasting and he is not intelligent. If the Creator does such a perfect thing and if He is able to do it to live infinitely, He will do so. Since He is able, the Hereafter exists.

1.2.9-This World, Which is the Visible Realm, is Like a Veil over the Life of the Hereafter

This apparent material world life is not essential. It is like a veil over the life of the eternal and unseen hereafter. In other words, when we look carefully at the structures and conditions of the beings in the world, the existence of the hereafter is clearly seen behind this world life, which is like a veil.

Dialogue of Two Babies and Logic of Afterlife

The comparison of concept between the life of a child in the womb and the world life is likened to the comparison between the world and the hereafter. The similarities between the view of a child in the womb on the world and the view of

a person in the world on the Hereafter and similar mistakes are dealt with as follows in the “Twenty-Ninth Flash” written by Badiuzzaman Said Nursi:

“Similarly, a child who comes to the world from the womb of his/her mother attains the happiness of the world in return for the suffering in the tunnel.

Back direction: If those who come from behind are viewed from philosophical viewpoint, the following question cannot be answered: ‘Where are they coming from and where are they going? Why did they come to the world?’ Therefore, it will bring about astonishment and hesitation. However, if they are viewed through the glasses of belief, it will be understood that they are sent to the world by the Pre-Eternal Sultan to see and meditate on the miracles of the divine power displayed in the exhibition of the universe.”¹⁹

After passing through a narrow and troubled tunnel, a child in the womb attains the light and bliss in the world. Before the child is born, he questions the existence of world life while he is still in the womb. Let us narrate this questioning with a story:

There are two babies in the womb and they try to analyze postnatal life by talking to each other about the life after the womb. The first baby:

—We will not stay here permanently; we will move on to a life where we will remain permanently after birth. Everyone knows this life. We must be prepared for that life; we must strengthen ourselves against the things will happen after birth.

When we look at the unborn baby, we see that he makes some movements that he does not need there. For example, he sucks his thumb, makes a sucking movement with his lips, swallows the water in the womb though it does not have any nutritional value, makes it go round his body and takes it out. Thus, he makes his stomach and intestines work, exercising for digestion after birth. He activates the speech center of his brain with lip movements.

Prenatal psychology examines psychology before birth. In this branch of psychology, they compare children born through normal delivery with those born by cesarean delivery. They prick a needle in their heels and look at the stress hormones. It is observed that less stress hormone is secreted when the needle is inserted into the heel of the child that passed through the birth canal with difficulty, and stress hormone is secreted by the child born by cesarean section. It

is understood that the distress and difficulty experienced while passing through the birth canal gives the child endurance.

The first baby continues to question:

- Since we don't use organs like arms, legs, ears and eyes here, it means we will need them after we leave here.

The second baby says:

- No, I don't think so. It's all here, and I don't think there will be another life later; and I don't think of that life.

The first baby continues:

- Since a mouth is given to us, it means there is food; since eyes are given to us, it means there is light; since we move our lips, it means we will talk; we have an umbilical cord, which means that there is someone who feeds us.

This baby makes predictions about the next life based on the behaviors in the womb. He collects evidence from life in the womb for postnatal life. He says that the existence of postnatal life is more likely than its non-existence. The second baby continues to deny:

- I look at the present day. I believe in what I see; I don't believe in what I don't see.

The first baby says he believes there is a mother:

- I don't see her, but I believe there is a mother because she feeds us with the umbilical cord; she doesn't allow us to catch a cold; there's a force that protects us from being ill.

The second baby denies it:

- I don't see a mother. Why should I believe? If she existed, we would see her.

The first baby continues to say how she feels about the mother:

I sometimes hear a voice, a song when it is silent around. My intuition says that there is someone who loves me. Sometimes I feel she caresses me.

The other baby continues to deny by saying that some things happen by chance. That discussion takes place between the two babies.

A similar dialogue will emerge when we consider the talk between two people one of whom believes in the Hereafter and the other does not, just like those two babies. When the person who believes in the Hereafter looks at his

desire for eternal life, it makes no sense that everything will end after death. Food, drinking, saving money and being rich, etc. become meaningless.

If the feeling of hunger in the stomach shows the food, if to see something beautiful shows the feeling of love and leads man to perfection, if the permanency of this system disturbs man and makes him want eternal bliss, they all show that eternal life is necessary. Man's spirit will be satisfied only by eternity; his psychological needs will be met only by eternal bliss.

The existence of a power that we cannot see but we can feel, that protects us from dangers, whose help we feel when we pray at critical times is much more likely than its non-existence. The feelings, organs, ways of reasoning, reason in man indicate that it should exist. Therefore, the existence of the Hereafter is the closest view to reason and reality. If there is no life after this world life, there is no point in living in this world.

EVALUATION QUESTIONS

- 1-What is nanotechnology and what techniques does it work on?
- 2-What kind of changes in the understanding of physics did the realization that matter had a wave property cause?
- 3-What is Hadron?
- 4- What is faster than light?
- 5-Which thesis of materialism did quantum refute and how?

CHAPTER 2

2.METAPHYSICAL REALM IN UNDERSTANDING THE CREATION

2.1.LUMINOSITY AND QUANTUM REALM²⁰

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"Belief in the Creator of the Universe is the strongest and noblest stimulating power of the scientific research." Albert Einstein.

LEARNING OUTCOMES	EVALUATION QUESTIONS
1-The student understands what double slit experiment is. 2- He learns that the electron has particle and wave characteristics. 3- He learns the nature and logic of being in more than one place at the same time. 4- He understands thinking of meaning and the material realm together.	1-When was it discovered that the electron has both particle and wave properties? 2-'What is meant by the theory of "parallel universes"? 3-" <i>In the subatomic world, the concept of space is losing its meaning along with the concept of time.</i> " What is meant by that statement?

2.1.1.Matter, Energy and Luminosity

The physical world that we know consists of energy. In the first phases of the big bang that is estimated to have taken place 13.7 billion years ago, there was

only energy. In that phase, everything was inside everything; and it was not possible to talk of taking up volume. In the fractions of the first second of the big bang, elementary particles like quark and gluon formed as a result of the sharp fall in temperature and the condensation of energy; then, protons and neutrons formed as a result of their combination. The formation of the electrons and the transformation of the most of the particles into energy again as a result of the matter-antimatter interaction took place in the first second. The temperature fell to one billion degrees in the first minutes and some protons and neutrons combined to form the nucleus of helium. However, most of the protons continued to exist as hydrogen nuclei. According to the calculations, 379 thousand years after the big bang, the nuclei and the electrons combined to form atoms (mostly hydrogen); matter and energy started to disintegrate. The energy that was not transformed into matter due to some wisdom continued to exist as cosmic background radiation²¹.

Matter is a condensed form of energy; and matter and energy can be transformed into each other as it is stated by the famous formula of Einstein: E

Matter consists of molecules; molecules consist of atoms and atoms consist of subatomic particles like electrons, protons and neutrons. Matter is a condensed form of energy; and matter and energy can be transformed into each other as it is stated by the famous formula of Einstein: $E = mc^2$. It can even be said that matter is a condensed form of energy, which has lost its subtlety. Two basic properties of matter are as follows: it has mass and it takes up space. Therefore, matter is defined as ‘anything that has mass and takes up space’. Matter and energy are physical beings; both are subject to laws of physics; both can be observed and measured. However, unlike matter, energy (like the light from the sun) does not take up space and it has no fixed mass (it has the equivalent mass calculated by the formula of energy: $E = mc^2$). That is, unlike condensed matter, energy is a subtle being that has no mass and that does not take up space on its own. However, as a physical being, it is subject to some limitations – for instance, the speed of electromagnetic radiation cannot exceed the speed of light.

Quantum theory is dominant in the subatomic world and Einstein’s theory of relativity is dominant in

Matter and energy are two components of the same whole and they are virtually sources of each other. In the sun, matter constantly turns to energy and the solar energy travels to the world in the form of heat and light with a speed of 300 thousand kilometers per second. That is, matter turns to something that has no mass and that does not take up space (antimatter) and travels at a speed that matter can never reach. Then, it can be said that matter and energy that form the visible, physical world and whose existence are certain through observations are not the same kind of beings. One of them is condensed and the other is subtle. The subtle things are beyond time and space to a certain extent; subtle things are also called half-luminous things. If there exists the state of subtlety or half-luminosity, which is a state of being partly conditional, then, there exists the state of full luminosity and nur, which is an extension of that state and the state of being completely free from the conditions of time and space.

Then, it is necessary to classify beings in a scale of subtlety-density beginning from full luminosity to full density and to regard beings as a combination of nur and matter. It is certain through observations that luminosity is dominant in the subatomic level in the beings and density is dominant in the supra-atomic level. For instance, both the place and speed of the

Luminosity is dominant in the subatomic level in the beings and density is dominant in the supra-atomic level. For instance, both the place and speed of the tennis ball, which is a supra-atomic condensed being, can be measured with precision. However, the speed and place of the electron, which is a subatomic subtle being, cannot be determined. If its speed is certain, its place is not certain. That is, it is either nowhere or

tennis ball, which is a supra-atomic condensed being, can be measured with precision. However, the speed and place of the electron, which is a subatomic subtle being, cannot be determined. If its speed is certain, its place is not certain. That is, it is either nowhere or it can be anywhere. It can even be in two different places. However, the probability of the electron to be in some places is higher; and this probability distribution is expressed in the form of a wave function. This phenomenon is known as ‘the Heisenberg uncertainty principle’ in physics. That is why the quantum theory is dominant in the subatomic world and Einstein’s

theory of relativity is dominant in the supra-atomic world; and a theory to combine those two theories has not been put forward yet despite all efforts. Some phenomena were tried to be explained by some approaches like non-physical parallel universe or multi universe but it has not been possible to reach a conclusion because the concept of illumination was not put forward clearly.

We imagine the electron as a particle but it is also a wave – just like electromagnetic waves. The wave property of the electron is seen clearly in interference experiments. That is why the dilemma of particle-wave property in the subatomic world is one of the cornerstones of the quantum mechanics. That is, electrons and other subatomic particles sometimes act like a particle and

sometimes like a wave. Then, it can be said that subatomic particles are neither particles nor waves because they are different properties. For instance, the sound spreads in the air as a wave; the bullet from a gun moves as a piece of mass. The opposites of them are

The dilemma of particle-wave property in the subatomic world is one of the cornerstones of the quantum mechanics. That is, electrons and other subatomic particles sometimes act like a particle and sometimes like a wave. Then, it can be said that subatomic particles are neither

not possible. Similarly, a fruit cannot be an apple and a pear at the same time. If it can be, then, that fruit is neither an apple nor a pear. Then, subatomic particles must be such things that they should be able to be manifest in two opposite characteristics – both as waves and particles). That can only be achieved by keeping away from density, that is, by being close to luminosity.

A similar argument can be presented for light, which is generally an electromagnetic wave but which also shows the property of particle (photon).

The subatomic particle neutrino, which is much smaller than the electron, is so far away from being dense that it is virtually between existence and non-existence; and it is difficult to measure

The subatomic particle neutrino, which is much smaller than the electron, is so far away from being dense that it is virtually between existence and non-existence; and it is difficult to measure it. It will be seen that the particle of Higgs, also known as ‘the god particle’, whose existence is tried to be proved in the

experiments of CERN, is closer to luminosity due to its smallness – if it can be measured.

Unlike the dense beings like tables and chairs that are made of matter, subtle beings made of energy (for instance, light) have no mass and they do not take up space. They settle where there are other things. As a matter of fact, there are hundreds of broadcasts in the same point in the form of electromagnetic energy in the air but there is no jam. All of them travel through one another with a speed of 300 thousand km per second. That is, they can travel round the world a few times in a second and they can virtually be everywhere at the same time.

Most of the universe that we live in is not in a physical state but is known scientifically; it can only be seen through the eye of the

Similarly, a lamp is something that has mass and that takes up space; therefore, it is dense. However, the light coming from the lamp has no mass; it does not take up space and it has no certain place – it is virtually everywhere. However, the intensity of the light decreases as it moves away from the lamp.

The closest form of matter to luminosity is probably dark matter and the closest form of energy to luminosity is dark energy because dark matter and dark energy exist scientifically but they have not been observed experimentally. Calculations show that it is impossible for the force of gravity that keeps the stars in galaxies together to be realized by the mass that is seen. Then, a kind of unseen matter called “**dark matter**” must be providing additional force of gravity. Dark matter does not give, absorb and reflect light. It does not consist of electrons, protons and neutrons. Besides, the observations of the Hubble Telescope in 1998 showed that the expansion of the space does not slow down due to the force of gravity; on the contrary, it speeds up. Astrophysicists have concluded that it can be caused by a mysterious type of energy that is called “**dark energy**” but that is not known by anybody. It is not possible for this acceleration effect to be caused by anything that exists in the universe now. The view that is seen as a result is that about 70% of the universe consists of dark energy, 25% dark matter, and the remaining 5% consists of the normal universe that includes everything including the neutrinos that can be observed through devices. It means most of the universe that we live in is not in a physical state but is known scientifically; it can only be seen through the eye of the mind.²²

The smokeless fire, that is, type of matter or energy for whose existence there is no physical sign, mentioned in the following verses of the Quran is probably dark matter/energy: *'We created man from sounding clay, from mud molded into shape; And the Jinn race, We had created before, from the fire of a scorching wind'*²³ *'And He created Jinn from fire free of smoke.'*²⁴ In the future, with the development of science, those who will be able to control and use dark matter and dark energy might be able to rule the jinn too, using them for tasks that we cannot even imagine today. As a matter of fact, the verse mentioning the transportation of the throne of Balqis,

*"Said an Ifrit of the Jinn: "I will bring it to thee before thou rise from thy Council: indeed, I have full strength for the purpose, and may be trusted." Said one who had knowledge of the Book: "I will bring it to thee within the twinkling of an eye!"*²⁵ and the verse expressing that Hz. Sulayman (pbuh) governed the jinn and devils and made them do useful deeds, *"And of the evil ones were some who dived for him, and did other work besides; and it was We Who guarded them"*²⁶ and similar verses point out to that issue. Badiuzzaman Said Nursi draws the following lessons from those verses:

*"The jinn, the most important inhabitants of the earth after man who are conscious, may serve man. Contact may be made with them. Devils too may be compelled to give up their enmity 'and whether they want to or not made to serve. Thus, Almighty God made them 'subject to one of His servants who was obedient to His commands. And through the allusive tongue of the verses, in meaning Almighty God is saying: "O man! I made the jinn, devils, and their evil obey one of My servants who obeyed me. If you too are subjugated to my commands, numerous beings, and even jinn and devils, may be subjugated to you Thus, these verses trace the final limit of this, like spiritualism, the attraction of spirits, and conversing with jinn, which have been strained from the blending of art and science, and have appeared out of their extraordinary material and spiritual sensitivity. And the verses specify the most beneficial form of these and open up the way to them."*²⁷

2.1.2. Quantum Mechanics and Luminosity

The most famous experiment that characterizes the strange actions of the particles in the quantum world and that shows being present in more than one

place at the same time is the **double-slit experiment**. If a small slit is opened in the front one of the two parallel walls and if a tennis ball shooting machine shoots out tennis balls toward the wall at the front, the balls that come to the slit will pass to the wall behind and the marks of the balls will form a band on the wall at the back. If the walls are flooded with water up to the line and if waves are formed one after another on the surface of the water, the waves that reach the slits will move on and hit the wall at the back. When there is one slit, there will be no problem. However, in case of two slits, the waves that pass through two slits will undergo interference and, in the places where two wave crests clash, the height of the wave will double and, in the places where a wave trough clashes a wave crest, the two waves will eliminate each other. In the end, in the places where strengthened wave crests hit, a series of interference bands, which are dark in the middle of the wall and get light toward the sides, will form. That is, when waves pass, a series of bands will form instead of two bands.

When the experiment is repeated with an electron gun, in case of one slit, the electron marks that hit the wall at the back form a single band on the part of the wall that is right behind the slit just like the tennis balls. That is, electrons act like small balls. However, when two slits are opened on the wall at the front, a series of interference bands whose intensity decrease form just like in the experiments with water waves, instead of two bands when moved from the center to the sides. That is, electrons pass through the same hole at the same time just like the waves. When the experiment is repeated with only one electron, a band of interference forms on the back wall; and this definitely shows that the electron passes through the same slit at the same time as a wave. That is, electrons start their action as particles and when they see the two slits on the wall, they virtually turn to waves.

More interestingly, when a measuring device is placed at the back of one of the slits in order to see which electrons pass through a certain slit, electrons pass through one or the other slits in the form of particles and form two hitting trace bands on the back wall as if they know that they are being observed. The observation virtually causes the statistical wave function of the electron to collapse and reduces it to a particle. Electrons virtually feel the intention and will of keeping themselves in a certain position, that is, condensing and they become subject to that will as if they have been enchanted.

When light (massless photon particles) is used instead of the electron, the same things are observed. That is, the light sometimes acts like a particle and sometimes like a wave. The experiments were done with atoms, whose masses are quite large compared to electrons, and the same results were obtained. That is, the characteristic of luminosity, which necessitates being in more than one place at the same time, can show its effect even in the dimension of atoms. However, when the experiment is done with bullets from an automatic gun, the bullets act like particles no matter how small the bullets are. That is, when matter exceeds the dimension of atom, it loses the characteristic of luminosity rapidly.

The characteristic of luminosity, which necessitates being in more than one place at the same

One of the theories that is put forward to explain the fact that subatomic particles can be in more than one place at the same time and that is widely approved is the theory of “**parallel universes**”. According to this theory, particles are present not only in the universe that we know but also in numerous ghostly universes that are intertwined with our universe; and they shuttle among those universes. That is, when they disappear in one, they appear in others. It seems that if the thought of luminosity is not accepted, it will not at all be easy to explain the property of luminosity without using its name. In fact, it is reasonable to prefer the easy one to the difficult one.

2.1.3-The God Particle

The subatomic particles like electrons and neutrinos, which are the building blocks of matter, act more like waves although their names are particles, and a place cannot be attributed to them. According to a distribution principle, they are virtually in many places. Therefore, in the subatomic world, subtlety, that is, luminosity, rather than density is dominant. Since it is taken into consideration that the source of the existence of matter is the vibration of a luminous divine power, it is not at all surprising that luminosity is essential in that micro-universe. The problem is not in the clearly observed subtlety of the particles but in the density of the minds. In other words, since the minds of those who search for everything in matter became so focused on matter, that is, they got hard like stone

by moving away from spirituality, they cannot see the manifestations of luminosity in the spiritual realm.

It is significant that the Higgs particle, which is claimed to be the essential building block of the universe and which is expected to be observed in the experiments in which particles are clashed at speeds close the speed of light in CERN, is given the name “**the god particle**” in the world of science as a meaning that is reflected in the consciences. A luminous mind is necessary in order to be able to see and to understand such a half-luminous particle that comes from luminosity and goes toward density. The work of particle physicists, who have not yet settled the confusion caused by the electron that passes through two slits at the same time, is really difficult. Maybe, this particle, which comes from luminosity, will enlighten many minds. As particles move away from the luminous source, which is their field, as particles unite and form bigger particles and as heavy atoms like iron form, density occurs and the rules of the visible realm, in which time and place limitations are in question, start to be dominant.

2.1.4-The Collapse of the Concept of Time

The double-slit experiment explained above shows that the concept of place has collapsed in the subatomic quantum world. Another famous experiment of the quantum mechanics is the **entanglement** experiment which

In the subatomic world, the concept of both space and time lose their meaning; the property of timelessness and spacelessness, that is, luminosity comes to the forefront

shows that the concept time has collapsed. The subatomic particles produced at the same time are always in contact with one another no matter how far away they are from one another. This is called entanglement in quantum mechanics. For instance, if one of the two electrons that are in the state of entanglement is exposed to

As the dense physical beings go down to the dimension of atoms, they become luminous; as they go down to the fundamental subatomic particles, the conditions of density disappear and luminosity becomes the main character. To understand the true nature of the things is possible by

something, its twin reacts immediately even if they are light years away from each other. That is, time virtually stops and a timeless communication takes place. Einstein opposed the idea of entanglement because it is impossible to exceed the light speed (which is true for supra-atomic dense beings) but the phenomenon of entanglement, which is one of the basic concepts of quantum mechanics, was experimented in distances more than 10 kilometers and it was confirmed to be true. That is, in the subatomic world, the concept of both space and time lose their meaning; the property of timelessness and spacelessness, that is, luminosity comes to the forefront.

Under the light of the basic concepts of Quantum mechanics and many independent experiments done with subatomic particles, it should be accepted and declared that luminosity is a physical phenomenon for the subatomic world. The basic element to combine the theories of quantum and relativity that are valid but opposite to each other in the subatomic and supra-atomic worlds of the same universe is luminosity; that is, timelessness and spacelessness. If these two theories are combined, the quest for a “combined theory” will end; and the strange state of the existence of two different theories for the same universe will end.

It seems that as the dense physical beings go down to the dimension of atoms, they become luminous; as they go down to the fundamental subatomic particles, the conditions of density disappear and luminosity becomes the main character. To understand the true nature of the things is possible by understanding the concept of luminosity and using it properly. Otherwise, the theory of ‘**parallel universes**’, in which the existence of numerous ghostly universes that are intertwined with one another and in each of which different laws of physics are present will have to be accepted; this will be very difficult and confuse us instead of leading us to the truth.

Thus, the reality of all sciences is connected with the manifestation of a name of God Almighty, depends on that name, relies on it, and is a mirror to it. The more progress is made in science and the more beauties are shown, the more beauty and honor of the name to which it is connected will be shown

All physical and chemical incidents in the realm of luminosity in the subatomic world reveal the secrets of the realities of the names of Allah.

2.1.5-Subtlety and Density: To Be in Many Places at the Same Time

People usually limit their thoughts by their previous knowledge and experience, and they have difficulty in accepting things that they have not personally experienced with their five senses. The common general knowledge of humanity that is based on numerous observations and experiments and that is tested and confirmed is expressed as “laws”. For instance, what blocks the perpetual machines and does not give them a chance is the law of the conservation of energy, which is a law of physics like that. However, these universal laws and principles can cover and hide some subtleties and there may be stronger laws hidden in depths of those subtleties that are overlooked. For instance, according to the Newton laws, which form the foundations of classical physics, time and space are independent; and the watch of a person on the ground and the watch of a person flying on a plane at a speed of 1000 kilometer/hour show the same time. That is, the observations in macro cosmos confirm Newton. However, when the speed of light is approached, time starts to slow down. In a satellite that turns round the earth with a speed of 30 thousand kilometer/hour, the time difference originating from the speed has to be taken into consideration. That is, in situations where very high speeds are in question, we need to deal with the events through the principles of Einstein’s modern theory of relativity – though we do not understand how it happens – not Newton’s classical physics rules. The issue of time’s dependence on space, which made Einstein the father of modern physics, has become an ordinary fact in our age today.

It is definite by our experiences that an apple can only be in one place at a given time. If it is in the fridge, it cannot be on the table; if it is on the table, it means it is no longer in the fridge (I wish it were; it would help the budget of the families a lot). However, as it has been explained above, in the level of subatomic particles, this fundamental fact starts to be invalid.

For instance, in one of the classical experiments in particle physics, there is a piece of paper with two holes; an electron passes through the paper from the two holes at the same time – it is like a person entering a house through two different doors of the house at the same time. That is, one thing can be in more than one place at the same time. The phenomenon of being in more than one place, which our minds have difficulty in understanding, is one of the basic principles of quantum mechanics in physics.

It is really difficult to understand this when beings are regarded as matter only and when the space and time limitations in matter are taken into consideration; even geniuses like Einstein could not accept it. The way of understanding the reality of being in more than one place at the same time is to understand luminosity and the concept of subtlety, which is a reflection of luminosity on matter.

The materialistic approach, which limits beings with things that can be put into laboratories, that can be subjected to experiments and measured and whose mind is in its eyes, refuses to eliminate the previous prejudices and insists on acting indecisively in paradoxes. However, the acceptance (or rather the expression of its acceptance courageously and honestly) of luminosity, which is not subject to the laws of physics and hence which represents timelessness and spacelessness, as a dimension of existence, will clear the way for physics. It is interesting that the laws of physics, like the law of gravity whose existence nobody doubts, are luminous; they are everywhere though they are nowhere. As long as the rigid materialistic approach accepts the existence of laws of physics – opposite of which is out of question –, the concept of luminosity is accepted implicitly. Claiming the opposite is hypocrisy and it does not comply with scientific approach, which has to be objective.

If physics manages to get rid of the snare of the ideology of materialism that limits beings with matter, it will get rid of the strangeness of denying the will, which has been determined to exist through experiences; and it will approach the truth one more step.

Each difference between the movements of two men – one dead and one alive – is metaphysical because the movement of the dead body is determined by laws of physics in a pattern but the movement of the living body is determined by the product of the laws of physics and the metaphysical dimension of the will. To accept the correctness of this example (it is not impossible to claim the opposite) and to deny metaphysics is not science but scientific blindness and even scientific bigotry.

In order to understand many mysteries in the beings and some strange states that the mind cannot realize, it is necessary to understand well the concepts of subtlety (luminosity, fineness, lightness, luminance, airiness) and density (hardness, matter-density, weight, stiffness, bluntness, darkness). Despite the

materialistic philosophy, all of the physical beings that we know are a combination of subtlety and density. Although the same matter, that is, the dense matter, is present in men and women, due to the fact that the pleasantness, elegance and kindness aspects are more prominent, women are known as the subtle gender. Therefore, the rude attitudes that do not offend the eye in men are regarded ugly in women because they do not fit the subtlety of women. I hope the dark philosophy that sees all beings including human beings as ‘a mass of dense matter’ or ‘a pile of atoms’ will understand it. May God bless the soul of the poet Yunus Emre, who said, “*There is another self inside my self.*”

In non-living beings like stones and iron, density is essential. However, even they have some subtle aspects visible to careful gazes. In living beings, matter, which is like dense tulle, functions like a veil on which the subtle meanings behind are reflected. For instance, a person who looks at a cherry or at a butterfly sees the fine arts and subtle meanings on them first and feels the subtleties through his heart, which is the center for meaning. Man is a strange combination of subtlety and density consisting of a dense body and subtle spirit; it is assessed based on the dominant element. As a physical being, man is subject to laws of physics and cannot be in more than one place at the same time.

Spirit, which is a luminous being, is beyond time and space; no law of physics can dominate it. Therefore, it can be in many places even everywhere – just like the law of gravity. However, since man is a whole with his spirit and body, the spirit and the body have to act together. In this case, the dominant element will be in control. If a person is physically strong but spiritually weak, that spirit will be virtually a prisoner in that body and density will be essential in that person in whom the spirit becomes virtually dense. That person may even claim that he consists of the physical body only. However, if a person is spiritually developed and physically weak, the opposite will be valid and his body will assume subtlety; in such a person, the rules of luminosity rather than the laws of physics will be dominant. Then, this person, with his body that assumed subtlety, will be subject to the laws of the spirit and will be able to be in more than one place at the same time. However, many mysteries will make it an exceptional state not a common state.

Badiuzzaman Said Nursi states that the concept of time and space disappear when the body becomes subject to the spirit and rises to its level:

“Like the incident of ebb and flow (tide) in the sea, the expansion of time zaman (living long in a short time) ^{FOOTNOTE} and disappearance of place (a person’s being seen in several places at the same time) is common among saints. Briefly: according to a narration in Kitab Yuwaqit, Imam Sha’rani studied Ibn al’Arabi’s four-volume al-Futuh al-Makkiya (Makkan Conquests [Discoveries]) two-and-a-half times in a day. Incidents like that should not be regarded odd. There are many examples that approach such odd issues to confirmation. For example, during a dream that lasts for a few seconds, you seem to have lived for a year. If you read the Quran during such a time, you could read it from beginning to end several times. For saints, those incidents occur when they are awake. Time expands and the issue approaches the scope of the spirit. The spirit is not restricted by time. The deeds of saints, whose spirits are dominant over their bodies, occur with the speed of the spirit.

FOOTNOTE: For through its mystery, a few minutes’ Ascension become many years and prove the existence of this truth and demonstrate it in fact. The few hours of the Prophet’s (PBUH) Ascension had the length, breadth, and comprehensiveness of thousands of years, for by way of it he entered the world of eternity, and a few minutes of that world comprise thousands of years of this world.

There are, besides this, the numerous occurrences of the expansion of time experienced by the saints, constructed on this truth. It is related that some of them did a day’s work in a single minute, and others performed a year’s duties in an hour, while others recited the whole Quran in the space of a minute”²⁸.

This issue can be explained by likening the body to a balloon and the spirit to helium, which is seven times lighter than air and which soars very fast when it is released. If we release a balloon that has very little helium in it, the balloon will fall to the ground due to the effect of gravity. That is, the subtle helium will surrender to the dense matter of the balloon. Thus, slightly inflated helium balloon will act like a dense matter. However, if the balloon is inflated with helium fully and released, it will be seen that the soaring power in helium will dominate the falling power in the balloon

If we remove luminosity, whose existence we are not aware of and even we deny, from man, what is left but a bag of dark atoms.

and the balloon filled with helium will soar to the sky. That is, the body will be subject to the spirit and the laws of the spirit.

Man cannot fly like a helium balloon but he can weigh himself on the scales of the conscience and he can assess his state of density and subtlety. As it is stated in the sentence, ‘I feel as if I have been relieved of a burden of a thousand kilos’, when man does a good deed, he feels as if he is lightened or relieved; and when he does a bad deed, he feels as if his shoulders are stooped, which indicates that meaning – unless the scale of a person’s conscience is out of order.

The spiritual heart of man, who has a material and dense body and a luminous spirit that gives it subtlety, is the best-equipped center of luminosity and the receiver and transmitter of all of the luminous things. As a matter of fact, what is called as ‘positive energy’ are the luminous meanings that are transmitted through transmitters like words with the relation of the will or directly from heart to heart. If the meaning that is transmitted is the light of science, it is called

As man is engaged with luminous things like knowledge, belief and virtue and assumes subtlety, he is elevated in terms of humanity although he does not walk on air; he does not even feel the weight of his body. Although his body is here, he travels in different realms with his mind, heart and feelings just like a dream. Probably, the real poverty is to be unaware of this dimension of the existence

telepathy. If the meaning is good wishes, it becomes a remedy, which is also a light. If it is the light of love, it becomes happiness. If it is the light of the Quran, it becomes nourishment and a remedy. If it is the light of the Attractive Sun, with its name in the sufist terminology, it becomes ecstasy and trance; and the ties of the laws of physics start to be undone. If we remove luminosity, whose existence we are not aware of and even we deny, from man, what is left but a bag of dark atoms.

2.1.6-Theology and Luminosity

In quantum mechanics, the presence of subatomic particles in more than one place at the same time, and assuming opposite characters caused confusion and the serious oppositions of physicists at first; similarly, in the theology of the modern age, in which critical reasoning replaced submission, concepts that are contrary to classical physics like the presence of Allah everywhere although He is nowhere and Allah doing many different things in many different places have

been questioned and have been denied by a group because they were contrary to the mind and science. Badiuzzaman Said Nursi, who is a modern age theologian, easily solved those complicated matters, which the mind has difficulty in accepting, in his works called the Risale-i Nur Collection, using the concepts of light and luminosity and the analogy of the sun that he labels as half-luminous effectively and making it a stepladder for the mind.

Badiuzzaman Said Nursi divides beings into three groups based on their reflections on the mirror: dense, material luminous (or half-luminous) and luminous. The reflections of the dense material things like the chair, table and even man on the mirror are outside those things and they are dead. For instance, a man is alive; he breathes, sees, talks, rejoices and fears; however, his image on the mirror has no qualities other than its outward appearance.

The perfume smells nice but its reflection on the mirror does not smell. If a person enters into a gallery of mirrors, there appear a thousand people but only that person is alive; the others are all dead.

The reflections, that is, the images of the half-luminous things made of matter are not the same as their originals but they are not different either. Although the nature of the original and the image is different, the image has many characteristics of the original. Badiuzzaman Said Nursi gives the sun as an example of the material luminous things:

“For example, the sun entered the world, and displayed its reflection in all mirrors. In each of the reflections is present light and the seven colors in light, which are like the sun’s qualities. Let us suppose the sun possessed consciousness, and its heat was pure power; its light, pure knowledge; and its seven colors, the seven attributes, then the single sun would be present in all mirrors at one moment, and would be able to make each a throne for itself and a sort of telephone. One mirror would not be an obstacle to another. It would be able to meet with all of us by means of our mirrors. While we are distant from it, it would be closer to us than ourselves.”²⁹

Time and space are not in question for luminous beings; and their reflections or images are the same as their originals. However, the degree of the sameness of the reflection is

That is, the sun that is reflected on a huge mirror that is placed outside so that it will see a house that does not receive the sunlight directly and the sun gives the house heat, light and the seven colors just like the sun itself. That is, the sun on the mirror has the image and many characteristics of the sun in sky. Therefore, the half-luminous sun, which is present in thousands of places from a small piece of glass to vast seas at the same time, is a perfect example to explain luminosity, unity and oneness. The reflections on all shining things belong to the same sun that surrounds everywhere (unity) and every reflection shows differences based on the characteristics of the place that it is reflected on (oneness).

Time and space are not in question for luminous beings; and their reflections or images are the same as their originals. However, the degree of the sameness of the reflection is limited to the ability of the mirror. For instance, the images of angels, which are luminous and living creatures, are both alive and the same as angels. Therefore,

Azrail (the angel of death) can be in thousands of places at the same time and can do different things with different faces in each place although he is a single angel. It is famous

The images of angels, which are luminous and living creatures, are both alive and the same as angels. Therefore, Azrail (the angel of death) can be in thousands of places at the same time and can do different things with different faces in each place although he is a single angel.

that some blessed people who assumed luminosity could be in more than one place at the same time or could go to a distant place and come back in a moment.

The incident of Mi'raj (Ascension) is not something to wonder for a Being whose essence is light and is a symbol of luminosity. As a matter of fact, the following is stated in a verse:

*“Glory to (Allah) Who did take His Servant for Journey by night from the Sacred Mosque to the Farthest Mosque whose precincts We did bless— in order that We might show him some of Our Signs.”*³⁰

Many verses in the Quran regarding creation like,

*“Allah is the Creator of all things, and He is the Guardian and Disposer of all affairs. To Him belong the keys of the heavens and the earth.”*³¹

*“Verily, when He intends a thing, His command is “Be” and it is! So glory to Him in Whose hands is the dominion of all things.”*³²

“Say: ‘Allah is the Creator of all things: He is the One, the Supreme and Irresistible.’”³³

“Not a leaf doth fall but with His knowledge.”³⁴

“Say: He is Allah the One and Only; Allah, the Eternal, Absolute”³⁵ can only be explained by the concept of luminosity and the fact that Allah is Nur and that He is the source of all nurs.

As a matter of fact, questions like the following ones are frequently asked:

“O people of Unity! You say, ‘Say: He is God, the One and Only. God, the Eternally Besought One. That the Creator of the universe is one, He is single, He is eternally besought by all creatures. And that the Creator of everything is He. That He is one in essence and at the same time the reins of everything are directly in His hand, the key to everything is in His grasp; one thing cannot be an obstacle to another. And you say that at the same instant He has total disposal over all things and all their states. How can such a far-fetched fact be believed? How can a single individual be in innumerable places and do innumerable things at the same time with no difficulty?’”³⁶

A satisfactory answer to questions like the ones above and similar ones is the luminosity of Allah; and it can be made reasonable for the mind through the example of the sun:

“For example, although the sun is a particular and a single individual, it becomes like a universal by means of shining objects. It reflects its image, a sun like itself, in all shining objects, drops of water, and fragments of glass on the face of the earth, according to their capacity. The sun’s heat, light, and the seven colors in its light, a sort of likeness of the essential sun, is found in all shining physical objects. Let us suppose the sun had knowledge and consciousness, then every mirror would be like a sort of dwelling-place or seat or chair for it, it would be in contact with everything in person. It would be able to communicate with all conscious creatures by means of mirrors, with the pupil of every eye, even, each of which would be like a telephone. One thing would not be an obstacle to another. Communicating with one thing would not be a barrier to communicating with another. While being present everywhere, it would be present nowhere. If the sun, which is like a material, partial, and inanimate mirror to only the Divine Name of Light out of innumerable Names, can therefore display universal activity in an unlimited number of places while being a single individual, should the All-

Glorious One, with the oneness of His Essence, be unable to perform innumerable actions at the same time? ”³⁷

Those who did not understand the mystery of luminosity and the luminosity of Allah had to invent gods of goodness and evil and imagine the sky as the battlefield of gods. The reason why those who study science cannot accept the concept of God that is present at all times and everywhere with all of His attributes although He is nowhere is the fact that they are unaware of luminosity. The same scientists had to attribute the production of the hygienic egg, which is a wonder of biotechnology, to the chicken, which did not know what it was doing which ate any food that it found, and produced the egg in a dark environment without using its feet and eyes; and they had to ignore the fact that the matter in the egg turned to a chick, which is a zenith of art and a miracle of creation, in 21 days without the intervention of a hand or a tool all by itself; and they regarded it as a normal event. When they could not find a reasonable and logical explanation, they referred everything to the black box of evolution and thought they settled the issue.

In fact, if it is examined thoroughly, it will be seen that ‘evolution’, which is claimed to have done everything everywhere, has to have the quality of divinity equipped with knowledge, will, power and wisdom, and the quality of luminosity in order to do the things attributed to it.

Since the concept of luminosity is not understood well in the Christian world, gaps were formed in the understanding that the Creator of the universe has an eye that sees everything and has a power that can do anything; and ways leading to polytheism were opened.

Badiuzzaman Said Nursi concretizes the luminosity taking place in the creation by giving the example of a tree and its fruits in the 32nd Word. Acting upon this observation, he generalizes it through induction:

“This tree has at least ten thousand fruits and each fruit has at least a hundred winged seeds. At one instant of time, the ten thousand fruits and million seeds display altogether one art and creativity. While the center of the laws of the tree’s formation is present in its roots and trunk, through a manifestation of Divine will and a condensing of the Dominical command, which may be described as particular, individuated, and a knot of life, they are also present at the ends of all its branches, within every fruit and every seed. No part of any member of the

tree is lacking them, they are not obstacles to one another; the tree is formed through them.

And that single manifestation of will and that law issuing from a command are not transmitted and radiated like light, heat, and air. For they leave no trace nor may any hint of them be perceived in the long distances and various beings between the places they go. If the fact that they are present in each fruit and seed had occurred through their being transmitted and radiated, some trace or hint of them would be perceived. Rather, they are present in each of those places without being fragmented or radiated. Those universal and general actions are not incompatible with His Oneness and individuality. It may even be said that while the manifestation of will, and the law and knot of life are present in each of the places, they are present in none of them. It is as if the law has as many eyes and ears as there are fruits and seeds of the majestic tree.

Indeed, each part of the tree is like a center of the senses of the law, so that their long intermediaries are not a veil and do not form a barrier. Rather, like telephone wires, they are a means of facilitating and bringing things closer. The farthest is like the nearest.

Since, as is clear from observation, through a single partial manifestation of an attribute of the Single and Eternally Besought One like will, millions of events occur in millions of places without intermediary, it is necessary to be certain, with complete certainty, that the All-Glorious One can have total disposal over the tree of the universe, together with all its parts and particles, through the manifestation of His power and will.”³⁸

Badiuzzaman Said Nursi continues by making the acts of luminosity seen in the sun, trees and beings with spirit stepladders and makes people look upward; then, he puts before the eye of the mind the divine luminous sun in a chain of logic concisely and in a way to dazzle the eyes:

“Impotent and subjugated creatures like the sun, and half-luminous creatures like spirit-beings, which are restricted by matter, and the laws issuing from a command and the manifestations of will which are the knot of life and center of direction of this plane tree, these in turn being like its light and spirit, while being in one place and being particulars identifiable as single, according to the mystery of luminosity, they are clearly present in numerous places and in numerous events. And while being particulars restricted by matter, it is as though

they take on an absolute universality. And in the space of one second they may demonstrably do a great number of things through the power of choice. You see for yourself and you will not be able to deny it.

The Single and Most Pure and Holy Essence, Whose attributes are all-comprehending and functions, universal, is far beyond and exalted above matter, and is utterly remote and free from any restriction and the darkness of density. All these lights and luminous beings are but obscure shadows of His Sacred Names; and all existence and life and the World of Spirits, the Intermediate Realm, and the World of Similitudes, semi-transparent mirrors reflecting His beauty.

What being can be hidden in the face of His Oneness, which is within the manifestation of His attributes and actions, which in turn are evident through His universal will, absolute power, and all-embracing knowledge? What matter can be difficult for Him? What place can be concealed from Him? What object can remain distant from Him? What individual can draw close to Him without acquiring universality? Can anything at all be hidden from Him? Can any matter at all be an obstacle to another? Can any place at all be empty of His presence?

Ibn al-Abbas (May God be pleased with him) said: "There is an immaterial eye that sees and ear that hears in every being." Is this not so? Are the chains of beings not each like a wire or vein for the swift flowing of His commands and laws? Are obstacles and difficulties not means and intermediaries in His disposal of beings? Are causes and intermediaries not merely an apparent veil?

While He is present nowhere, is He not present everywhere? Does He need at all to be located in a place or situation? Can the veils of distance, smallness, and the degrees of existence be obstacles to His proximity, power of disposal, and witnessing?

Moreover, could the qualities pertaining to material, contingent, dense, numerous, restricted, and limited beings, and the states of change, transformation, division, and occupying space, which are their particular and confined necessary consequences, in any way touch the Most Pure and Holy Essence Who is far beyond matter, is Necessarily Existent, the Light of Lights, and is Single, One, and is free from any restriction or limitation and exalted above and pure of any fault or deficiency? Could impotence in any way be fitting for Him? Could any defect approach the skirt of His splendor and glory? "³⁹

Badiuzzaman Said Nursi first diagnoses the realities reflected on the beings through careful observations like a proficient scientist and virtually separates it with tweezers and proceeds to the source of this law, whose tip he has discovered, because the reality becomes perfect and generalized if its source is reached. For instance, the half-luminous sun is virtually closer to us than our pupils and it encompasses us with its heat, light and colors but we observe that we are far from the sun due to our dense body, which is limited by the laws of physics; it makes us see the reality that ‘when two things are very far away from each other, one of them can be very close to the other’ and enables us to examine the differences between those two things, which opens the way to understand luminosity.

Conclusion

Quantum mechanics or theory, which started to be established in 1920s and which abolished the sovereignty of Newton mechanics in the subatomic world establishing its own rule unquestionably, invalidated many accepted things related to matter and affected our understanding of beings profoundly. The first victim of Quantum mechanics was the understanding that everything consisted of matter and that everything could be explained by deterministic laws of physics. A big gap has formed with emergence of quantum reality and the collapse of the understanding of time-space, which was known as the strongest ground of science, as a result of the confirmation of the existence of subatomic particles in more than one place at the same time and the fact that they communicated much faster than the speed of light (or rather timelessly), which was thought to be impossible to exceed, through careful measurements and observations; and this gap has not been filled yet. The prominent physicists, who were thought to understand everything in the past, turned out to understand nothing. The efforts to explain the new phenomenon that emerged through some utopian theories like parallel universes, which did not satisfy anybody, were nothing but mind exercises.

The attribute of luminosity is the property that is dominant in all levels in subatomic world, and in living beings, especially in humans

In fact, Quantum mechanics shows even to the blind eyes that timelessness and spacelessness, that is, to be present in more than one place at the same time and to be able to go everywhere at the same time, is a reality that cannot be denied. While deterministic Newton laws, which imprison luminosity, and hence density dominate in the supra-atomic world, matter becomes subtle in the subatomic world and luminosity starts to dominate apparently.

Through the concept of luminosity and the analogy of the sun, which is a half-luminous being, many issues that baffle the mind in theology and that cannot be accepted by the mind conditioned by the deterministic philosophy can be settled easily. Therefore, the concept of luminosity must be included as an indispensable concept in both natural sciences and social sciences. The groundless fears that science and religion will approach each other and that very bad things will happen if luminosity is accepted must be abandoned. For the happiness of humanity, it is necessary for these two big institutions that play important roles in the life of human beings to stop old disagreements and denying each other, to make peace and to support each other. The positive atmosphere that will be formed will contribute to the development of both institutions.

EVALUATION QUESTIONS

- 1-What is the difference between the laws of physics that are valid in the subatomic realm and the supra-atomic realm?
- 2-What is a double slit experiment?
- 2-What is the God Particle?
- 3-Can a being exist in more than one place at the same time?
How?

2.2.METAPHYSICS OF THE UNIVERSE AND HOLOGRAPHY⁴⁰

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LEARNING OUTCOMES	EVALUATION QUESTIONS
1- The student understands the meaning of holography. 2- He learns that there is an enormous system in the universe and that everything has a certain structure and size. 3-He understands the relationship between holography and the Preserved Tablet 4- He learns the structure of the	1-What kind of a criterion does holography give to understand the structure of spiritual beings? 2-How does the holographic structure shed light on being in different places at the same time? 3-Is the movement of tachyon a wave movement? 4- What kind of information does the world of luminosity give us?

Developing science, brings us together with new concepts related to matter and space. The developments in the sciences of the modern age, especially in the physical sciences, reveal the new dimensions of the existence and the metaphysical realities. The results make us understand that our universe is literally intertwined with other universes. Thanks to new discoveries, we can formulate ideas more easily about the universes on the upper floors and the invisible truths of the Quran. New developments take the issue out of the narrow patterns of space and move it to the vast and bright horizons of faith.

We have difficulty in understanding the metaphysical properties of beings. In order to understand these strange states, it is necessary to understand the concepts of subtlety (fineness, luminosity) and density (solidity, matter).

Materialist understanding ignores the subtle states and the metaphysical reality, which is the luminous dimension of existence.

2.2.1.The Connection of Something with Everything: Holography

One of the inventions showing the metaphysical dimension of existence is holography. Holography provides us with examples showing at the level of light and electron that something is connected with everything and that there is a connection even between distant things without cause and effect relations. Furthermore, those discoveries show that a high system is sovereign in things despite the complex relationship among them. The discoveries about holography are clear examples of the name of Wahid (One), which shows the oneness of the Creator in the "whole," and the name of Ahad (One), the evidence of unity in the "units".

In conclusion, holography is an example showing the metaphysical properties and secrets of the existence that are not dependent on time and space.

What is Holography?

First of all, let us try to explain what a hologram is like. To form a hologram, it is necessary to divide a single laser beam into two separate beams. We bounce the first beam on the object to be photographed. Then, we collide the second beam with the light reflected from the first one. An interference pattern emerges. We record the pattern and look at the film. Now, the image has been photographed, but it has no similarity to the photographed object. We pass another laser beam (or another bright light source) through the film. This time we encounter something that we can never guess. A three-dimensional image of the original object now appears. This is a holographic image! You can move around this image if you want. You can even look at it from different angles as if it were a real object. However, you cannot touch it. When you want to touch, your hand goes through the image. It is not an object; it is a ghost image!

The more interesting part of holography is as follows: Take a holographic film with a human image recorded on it. Divide it into two and then illuminate each part with laser. What happens? You will see full picture of the person on both halves! Let us split the half films again and again. We continue to see the full

picture in each divided part. Even the smallest part of the picture is the whole and full picture!

2.2.2-High Order Not Chaos

Bohm concluded that there was no room for disorder in the universe. Besides, mathematicians could not prove the disorder. The so-called disorder was in fact a high and advanced level of "manifestation of order." Bohm thought so. Then, there must have been mistakes in the theory of chaos. He designed a simple experiment for this purpose. He placed a cylinder in a jar and filled it with glycerin. A drop of ink dripped into the glycerin disintegrated and disappeared when the cylinder rotated but it took the form of a drop again when turned back. Even the ink distribution, which should have been irregular, had a pattern. This experiment can be compared with the formation of pictures on the surface of water in marbling art. The resulting "high symmetry" shows that the electrons in water are connected with and aware of one another, without cause and effect relation. Being aware can definitely not be the work of unconscious water particles and electrons. It can be the act of the Creator and the Creator of all the Light, whose knowledge encompasses all things and makes particles work like soldiers. The interferences on the holographic film appear to be irregular with a superficial look but there is a secret and hardly discernible layout. The claim of the chaos theory that there is disorder in the universe stems from the inability to see the order displayed by holography.

Where did the idea of chaos come from? The subtle and delicate order that has complex relations with each other is not easy to recognize. For this reason, a developed mental structure away from prejudice and a holographic point of view is required to see the whole picture.

The materialist understanding tries to use science against faith. It uses some scientific arguments for this purpose. Materialists try to give the impression that there is disorder in the universe since the extraordinary elaborate and complex structure of the advanced order in the universe conceals itself from superficial gazes.

In conclusion, with the hologram theory, which is a new name of the metaphysical reality, Newton's rigid determinism evaporates; instead, a model of movable universe and existence in which everything is connected with one another, where matter is freed from limitations, emerges. As our knowledge about the truth of matter increases, it becomes clear that chaos is

2.2.3-Holographic Explanations to Metaphysical Incidents

Holography means the knowledge of the whole being present in every part of the film. Holography started to shed light on many other unknown incidents that could not be explained by the principles of determinism.²

For instance, at the quantum level, regardless of the distance between matter and antimatter, the simultaneous emergence of one effect in the other should be related to the property of having both spacelessness and wholeness. In the same way, we could have explained the fact that each of the electrons in “plasma”, that is, the gas-ion state of matter, act by having the knowledge of all with the same “secret”. In other words, subatomic particles were subject to luminous, metaphysical laws.

The “quantum” world of the atom is actually a metaphysical world.

In the “Double Slit” experiment of electrons, when one hundred hypothetical particles were allowed to pass through the gap one by one, after 10% of the particles hit the zone, the other particles passing through the slit, avoided that region as if they knew calculus of probability, which is related to being in a luminous connection in the space without any cause-effect relationship. Holography shows that not only physical laws but also metaphysical realities are dominant in the world of light. Quantum, on the other hand, shows that laws of luminosity are dominant in the atomic particles, which are the basis of matter. Indeed, the “quantum” world of the atom is actually a metaphysical world.

2.2.4-Holography and the Preserved Tablet (Lawh al-Mahfuz)

Since holography offers a new understanding, our view on things and incidents is expanding. We can now better understand some of the incidents called

² The principles of cause-effect (causality), which are valid in classical physics but which have largely lost their validity in new sciences such as quantum physics and holography, are as follows: (a) The principle of causality (every event has a cause). (b) The principle of determinism (every experiment repeated under the same conditions always gives the same results). (c) The principle of measurability (There are physical quantities that characterize each event and that can only be determined by measuring). (d) Consistency principle (the results of positive sciences cannot be contradictory in themselves). (e) Principle of falsifiability (there must be a method and a way to refute the results of positive sciences.)

“inexplicable” by the materialistic view. For instance, new windows are opened in our minds related to “paranormal” events such as synchronicity and meaningful coincidences that we have difficulty in understanding due to shortness of understanding or neglecting the luminous dimension of things.

Holography allows us to explain many things that seem incomprehensible. For instance, telepathy, foretelling, foresight, prophecy, and similar events are the ability to see the information that is recorded on the hologram plate that actually exists and that is available and that can be used any time “through a different eye”.

Holography allows us to explain many things that seem incomprehensible. For instance, telepathy, foretelling, foresight, prophecy, and similar events are the ability to see the information that is recorded on the hologram plate that actually exists and that is available and available at any

One of the issues that opens a window to our understanding with holography is the reality of the Preserved Tablet (Lawh al-Mahfuz). The Preserved Tablet is mentioned only in one verse in the Quran. In this verse, it is stated that the Quran is in the Preserved tablet, but there is no definition.⁴¹

However, its features are explained in several verses. According to those verses, the Preserved Tablet is described as the main book in which nothing is left incomplete⁴², the information about the things to take place is stored⁴³, all misfortunes that happen on earth or in people’s souls are recorded⁴⁴, everything is counted and determined⁴⁵, all secrets in the sky and the earth are written clearly⁴⁶, which nobody but the angels created cleanly can touch, which is clear, protected, preserved and stored.

The Preserved Tablet is a Divine preservation tablet in which everything is written, the mirror of divine knowledge, the book of predestination and the program of the universe. Our

The Preserved Tablet is a Divine preservation tablet in which everything is written, the mirror of divine knowledge, the book of predestination and the program of the universe. Our memory is like a small example of this notebook. All events that happen to man are recorded in his memory; similarly, all of the

events that happened and that will happen in the universe are recorded in this great memory. Our Lord's name "Hafiz", that is the one who protects and preserves becomes manifest on both "tablets". It is not appropriate to understand writing every letter when the word "writing" is used. The sequence of genes is a something very different from writing. Words and events are not recorded on a computer hard drive with a pen. Everything and every event being written in the "Clear Record", "Clear Book", which are the notebooks of the Preserved Tablet should be written in a way beyond them.

As holography shows, the smallest part of the universe bearing the properties of the big universe enables "information" ready to be used and available anywhere at any time. Since the universe is structured with holographic properties, it goes beyond the space-time coordinates. In such a plan, the past, the present and the future are in the same place, at the same time. Everything in the "main hologram plate" defined as the "Preserved Tablet" in the Quran has spread to all of the particles of the plate and all of created beings. Each unit can receive all kinds of information about the universe at any time independent of space and time.

However, to benefit from the main information called the Preserved Tablet may depend on people's 'spiritual perfection'. As holography shows, since all 'information' is anywhere at any time independent of time and space, it may be possible to access that information. Karamahs of saints like knowing things that are unknown may be another way of evaluating knowledge.

2.2.5-Holography and Luminosity

The fact the whole universe is hidden in the smallest unit is expressed by Einstein as follows: "*If we could understand a grain of sand, we would understand the whole universe*". The statement of the Prophet (pbuh), who discovered the universe in the light of the Quran, "A particle is a mirror of the whole" expresses this fact concisely. The small thing is an example of the big thing. A part is the reflection of the whole. The one who cannot create the small thing that cannot create the big thing. This fact sheds light on our understanding of the Creator's names Wahid and Ahad.

In conclusion, the facts revealed by holography allow us to better understand some of the Quranic truths. The fact that a small part of the

holographic film bears the information in the whole provides us with evidence and signs that the information is not based on place and that it is everywhere. It also opens up new windows to the indivisible integrity of the universe and the reality of the oneness of the Creator by showing the connection of one thing with everything, the smallest bearing the properties of to the biggest. Holography is the new title of the realities of Oneness and Unity, which dominate the universe, discovered through science.³

2.2.6-Are Tachyons the Building Blocks of the Metaphysical World?

The virtual particles, whose existence causes a lot of debate, become manifest in some laboratory experiments. This particle with strange and abstract character was given the name “tachyon”, which means ghost in Latin. This time, the experts analyzed the issue in mathematical terms, using Einstein’s equations and they reached a very strange solution. According to those solutions, if an object moves faster than light, physical properties such as mass, length, energy, and even time assume an abstract (virtual/imaginary) nature.

What can be the meaning of abstract mass? According to the “Theory of Tachyons”, which matured with the great contribution of scientists like Bilaniuk and Geinberg, anything faster than light and with a mass smaller than zero and with minus length and dimensions, that is, anything that is abstract can be regarded as tachyon. For instance, our feelings, dreams, memory, thoughts, consciousness, love, fear, excitement, hearing, seeing, tasting, etc.

According to the “Theory of Tachyons”, anything faster than light and with a mass smaller than zero and with minus length and dimensions, that is, anything that is abstract can be regarded as tachyon. For instance, our feelings, dreams, memory, thoughts,

A particle called “tachyon” that has metaphysical properties and speed

³The following resources can be useful for those who want to access to detailed information about holography: (a) <http://www.intuition.org/txt/pribram.htm>, an interview with Karl Pribram. (b) <http://www.acsa2000.net/bcngroup/jponkp/>, Karl Pribram’s holographic brain theory and its comparison with classical models. (c) <http://omegafdn.org/hologram.html>, an article on the Holographic Universe. (d) <http://crystalinks.com/holographic.html>, Pribram and Bohm’s holography theory is explained. (e) <http://www.scribd.com/doc/6804498/Hologram-Teorisi-Ve-Eszamanlilik>

faster than the speed of light thousands of millions of times is definitely not expected to be ready and available in our daily lives. Since the properties of these particles do not conform to the physical and mathematical structure of this universe, another realm, another time and space where another kind of energy is dominant should be considered.

The unchanging reality that is ever-changing but that seems unchanging because it flows on an immutable reality on which the apparent realm is based is essentially the properties of the metaphysical dimension of the existence. We think that the realities related to metaphysics and meaning are only souls and angels, and the Hereafter. However, contrary to what we think, spiritual realities encompass a much wider field. "Physical" events and beings become metaphysical events with a "new" and "appropriate" look. For example, properties like electricity, magnetism, gravity, light, color, temperature, even taste, sound, healing, odor and life are essentially beyond matter. Science can formulate externally reflected effects and introduce principles for their use. However, the nature and reality of the events are much different and have no scientific explanation.

Giving a name to events is not an explanation of that being and event. Matter and atoms are not the source of any of the features mentioned and unmentioned above. They are not part of matter. Matter and atoms only reflect them.

Badiuzzaman states in the 1925s that the causes of the creation of beings are a veil and that the reality of something cannot be understood by giving it a name:

"They utter meaningless nonsense like this. Due to a boundless ignorance resulting from misguidance and an ugly obduracy arising from aggressive atheism, they do not know that causes are only each a pretext and a veil. A small seed taking the place of a village full of factories and looms to weave and produce the members of a pine-tree as large as a mountain shows this. By saying, "The tree emerged from the seed," they in effect deny the thousand miracles displayed in the pine tree, and put forward a number of apparent causes. They reduce to nothing a huge dominical act worked through the Creator's will and wisdom. Sometimes they attach a scientific name to a most profound, unknowable, and important truth which has purposes in a thousand respects, as though through the

name it has been understood. Whereas it is merely made commonplace, and without purpose, wisdom, or meaning.

So, come and see the innumerable degrees of stupidity and foolishness! They attach a name to a truth so profound and broad and unknown it could be completely understood only if it and its purposes and instances of wisdom were described in a hundred pages. As though it were something obvious they say: "It is this." For example, 'It is some substance in the sun clashing with electricity.'"...

"Similarly, if a wonder-working craftsman produces a hundred okkas of various foodstuffs and a hundred yards of varying cloths from a chip of wood the size of fingernail, like the creation of a fruitbearing tree from a seed, and someone points to the chip of wood and declares that these things have come into being out of it 'naturally' and 'through chance,' reducing to nothing the craftsman's wondrous arts and skills, what utter lunacy it would be"⁴⁷.

The result of all this is as follows: the beings in the universe do not consist of matter, as materialists and atheists suggest. The world of meaning, referred to as the metaphysical world, is much wider and covers the whole universe. Therefore, in order to understand the universe and beings, it is necessary to deal with the physical world and the metaphysical world together as the subject of science and to investigate them as scientific knowledge. Otherwise, it is not possible to understand man or the universe by accepting only matter as scientific knowledge.

The wonders and wisdom in the results have not been understood since studies have been done without considering meaning so far. Everything was seen as soulless, aimless and unattended. These extremely wise, artistic beings created for thousands of purposes were given scientific names to make them ordinary; they were all regarded as the work of nature and coincidences, and this atheist philosophy was presented as "Scientific knowledge".

2.2.7-Journey to Subatomic Particles

Let us make a journey to atoms, protons and quarks. Let us examine the electrons first. Instead of the "solid units" and "particles" that we expect to find there, we find the fluctuations of the particles between existence and non-existence expressed by quantum, and energy type "radiations" and "vibrations".

We virtually meet a metaphysical world there. Thus, we can understand that even matter is not “matter“ with a journey into atoms.

If the things that we call subatomic particles can form an image that exists and does not exist, and a particle can be in one place, in another region and everywhere, its means that the laws of classical physics that we know and the principles of determinism become invalid in the subatomic world.⁴

How can a particle be in one place and another at the same time? The world of the atom is explained by quantum theory. Quantum is actually the discovery of another space and world. There is no difference between the fact that atomic particles are present in many places at the same time and that angels are present in many places at the same time.

In conclusion, even the laws of physics such as gravity, magnetism and light, whose existence no one doubts exist, have the quality of “light”. They can be everywhere even if they are not anywhere.

2.2.8-The New Meaning of Space and Time

We thought space as the room we live in, time as an object showing hours and minutes and mass and time as unchangeable absolute beings. Centuries passed. We reached the 20th century. It was understood that time had a speed. We understood that as objects “accelerated”, their time “slowed down” and “expanded”. The speed of light was also the flow rate of time. When that speed was reached, the “flow of time” stopped.

Yes, the developments showed the “light barrier” in addition to the sound barrier. When the speed of light was reached, time would be matched and time would stop.

⁴Quantum ideas strike at the heart of classical principles. An indicator that the quantum world is literally a metaphysical world is the famous "double slit" experiment. The particles (such as photons and electrons) that we think of as beads pass through two holes at the same time. You say, “How is it possible? It must have passed through this hole or that hole. Is there something that we don't realize something that we miss?” You try again. The result is the same. The particle passes through two holes at the same time. Here, the metaphysical nature of the atom shakes us once again. We see that electrons do not resemble tennis balls, and light is nothing like water waves. As we go deep down to the basis of matter, we will be surprised to see that there is a transition to the subtle/luminous property. You can easily access various videos and animations about the double slit experiment on the internet. One of them can be found at the following website: <http://vimeo.com/2236536>.

Then, we discovered that time changed not only in relation to speed but also “gravity force” (general relativity). According to the “General Relativity Theory”, time was added as a fourth dimension to the three dimensions of space (width, length, height). Depending on gravity, we could get old late or quickly.

When we look in the light of these facts, there are points where time works differently in matter-dependent dimensions, and we can see in the beyond matter dimension the fact that there is a peculiar time dimension in the grave, Gathering Place and Hell dimensions. When we wake up from a dream, that environment is perceived as a few seconds; similarly, there will be a different flow of life in the Intermediate Realm (Barzakh) and Paradise dimensions.

The “Big Bang” theory, which tells us that our universe emerged from a tiny core of creation from a single point, and the discoveries related to the continuous expansion of the universe indicate that the universe has a beginning and that it was created out of nothing. Behind the “perforated” space with the black holes, doors open to the “infinite spaces” at the point where physics ends. The fact that the process we call time, like matter, enters into another flow with the Black Hole gravity bring forward the realms of infinite and different dimensions.

The physical principles that were declared invariable and untouchable, and that were almost deified in the past caused the questions of philosophy and religion to come forward when those principles were turned upside down by black holes.

Why was the universe created and why is it destroyed? Is there a new creation after the expected Black Hole apocalypse? These issues are not only included in religious conversations today but are inevitably among the discussion topics of modern astronomy centers.

A star swallows itself, its own light, its own volume, place and time, assuming a totally different state. The stopping of time in the Black Holes or their assuming a different state brings the concept of eternity into mind and puts the infinite spaces or the hereafter and the realms there in our agenda.

In conclusion, the new developments in science increase the hopes that there will be a wider, brighter and more faithful future. For example, the quantum physicist Hans Peter Dürr expresses the ideas of many scientists. Professor Dürr emphasizes that our view on matter and the universe will change with quantum

and he draws the boundaries of the expected world. He emphasizes that materialist and coarse perceptions will disappear and a spiritual, holistic, flexible understanding based on spiritual foundations will prevail. Dürr continues as follows:

“Quantum physics tells us that reality is based on great consciousness and that it has logical integrity and unity at the same time. Another thing that quantum physics says is that the world and the future will be bright. Quantum offers us a world full of possibilities. Those possibilities encourage us very much and make us optimistic. Why? We learn with quantum that the world is much larger and vaster than we know and think. We do not shape the world but the world shapes us. In fact, we cannot see the ways out of the numerous possibilities that the world offers us. Therefore, unfortunately, we see the world of financial competition, with which we believe the consumerist western culture guarantee our lives, as the only way out; thus, we confine ourselves in a narrow cell. Since we look at economic requirements and laws of nature as if they are unchangeable and one-dimensional - like silkworms -, we trap ourselves in the cocoon of obligations we have constructed. The unbelief and selfishness caused by materialistic understanding prevents us from recognizing blessings and abundance. Since we do not know how to ask by relying on God, we become deprived of not only do what we want but also the happiness and peace that we miss.”⁴⁸

The fact that people of our age became addicted to matter made them close their eyes to the truth and gave rise to the idea that *the source of everything is matter and energy*. Consequently, artificial compulsions that science conflicted with religion emerged, and unfortunately, they used science for materialism and atheism. The neurophysiologist Roger Sperry (1913–1994), the Nobel Prize winner in medicine in 1980, draws attention to the fallacy of the thesis that religion conflicts with science and states the following in an interview:

“Science itself conflicts with materialism. Why would science and religion conflict? Essentially, this “conditioning that religion clashes with science” dates back to the times when materialist philosophy was accepted as science.”⁴⁹

In conclusion, thanks to new discoveries based on metaphysics, we see that science is trying to get rid of the clutches of the ideology of materialism, which does not want to see the realities of metaphysics. If this “struggle for independence” can be successful, the Divine “will”, which is definite by all

experiences, will manifest itself. Then, the separation of religion and natural sciences will end; it will be understood that the universe and the Quran talk about the same realities.

EVALUATION QUESTIONS

- 1-What is holography?
- 2-What is the relationship between Holography and the Preserved Tablet?
- 3-What is luminosity?
- 4- How do tachyons move?
- 5-*“Luminosity seems to be dominant in beings at the sub-atomic level and density seems to be dominant at the supra-atomic level”* What do you understand from

CHAPTER 3

3-RELATIONSHIP BETWEEN PHYSICS AND METAPHYSICS

3.1-RELATIONSHIP BETWEEN MIRACLES AND LAWS OF PHYSICS⁵⁰

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“This wonderful knowledge embroidered in the universe particle by particle can occur only by Allah’s infinite knowledge and power. As I plunge into the sea of knowledge, my faith gets perfect”. Pasteur.

LEARNING OUTCOMES OF	EVALUATION
1-The student learns what a miracle is. 2-He learns that the laws of physics will not bind Allah, who imposes these laws. 3-He understands that the laws of physics confirm the existence of a realm outside the realm of physics and necessitates it.	1-In what situations are miracle shown? 2-How would you interpret the statement “ <i>A good physicist can believe in miracles easily</i> ”? 3-What kind of a relationship exists between laws of nature and miracles? 4-What kind of a relationship

When the stories of the prophets are narrated in the Quran, the miracles that they show are also mentioned:

*"Then We told Moses by inspiration: "Strike the sea with thy rod." So it divided, and each separate part became like the huge, firm mass of a mountain."*⁵¹

*"I have come to you, with a Sign from your Lord, in that I make for you out of clay, as it were, the figure of a bird, and breathe into it, and it becomes a bird by Allah's leave: And I heal those born blind, and the lepers, and I quicken the dead, by Allah's leave; and I declare to you what ye eat, and what ye store in your houses. Surely therein is a Sign for you if ye did believe."*⁵²

*"The Hour (of Judgment) is nigh, and the moon is cleft asunder. But if they see a Sign, they turn away, and say, 'This is (but) transient magic.'"*⁵³

*"Of old We sent Moses, with Our Signs and an authority manifest, To Pharaoh, Haman, and Qarun; but they called (him) 'a sorcerer telling lies'."*⁵⁴

*"They said, 'Burn him and protect your gods, If ye do (anything at all)!' We said, 'O Fire! Be thou cool, and (a means of) safety for Abraham'."*⁵⁵

The verses above and similar ones show that miracles, which are extraordinary states, are a religious reality and that miracles are an inseparable part of the cause of prophethood.

Miracles are extraordinary states, words and deeds of prophets that human beings are unable to do. For those who come with the claim that they are sent by Allah, miracles are evidences and witnesses showing that their claims are confirmed by Allah. When miracles are viewed under normal circumstances, that is, in terms of the laws of physics that are dominant in the universe, they are extraordinary incidents that are impossible to happen and that exact sciences like physics, chemistry, biology and astronomy describe as "impossible" because they violate one or more basic laws. Therefore, miracles turn people's attention to the Being that is dominant over the laws of physics and that is not dominated by them, that can change and abolish the laws as He wishes, and that has endless power and will. The existence of miracles, which are metaphysical incidents, show the existence of a metaphysical Being to sane people and show that the person who shows miracles acts on behalf of that Being, not on his own. Therefore, the first and basic claim of the people who show miracles is the existence of that Being, who equips them with extraordinary states and sends them as messengers to people. Miracles are like litmus paper; they distinguish the

true prophets who are known as honest people and who do not want anything for themselves from the fake prophets.

The following verses attract attention to the expectation of miracles by people from prophets:

*"Thou art no more than a mortal like us: then bring us a Sign, if thou tellest the truth."*⁵⁶

*"Ye they say: 'Why are not Signs sent down to him from his Lord?' Say: 'The signs are indeed with Allah: and I am indeed a clear Warner'."*⁵⁷

*"And it was never the part of a messenger to bring a sign except as Allah permitted"*⁵⁸

As a matter of fact, the cause of Hz. Muhammad's (pbuh) prophethood can be expressed as follows:

*"I am the envoy of the Creator of the universe. My proof is that He will change His unbroken order at my request and my prayer. Now look at my fingers: He causes them to run like a fountain with five spigots. Look at the moon: by a gesture of my finger, He splits it in two. Look at that tree: to affirm me and to bear witness to me, it moves and comes near to me. Look at this food: although it is barely enough for two or three men, it satisfies two or three hundred."*⁵⁹

The following is stated in the Quran: *"He it is Who created the heavens and the earth in six Days - and His Throne was over the waters - that He might try you, which of you is best in conduct"*⁶⁰ and *"Verily We created Man from a drop of mingled sperm, in order to try him."*⁶¹ As the verses above state, religion is experience and the world is a place of testing. Therefore, miracles open doors to the mind in a way that is in accordance with the law of accountability but they do not remove free will. Otherwise, the secret of testing will be broken and the wisdom behind the creation of the world will be eliminated.

"But as required by the examinations and trials that man is set, his miracles never occurred so obviously as to compel everyone to believe, whether willingly or unwillingly. For the wisdom in man's trial and accountability necessitates that the way be shown to him without depriving him of his will; the door has to be opened to his intelligence without snatching its freedom from its hand. If the Messenger's (UWBP) miracles had occurred in so apparent a way, intelligence would have had no choice; Abu Jahl would have believed as did Abu Bakr; coal

would have had the value of diamonds, and no purpose would have remained for testing and accountability”⁶²

This law of accountability makes it necessary for miracles to take place in a certain place and for a short time. That is, miracles have to be like a flash of light that turns on and off all of a sudden, not like the sun that always shines in the sky. Thus, when some people who witness the miracles themselves consider those miracles together with the solemnity, honesty and high ethics of the person who claims to be a prophet, they will accept the claim of prophethood as a necessity of the mind and conscience. Others will interpret the extraordinary states that they witness as an illusion and magic; they will accuse the person who claims to be a prophet of insanity and skilled magic, refusing his call to believe.

If the extraordinary states sent as a divine bestowal are performed by prophets, they are called miracles; otherwise, they are called

Miracles are not limited to being used as evidence for the claim of prophethood. As a matter of fact, miracles were also shown as a sample of Allah’s grace, bestowal and grant and to reinforce their belief. Many miracles are reported from prophets like hundreds of people being fed from one plate of food with the prayer of blessing of a prophet and so many people quenching their thirst from one jug of milk.

Those incidents of coming to existence out of nothing, which are a clear violation of the laws of nature can also be observed in the blessed people who are not prophets; those incidents, which are a manifestation of Allah’s bestowal are called karamah. That is, if the extraordinary states sent as a divine bestowal are performed by prophets, they are called miracles; otherwise, they are called karamahs.

3.1.1-The contradiction between the apparent laws of nature and miracles

One of the basic laws of physics is the principle of the conservation of matter, which can be expressed as “matter does not come into existence out of nothing; it does not go into non-existence from existence”.⁵

⁵Matter is actually a form of energy; therefore, the principle of conservation of energy or matter plus energy is more general. However, in cases where matter-energy transformation is not in

Everything confirms the trueness of this principle from the simple observation that when you remove 3 slices out of an 8-slice pizza, 5 slices remain to the most accurate scientific measurements made by taking into account matter-energy transformations. However, some religious circles remain aloof from this scientific fact, which they cannot deny because they perceive it to be contrary to Allah's creation out of nothing. In fact, exact sciences express what is seen based on objective observation only; they do not say anything about Allah's creating out of nothing because this issue is outside the scope of exact sciences. Scientists' statements about a supernatural being are not based on science; they are their own views and thoughts.

Isaac Newton, who discovered the law of gravity and who is known as the father of classical physics, objects to the idea of seeing the universe as a big clock/machine and draws attention to the difference between science and difference of opinion as follows:

“The law of gravity explains the movement of planets but it does not explain who makes them move.”

Similarly, Galileo, who was excommunicated by the church due to his ideas, describes a scientist as a person who tries to read the book of the universe and to understand it and states the following in his book called *Il Saggiatore*:

“Philosophy (science) is written in this big book, that is, in the universe. It is such a book that it is always open for our observations but it is not understood unless somebody understands its language and explains its letters.”

The power and will of Allah have encompassed everything and is away from any weaknesses. A lawmaker that is dominant over laws and is not dominated by them. The laws of physics do not bind Allah, who has imposed them because the one who has the power to impose a law with His will has the power to change the law, and if necessary, to cancel it temporarily.

Albert Einstein, who is known as the father of modern physics, regards beings as written books:

question like nuclear reactions, the idea that matter and energy are conserved separately is a valid approach that provides convenience.

“We are in the position of a little child entering a huge library filled with books in many languages. The child knows someone must have written those books. It does not know how. It does not understand the languages in which they are written. The child dimly suspects a mysterious order in the arrangement of the books but does not know what it is. That, it seems to me, is the attitude of even the most intelligent human being toward God. We see the universe marvelously arranged and obeying certain laws but only dimly understand these laws.”⁶³

Badiuzzaman Said Nursi regards the beings as letters or words and the whole universe as a book and mentions it as ‘the grand book of the universe’.

That man cannot comprehend coming into existence out of nothing makes the issue more complicated and causes confusion. For human beings, the conservation of matter or rather matter + energy is a sound law that cannot be violated. Besides, due to a necessity of this law, all perpetual motion machines claiming to produce energy out of nothing are rejected categorically. However, this situation does not bind Allah, who has imposed the law, in terms of the philosophy of religion because the one who has the power to impose a law with His will has the power to change the law, and if necessary, to cancel it temporarily. All miracles and karamahs are based on the temporary and limited cancellation of one or more laws of nature. For this reason, the first request of the people from those who claim to be Allah’s messengers are to show miracles that are impossible to take place under normal circumstances to prove their claims. For, people know very well that feeding five hundred people with food that is enough for five people can be possible only through temporary cancellation of the law of conservation of matter; nobody, including scientists, can do it with their own power.

3.1.2-A good physicist can believe in miracles easily

When everything is placed properly and in a correct perspective, one can be a very good physicist as well as a very faithful man who believes in miracles easily - that is, he can be a religious scientist who does not feel any contradiction. For example, Isaac Newton, who formulated the most fundamental laws of physics known as ‘Newton’s first, second and third laws’ was a very religious person who studied the Bible seriously. Albert Einstein, who is the second greatest physicists in the world, rejected atheism and expressed his belief in Allah.

A person who believes in Allah and has difficulty in believing in miracles due to his belief in the laws of physics, such as the conservation of matter, needs to re-evaluate the attributes of Allah, whom he believes in, in detail by getting rid of his premises. A Being who is believed to have created the universe out of nothing as a miracle of power can create whatever He wants out of nothing at any time if his wisdom necessitates it. The concept of barakah (blessing/abundance) can be evaluated within this framework.

3.1.3-Laws of Nature as a different dimension of existence

Laws and rules are the foundations of order and peace all over the world; and that is the case in the universe too. For example, if the law of gravity only were to be canceled, everything would start to fly in the air and a complete chaos would break out. In the atomic nuclei, if the strong force holding the quarks and the protons together were to disappear, all atoms would break into pieces and the universe would be transformed into a cloud of particles. The laws in a country reflect the general will of the people who live in that country; similarly, the laws in the universe reflect the universal will that dominates the whole universe. Security forces make individuals obey the laws in countries. Universal forces and effects do it in the universe - like the force of gravity making everything in the world obey the law of gravity.

Full obedience of every particle of matter to all laws of physics and the laws' being seen and known only by their manifestations in matter formed the prejudice that the source of laws as well as power was matter. However, there is no element called law in the particles, which are the basic building blocks of matter, or waves; similarly, there is no element called law in the bodies of the people who obey laws. It can even be said that even if all the mass in the universe disappeared and the law of gravity did not exist, and there was no heat conduction - the whole universe being at the same temperature – the law of heat conduction would be valid. Similarly, even if a country did not collect any income tax in a given year, the tax law would still be valid in the whole country since it had income or people producing income. Therefore, laws become manifest

**When the veil of
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in matter, penetrate into matter, and control matter fully, but they are not matter. Thus, the laws are outside the physical world just like the attribute of 'will', which comes from outside and dominates matter. In other words, the laws of physics themselves do not cancel but confirm or even necessitate the existence of a realm outside the realm of physics.

Conclusion

When the veil of accustomedness is raised, it will be seen that all beings are works of miracles like a chick that comes out of an egg that hatches after 21 days. Will is an arrow that pierces the universe of great explosion that is subject to the laws of physics. The existence of will is an evidence showing that the realm of beings does not consist of matter-energy only. The law comes from the attribute of will and the laws of physics reflect the existence of a universal will. That we extend our weakness to violate the laws of physics to Allah and regard miracles as impossible is the result of the idea of regarding all beings like ourselves. However, the power and will of Allah have encompassed everything and is away from any weaknesses. A lawmaker is dominant over laws and is not dominated by them. The laws of physics do not bind Allah, who has imposed them, because the one who has the power to impose a law with His will has the power to change the law, and if necessary, to cancel it. All miracles and karamahs are based on the temporary and limited cancellation of one or more laws of physics. For this reason, a miracle is a necessary and sufficient condition of prophethood. In conclusion, Allah's customs are natural laws; unusual incidents are miracles or karamahs.

All miracles and karamahs are based on the temporary and limited cancellation of one or more laws of physics.

EVALUATION QUESTIONS

- 1-What is a miracle?
- 2-What is the difference between a miracle and a karamah?
- 3-What are the reasons for showing miracles?
- 4-What is the difference between the physical world and the metaphysical world?
- 5-Is gravity a law of the physical world or the metaphysical world?

CHAPTER 4

4-WHAT IS THE NATURE OF LIFE?

4.1.ORIGIN OF LIFE⁶⁴

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*“The system of the universe
cannot be explained without
belief in Allah.”* Newton.

LEARNING OUTCOMES OF	EVALUATION
1-The student understands the first creation of the universe. 2-He understands the wisdom behind the creation of the beings with simple structures first. 3-He learns that beings cannot occur as a work of nature. 4-He understands the relationship between the laws of nature and metaphysics.	1-What gases may have existed in the first atmosphere? 2-Why can the beings not have come into being spontaneously? 3- What is the relationship between the laws of nature and metaphysics?

It is possible to summarize the views put forward by scientists in geology and biochemistry books related to the origin of life as follows:

The universe occurred 15 to 20 billion years ago with an explosion. As a result of the explosion in which elements such as helium (He) and hydrogen (H) were formed by explosions, planets and the world formed in a very short period of time. Then, elements occurred; after that, compounds were formed as a result of the combination of elements in a period of billions of years. Life started on earth 4.5 to 5 billion years ago. It is put forward that the first atmosphere of the world consisted of water vapor, methane, other hydrocarbons, cyanide acid, ammonia and hydrogen sulfide. It is stated that O₂ joined the atmosphere as a result of the photosynthesis of plants, that organic substances were synthesized as a result of continuous electrical discharges and that animal organisms were synthesized from those organic substances. Some of those views are worth supporting. However, many of those views of scientists are baseless.⁶⁵

4.1.1. STAGES RELATED TO THE CREATION OF THE UNIVERSE

Firstly: It is a view supported by all scientists that the universe occurred as a result of an explosion. However, why was an explosion necessary in an environment where seas, land, plants, animals, people, and even matter did not exist? It is clear that even a child's cap gun will not shoot on its own; it is shot by a child; similarly, it is clear that this explosion was caused by an endless knowledge, will and power. It is not possible to exclude the Creator by attributing everything to causes. When the creator is excluded, many questions will arise: "Why was an explosion regarded necessary?" "How did it explode?" "What was intended in the end?" "Why should it happen?"

Secondly: The idea of "spontaneous formation of small elements such as H and He in a very short time after the explosion" is far from expressing the truth. Even a child who wants to make a toy, a house or a car from clay or play dough will know what to do first, then decide and after that start doing it.

Thus, the being that will create the universe will aim to create first. He needs to have knowledge and to know the ways of creating to do it; He will produce suitable materials and then start to create the universe.

It means Allah knows what He will create beforehand, designs them and then creates them. He creates elements based on His aims and uses them in construction. Otherwise, it is not possible for the elements of a mass to form themselves by chance.

Thirdly: “The view “planets formed as a result of the cooling of the masses that were discharged as a result of the explosion” is true. However, “Who wanted these masses to cool down? Why did they cool down? And how did they stop when they reached a certain place? Why did they always form regular steps in the future?” We can answer those questions by accepting that there is someone who makes them. For, all of those things are works of a great knowledge, will and power.

4.1.1.2-The tree of universe whose fruit is man was created

Everything was done in a very planned and programmed way. The beings to come years and even centuries later were taken into account; everything was planned and designed down to the finest detail; very sensitive balances were observed; no small deficiencies or gaps were left; the whole universe was woven like a lace and embroidery. A large fig tree squeezed into a fig seed comes out of that seed; similarly, the tree of the universe was formed from the nucleus of the universe at the very beginning. The branches of this tree of the universe were formed by elements, its leaves by plants, its flowers by animals and its fruits by people. This tree of the universe yields new leaves, flowers and fruit all the time, and it hosts new guests in every century.⁶⁶

A large fig tree squeezed into a fig seed comes out of that seed; similarly, the tree of the universe was formed from the nucleus of the universe at the very beginning.

They are all decisions that a being with endless knowledge, will and power can make. A being that does not prepare the whole universe in the form of an atom in His sight cannot manage the universe.

4.1.1.3-Nothing has a model. Everything is made for the first time

Fourthly:The view that “energy was released for the formation of the elements and that compounds formed from the elements in a period of billions of

years” indicates a great source of energy and power, and the owner of a great knowledge and will; it never indicates coincidence. Before the energy is released, the being to release the energy must have enough energy. Then, a cause for the energy release is necessary; and energy release is then expected to have a knowledge and power to form the compounds into a certain shape and produce the elements. For, everything is new and the properties of each element are given for the first time; and the rules of forming compounds are introduced for the first time. In that case, the being giving that energy and luminous light must be eternal. In other words, it must dominate both the past and the moment as well as the future. Not accepting Allah, who has those attributes, and accepting matter as pre-eternal mean attributing divinity to substances that do not possess energy, knowledge, will and power. This is a thought that is impossible even to imagine.⁶⁷

4.1.1.4-The view that “organic substance occurred as a result of electric discharge” is baseless

Fifthly: “The view “that first atmosphere of the world consisted of water vapor, methane, other hydrocarbons, cyanide acid, ammonia and hydrogen sulfide, that O₂ joined the atmosphere as a result of the photosynthesis of plants, that organic substances were synthesized as a result of continuous electrical discharges and that animal organisms were synthesized from those organic substances” is a view that needs to be corrected. The substance such as methane, cyanide acid, ammonia and hydrogen sulfide, which are claimed to have existed in the first atmosphere of the world, are toxic substances for living beings and they do not allow living beings to live. It is impossible for life to start in this environment. It is not possible for O₂ to occur by photosynthesis later because there is CO₂ in the atmosphere but there is no sign of water in the soil. Besides, there is no information about how plants emerged. It is clear that each plant has a perfect order, a precise measure and a regular functioning. In that case, it is certain that plants were created by a creator that has absolute knowledge, will and power. For, it is not possible for about a million plant species to form by chance and without any reason.

Sixthly: The view that “there is a continuous electric discharge and that organic matter is the result of these discharges” is unfounded. For, an electrical potential is required for electrical discharge. Where does this power come from

and why does it come? If it is discharged for the synthesis of organic substances, it must also be the work of a creator with a goal, purpose and result.

Even today, simple sugars and simple organic materials, such as amino acids do not occur as a result of electrical discharges. How may complex molecules have turned to tissues and organs under the claimed primitive conditions of that time? It is necessary to apply electrical discharges for a certain period of time on a certain dose of substances in order to obtain results from them. It is something that necessitates expertness. Besides, the organic substances are combined according to a rule among themselves. So, there is a need for a creator who recognizes elements and knows the rules of their combination and who can realize these combinations.

The creation of the universe is explained as follows in some verses:

“To Him is due the primal origin of the heavens and the earth” (al-An’am, 101).

“Your Guardian-Lord is Allah, Who created the heavens and the earth in six days, and is firmly established on the throne (of authority): He draweth the night as a veil o’er the day, each seeking the other in rapid succession: He created the sun, the moon, and the stars, (all) governed by laws under His command. Is it not His to create and to govern? Blessed be Allah, the Cherisher and Sustainer of the worlds!” (al-Araf, 54).

“Seest thou not that Allah created the heavens and the earth in Truth? If He so will, He can remove you and put (in your place) a new creation?” (Ibrahim, 19).

“He has created the heavens and the earth for just ends: Far is He above having the partners they ascribe to Him” (an-Nahl, 3).

4.1.2-Every living being was created specially based on their DNAs

The masses that occurred after the explosion were moved away from one another and cooled. Each mass was placed in an orbit and given a movement. In the meantime, our world, which was given great importance, was cooled and mountains and seas were created. During this process, the atmosphere was made suitable for living beings like the present atmosphere. First the plants and then the animals were created; and those beings were presented to the human beings so that they would benefit from them.

When all conditions were suitable, Hz. Adam was created and all conditions of life were taught to Adam by Allah. Otherwise, man, who was alone with wild animals, would not have had any chance to survive. In addition, each plant, each animal and each human being is expressed with a DNA peculiar to them, and each living being is created specially according to this DNA. It is not possible to express this otherwise. For, the creation of so many kinds of living beings in the best way cannot be the work of ignorant, blind, unconscious and mindless causes and nature. For, the existence of infinite, knowledge, will and power is seen in everything that is done.

Nucleic Acids

When we think of living beings, nucleic acids come to mind because nucleic acids are the key molecules of life and are existent in all living beings. These structures contain genetic information in living beings and are a source of information for protein synthesis. Nucleic acids are polymers that are made up of nucleotide units chemically. DNAs in human chromosomes are derived from millions of nucleotides. Each nucleotide unit consists of three parts:

- 1) An organic base with nitrogen
- 2) A pentose sugar with five carbons
- 3) A phosphate group.

Bases are divided into two as pyrimidine and purine.

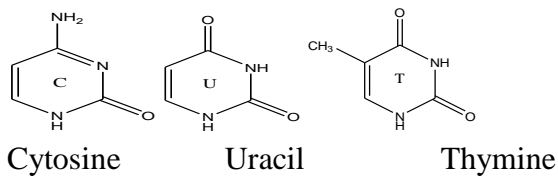


Figure 1. Pyrimidine bases: Cytosine, Uracil and Thymine.

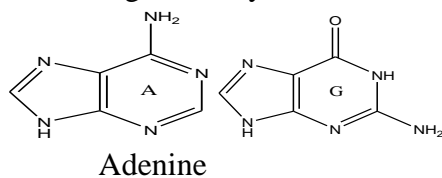


Figure 2. Purine bases: Adenine and Guanine.

Nucleotides also have a sugar group along with the bases mentioned above. This sugar unit is ribose in Ribonucleic Acid (RNA) and Deoxyribose,

which has one oxygen missing, in Deoxyribonucleic Acid. Base and sugar units form nucleoside structures⁶⁸.

Ribonucleotide (RNA) and Deoxyribose Nucleotide (DNA) units form when nucleoside units combine with phosphate groups.

Nucleic Acids (RNA and DNA molecule chains) form when more than one nucleotide unit come together.

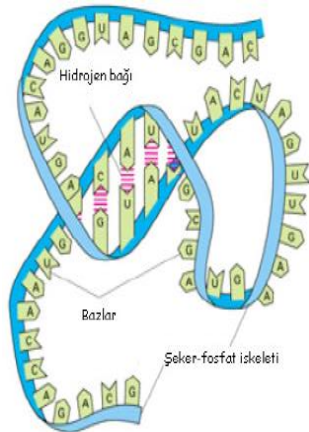


Figure 3. The schematic structure of an RNA chain.⁶⁹

RNA chains consist of single polynucleotide chains. DNA Molecules consist of the chain of two polynucleotide chains, which bind to each other to produce the helical structure. RNA chains consist of single polynucleotide chains. This helical structure forms as a result of the matching of the nucleotide bases on the two DNA chains like Adenine-Thymine (A-T) and Guanine-Cytosine (G-C). During these matches, H bonds are formed between the bases; and the two polynucleotide chains of the DNA are held together thanks to these bonds. The formation of a different number of H bonds between different bases causes the formation of the helical structure of the DNA molecule.⁷⁰

In a system called nucleotide metabolism in living organisms, DNA, which is a genetic material, and RNA molecules, which are involved in protein synthesis, are made and destroyed any time based on the need

A chemist with knowledge, will and power is necessary for the construction of even table salt (NaCl), which is the simplest compound, in a laboratory.

Similarly, a being with knowledge, will and power is necessary for the carbon (C), Hydrogen (H), Nitrogen (N), Oxygen (O) and Phosphorus (P) atoms to combine to form base, sugar and phosphate units in living beings and for these units to join together to give nucleotide structure and for nucleotides to form polynucleotide chains by linking to each other with ester bonds and for these polynucleotide chains to form the double helix structure by binding with H bonds.

Although human beings have the most knowledge, will and power among living beings, they cannot interfere with the nucleotide metabolism that occurs even in their own bodies; and if these events occur outside their own knowledge, will and power, it means they are done by a secret hand. This secret hand can only be Allah, who has absolute knowledge, will and power. All these deeds are carried out by His knowledge, will and power.

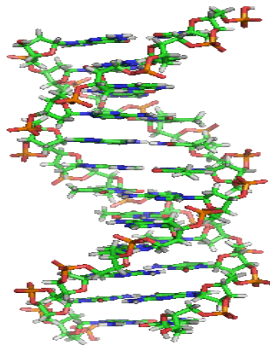


Figure 4. The schematic shape of double DNA chain helix.⁷¹

EVALUATION QUESTIONS

- 1-What substances did the first atmosphere consist of?
- 2-How much time has passed since the creation of the universe?
- 3-How is the sequence of creation of the beings in the

4.2.MAGNIFICENTORGANIZATION OF MOLECULES⁷²

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student understands the connection between the periodic table and the creation of living beings. 2-He learns the secret of the systematic and organized movement of all molecules. 3- He understands the secret of DNA's showing that its master is pre-eternal and post-eternal.	1-What kind of a connection can be established between the periodic table and the creation of living beings? 2-How do molecules manage to do things that are engineering marvels? 3-How would you explain the fact that the molecular events in all living beings are mostly the same

All living and non-living beings are made of atoms. That is, the building blocks of living beings are atoms. Atoms are equipped with a structure to form molecules. The atoms are combined in different ways to form molecules according to the needs of living beings.

The life of living beings depends on the regular operation of the molecules. Since atoms are lifeless, mindless and unconscious, they can definitely not know about the need of a living being and cannot get together and organize to meet this need.

In addition, molecules act very consciously. There are billions of molecules compared to the body weight of the living being. Those molecules

fulfil their duties without failing, getting tired and being confused. The living being itself has no contribution toward producing those molecules and assigning them to do things. It is even unaware of it. However, if only one of those molecules did not function, the life of that living being would end.

4.2.1-Hemoglobin Molecule has a Magnificent Organization

In that case, the being that created the living beings must have definitely created the molecules too. For example, oxygen carries hemoglobin molecules to cells in humans. Hemoglobin is a large molecule composed of various atoms. It has 4 large molecules in the form of a chain. These chains come together by folding and assuming a certain shape. There is another molecule called HEM group in the middle of each chain. In the middle of the HEM group is an iron atom. Oxygen is connected to this iron atom in hemoglobin and it is taken to all of the cells in our body⁷³

Since hemoglobin is lifeless, mindless and unconscious, it certainly does not know what oxygen is and how much oxygen the cells need. In

The owner and the creator of the atmosphere, oxygen, iron, hemoglobin, cell and the living being that consists of cells is the

addition, it is not possible for hemoglobin to establish such a mechanism on its own and to assume such a structure. So, the one that produces hemoglobin must be a very good chemist to know how to carry oxygen by binding it with iron. In addition, He must know that people need oxygen and hence create oxygen in the atmosphere. He must also know how and why to use oxygen in the cell.

In that case, the owner and the creator of the atmosphere, oxygen, iron, hemoglobin, cell and the living being that consists of cells is the same.

The mechanisms by which atoms come together and how they form molecules are known. However, knowing this does not mean that they are ownerless and that they arrange themselves like that on their own. Besides, the system of the structure of atoms is a miracle in itself. The atom is too small to see even with the largest microscope. However, there are protons, neutrons and electrons that are even smaller in that tiny particle. The number and arrangement of these particles in atoms enable them to come together and to make numerous different molecules. In that case, whoever created the periodic table must have definitely created all living beings too.

4.2.2-Molecules do things that are engineering marvels

The molecules in living beings are lifeless, mindless, unconscious and simple things. However, they work extremely consciously. In fact, human beings cannot do what they manage to do even with today's technology. For example, molecules produce energy at constant temperatures. They work at a constant volume and constant pressure. It is definitely not possible for them to prepare and produce such a system on their own. Many molecules come together to do a certain job. And they do this continuously, without getting tired and being confused throughout the lifespan of that living being. In fact, the work of molecules in cells is described as follows by famous biochemists: The chemical activities a cell does in a few minutes can only be done in months by many experienced chemists working in highly developed laboratories.⁷⁴

Molecules are made work with maximum economy in the cell. The yield in their reactions is 100%. It means they do not produce any unnecessary by-products. Energy efficiency is maximum. Cells use many different molecules taken as food very efficiently and convert them to a few simple molecules; they can also make hundreds of different molecules starting from a few simple molecules such as water, carbon dioxide and ammonia.

For instance, producing energy from sugars and fats in humans is quite a long process and many molecules take part in this task. Enzymes constitute most of those molecules. The enzymes are made work so perfectly, carefully, fast and consciously that they astonish people. However, since these molecules do not have life, mind and consciousness, it will be gullibility to expect them to come together on their own to do a job. Then, who makes all these molecules work in a very intelligent and conscious way? Is it not necessary to think about it?

The enzymes are made work so perfectly, carefully, fast and consciously that they astonish people. However, since these molecules do not have life, mind and consciousness, it will be gullibility to expect them to come together on their own to do a job.

In addition to enzymes, auxiliary molecules and various minerals are involved in this work. It is not possible to understand how so many molecules, which are quite different from one another, do the same work for years by coming together and without having a rest and making any mistakes. That is, it is not possible for these molecules to achieve such a task on their own. Therefore, whoever created both those molecules and the living beings that they serve must have definitely created the universe too; He is the one who employed those molecules in those works. Nobody else can do it.

For example, 21 enzymes, about 10 auxiliary molecules and various elements such as Na, K, Fe, P and copper take part in the process of a sugar molecule being transformed into CO₂ and water so that they will be used in energy production. Those molecules form an organization shown below in three schemes. The molecules in these three schemes work in series one after the other in an oxygenated environment to convert the sugar molecule (glucose) into CO₂ and water. Meanwhile the energy that is produced is used for the needs of the body.⁷⁵

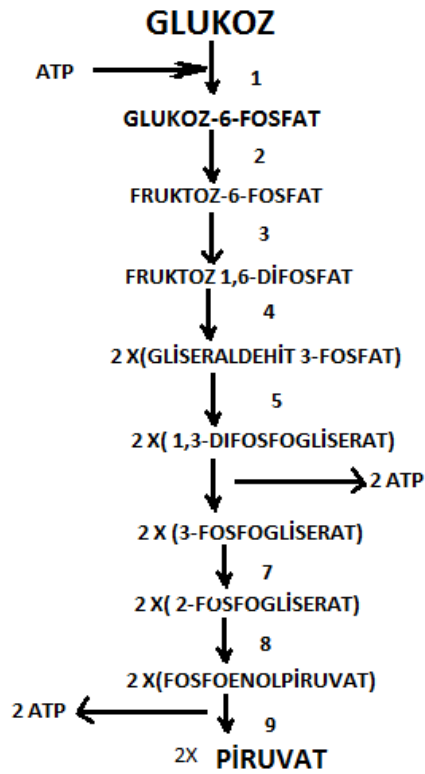


Figure 1. First reaction series. Glycolysis.⁷⁶

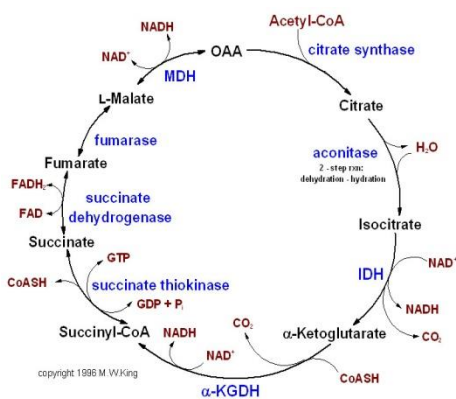


Figure 2. Second reaction series TCA cycle is an extraordinary organization. Those who discovered this cycle won the Nobel prize.⁷⁷

As it can be seen, it is very difficult even to schematize the molecules that realize these reactions let alone producing those molecules.

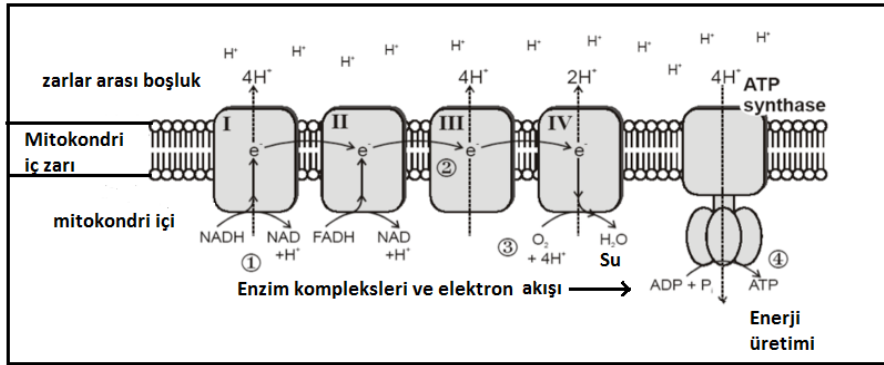


Figure 3. The schematized form of the third reaction series: Oxidative phosphorylation (or respiratory chain) reactions (A scientist who explained how those reactions worked with a theory won the Nobel prize).⁷⁸

This reactions series is a real engineering wonder that today's engineers cannot even imagine because these molecules produce energy at a constant temperature. In addition, they reveal the high energy in the structure of glucose with a great engineering science. These reactions have not been understood yet. This mechanism is almost the same in all living beings. Is it possible for the lifeless, mindless and unconscious molecules to produce this technology, which has not been understood yet though today's science and technology have advanced so much, on their own?

The enzymes that produce energy from fats in our bodies are similar and they are equally perfect. The enzymes that produce oils are also like that. These enzymes are even called "molecular factories"⁷⁹.

When you look at Figure 4, you will clearly see that lifeless, mindless and unconscious atoms cannot come together on their own for a very important purpose and make such a complex molecule. Since those living beings in which those molecules work cannot do this, and since those who are not interested in this science are not even aware of the existence of such a thing in their bodies, the being that makes it is Allah, who has endless power and strength, who makes both

atoms and molecules, and who knows the living beings and the needs of living beings and, Allah is the Lord of infinite power and might.

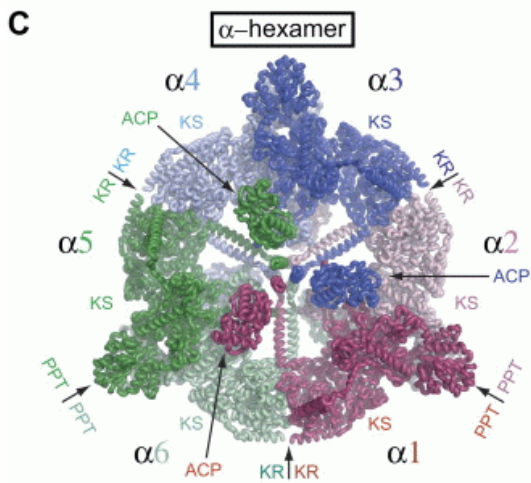


Figure 4. Fatty acid synthesis enzyme – Molecular factory that produces fat.⁸⁰

For instance, sugar (glucose) is produced by the molecules in plants using solar energy, carbon dioxide and water. This is an extremely simple but very cheap and excellent way of nutrition. Is it possible for plants or the molecules in the plant cells to do something like that on their own? Is it reasonable and logical not to know, not to want to know, or even to deny the real owner of this magnificent science?

4.2.3-What will molecules win if those who understand what molecules do win Nobel Prize?

We can also explain the molecular perfection in living beings as follows: Many scientists have managed to understand what molecules do in cells after years of working as a team. They deserve the NOBEL prize due to understanding it.

Now, let us think: Since scientists win a Nobel prize due to understanding what these simple molecules do after working for years, either these molecules have some knowledge, strength and power that are far more advanced than those scientists have or there is a being with infinite strength and power that makes them do it. Is the second alternative not much more reasonable and logical?

It is not possible to do all of them even with today's technology. People who are experts in this science know this very well. Besides, the same work continues in harmony and unity without interruption for years in a multicellular organism, for example in the trillions of cells of a human being.

So, how do the molecules in a cell achieve maximum efficiency, maximum energy and 100% efficiency? Who did they learn it from? Since molecules are lifeless, mindless and unconscious, how do they achieve such advanced scientific success? Accordingly, how is it possible to not know and see the real owner of strength, power, knowledge and life behind this magnificent system?

4.2.4-Scientific conceit causes denial

The following question can come to mind here: How do some of the scientists who see such a magnificent system not find and accept the real owner of this science?

Intelligences that become narrowed by absorption in neglect of God and in sin, or the material realm, are unable to comprehend vast matters in respect of sublimity, grandeur, and infinity; hence taking pride in such knowledge as they have, they hasten to denial and negation. Since they cannot encompass the extremely vast, profound and comprehensive questions of faith within their straitened and desiccated intellects, their corrupt and spiritually moribund hearts, they cast themselves into unbelief and misguidance, and choke.

If they were able to look at the true nature of their unbelief and the essence of their misguidance, they would see that, compared to the reasonable, suitable and indeed necessary sublimity and grandeur that is present in belief, their unbelief conceals and contains manifold absurdity and impossibility.

4.2.5-DNA shows that its master is pre-eternal and post-eternal

Words will not suffice to explain DNA and RNA molecules. As it is known, DNA is the molecule that carries genetic information in living beings. In other words, they are the molecules in which the plans and programs of living beings are kept and used when necessary. This is called genetic information. The system in which genetic information is kept in all living beings is similar.⁸¹

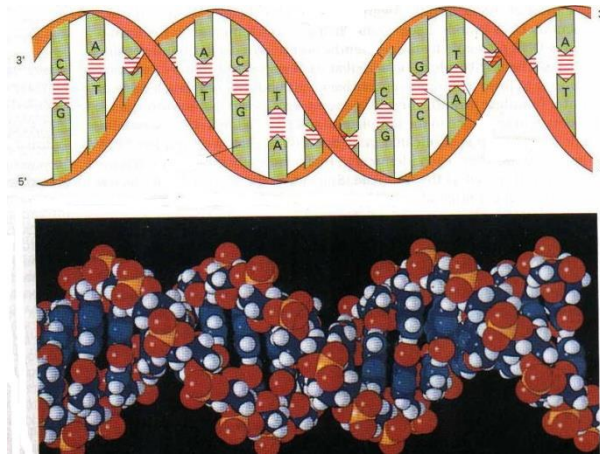


Figure 7. Schematic appearance of DNA molecule.

This shows that the creator of all of them is the same. DNA exists in all living beings: in plants, flies, donkeys, etc. Since none of these creatures, even man, who is the most intelligent and conscious among them, cannot make the DNA, and has not been able to understand it fully so far, and since DNA cannot create itself, the one that creates DNA can be only Allah, who has infinite knowledge and power. DNA is not something that is made of steel. On the contrary, it is an extremely simple molecule. Although it is so simple, the genetic information it carries remains unchanged for centuries and is passed on from generation to generation. This fact also clearly shows that the creator of the DNA must be pre-eternal and post-eternal.

As it is known, man has been able to discover to a great extent the genetic code that the DNA keeps by working for many years. Even the leaders of the two great countries of the world, the USA and the UK, proudly announced this achievement to the world. What did they announce? It was the understanding of the genetic code in DNA. In the meantime, those who discovered DNA (not those who made it) were awarded the Nobel Prize. In other words, no one has ever thought of making a new DNA molecule and putting as much genetic information as possible in it. Since man has never thought of making a DNA molecule though today's technology is so advanced, the being that makes DNA can only be the Lord of the pre-eternal and post-eternal realms, Almighty God, who has infinite knowledge.

Nowadays, people are trying to model DNA for computers because a spoonful DNA molecule can store the knowledge that hundreds of advanced computers can.

In conclusion,

1. All living beings are made of different arrangements of the same atoms.
2. The molecules in the cells work continuously without having a break and making a mistake so that living beings will continue living.
3. The molecular phenomena in humans, animals, and plants in the universe are generally the same.
4. Since there is almost an infinite number of cells in the living beings in the universe, and the chemical events in all these cells are done perfectly by the molecules, only a being with infinite knowledge, strength, power and wisdom can do them; and that being is Allah, who is the Lord of the realms.

EVALUATION QUESTIONS

- 1-How can a connection be established between the periodic table and the creation of living beings?
- 2-What is the secret of the systematic and organized movement of all molecules?
- 3- How does DNA show that its master is pre-eternal and post-eternal?

4.3-MAN IS A MIRROR THAT REFLECTS THE NAMES OF ALLAH' IN THE BEST WAY⁸²

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*I am Muhiddin, I am a dervish
I am in the way of God*

*I saw eighteen thousand realms
In a single particle*
MuhiddinAbdal

LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student understands that all structures like beauty, art and system are not matter but meaning.</p> <p>2-He realizes that the nature of things is the manifestation and reflection of the names of Allah.</p> <p>3-He knows that taste, smell and shapes in beings are properties that do not exist in atoms.</p> <p>4-He learns that meaning, that is, spirit is the essence and real being and that matter is the shell or</p>	<p>1-What way of thinking reduces man to the level of "happy animal"?</p> <p>2-Are laws such as gravity matter?</p> <p>3-What is spirit? Can it be limited to time and space?</p> <p>4-Can life be described?</p> <p>5-Why can the nature of man be understood by taking the metaphysical realm into consideration too?</p>

Exact sciences are based on observation and they develop through questioning. The biggest obstacle to the development of science is conditioning and its source is the habit that occurs over time. A person who is used to seeing

two things together all the time perceives these two things as part of one another or one of them as the source of the other and gets the feeling that one of them cannot exist without the other. It is very difficult to overcome these prejudices that become deep-rooted and make man accustomed.

We can perceive many things such as strength, love, anger and even life, vision, hearing, etc., only when their effects are seen on matter; and we naturally form the opinion that the source of everything is matter. This prejudice, which we form without questioning, forms the platform on which science is built today.

We generally rely on our five fundamental senses, all of which are related to matter, in our perception of the environment and beings. In other words, we cannot see something that does not have matter (like mind and love) and we cannot touch things that are not matter. As a result, we see matter as the real being, and the things that do not have matter as imaginary beings or as the manifestations of material interactions.

In fact, everything that we perceive as matter - from sub-particles to galaxies, from microbes to humans - is a mixture of matter and non-matter.

In fact, everything that we perceive as matter - from sub-particles to galaxies, from microbes to humans - is a mixture of matter and non-matter (immaterial things). Everything is virtually an embodied meaningful word or a fabric woven with material and immaterial fibers. And what is essential is not matter, but meaning. Matter is only the sheath or garment that enables our five senses, which themselves are also meanings, to perceive it. The material world is like a tulle curtain over meaning.

*“The physical world but is a lace veil strewn over the irradiating worlds of the Unseen,”*⁸³

*“An embodied meaningful word, is each being in the world.”*⁸⁴

*“This material and manifest world is but a lace veil strewn over the inner and spirit worlds.”*⁸⁵

The reality of things is the manifestation of

That is, meaning is the core and matter is the shell. Meaning is beyond time and space but matter is subject to time and space, and hence laws of physics.

There is nothing like life, willpower, consciousness, fight, love and beauty in the basic building blocks of matter; and what does not exist in the basic building blocks cannot exist in the whole. If there is, it means it comes from somewhere else. The reality of the diamond is understood only when it is realized that the glitters do not come from carbon atoms but from a light source other than the diamond. The reality of beings, especially human beings, will be understood when it is realized that tens of immaterial glitters, such as life in matter, come from non-matter layers, not from the particles of matter. The reality of things is the manifestation of Allah's names. *This reality is expressed as follows:*

“The Divine Names constitute the true reality of things, while the essences of things are only shadows of that reality.”⁸⁶

That is, the true reality of things are Allah's names. The essences of things are the shadows, manifestations and reflections of that reality.

4.3.1-It is necessary to know man truly

Despite the great developments in science in the twentieth century, and despite the name information age given to the time period we live in, man continues to be a great enigma. The way to understand people's behavior in the past and to predict their behavior in the future is to understand man and the society, which is virtually a big human being. If the reactions of individuals and societies vary considerably and continue to surprise us, this shows that we are still far from recognizing man and human communities.

If the diagnosis is wrong or incomplete in medicine, the treatment does not become useful and the patients cannot find a cure for their problems; similarly, it is not possible to solve the individual and social problems without knowing people enough in private and social life. Therefore, the starting point of solving the problems of people and societies and providing them with permanent peace and happiness should be to understand the human nature correctly. Otherwise, all proposed solutions and written prescriptions will be useless and disappointment will continue.

Biological sciences experienced great developments in the last century and biotechnology has become one of the most important locomotives of the global economy today. As a result, we now know the human body much better and can diagnose and treat its illnesses much better. Moreover, we will produce tissues

and organs suitable for the genetic structures of individuals in laboratories in the near future.

However, it is not possible to see the same bright picture for the human spirit, which shows itself with its attitudes. In other words, while the sciences related to the bodily or material structure of man have developed rapidly and show a bright future, the sciences related to the spiritual or immaterial structure of man have lagged. This clearly shows that the existing information about the spiritual structure of man is incomplete, inadequate and even invalid. The first thing that needs to be done is to try to understand the nature of man correctly by being saved from deeply-rooted prejudices. This should be done based on observations, which are the source of exact sciences, and by benefitting from the ideas of prudent thinkers in the Islamic world.

4.3.2-The idea of materialism is a faith and ideology rather than science

The basic problem of our age is basing everything on matter, and the basic fallacy is the prejudice that matter is the source of everything. This idea of materialism, which forms the basis of the current scientific approach, is a belief and ideology rather than science. An approach that sees man as a lump of matter and seeks the source of his state, deeds and feelings in the manifestations of the interactions of matter is far from understanding man. There is nothing much the viewpoint seeing man as an advanced animal species that evolved as a result of a chain of coincidences and that is taken under protection by being labeled as “scientific” can offer to humanity. The highest point that humanity can reach in a platform where human beings are seen as an animal species is the point of “a happy animal”. This corresponds to a situation where the body is healthy and comfortable, where all of its needs are met and

There is nothing much that the viewpoint seeing man as an advanced animal species that evolved as a result of a chain of coincidences and that is taken under protection by being labeled as “scientific” can offer to humanity. The highest point that humanity can reach in a platform where human beings are seen as an animal species is the point of “a happy

everything that is desired is attained as much as possible. To what extent this recipe for happiness is valid for man is debatable.

There is not really much difference between a human being and an animal in terms of their bodies. People are cleverer than animals; they need to live together and they meet their needs by exchanging. That is why man is usually defined as an “intelligent animal”, “social animal” and “economic animal”. Another remarkable difference between human beings and animals is that humans use tools and bring together all the necessary materials before they start doing something, which shows their imagination.

However, the differences between humans and animals are not limited to them. For example, man is closely interested in the past and the future, and his understanding and perception is wide enough to cover all times. While man is living in the place where his body is currently, his imagination, mind and heart can travel through other time periods and places, take pleasure from the past and the future and can live in a very wide period of time. Therefore, he may be suffering hellishly in terms of his spirit due to the pains from the past and the fears related to the future when his body leads a heavenly life, unlike animals. Or, he may be comfortable and happy but the pains of other people, especially his relatives, will depress him when he empathizes with them and he will shed tears.

4.3.3-The immense world is like a dot in the imagination of man

In terms of matter, the earth is not even as big as a dot in the universe and man is not even as big as a dot in the world. In other words, man is as big as a dot within a dot only in terms of its body. However, he has such a greatness in terms of his meaning, that is, his spirit, and his spiritual organs and feelings like the mind, imagination, heart and talents encompassing everything that the immense world will be as small as a dot in his imagination. The pleasures and pains that man receives with his spiritual organs are also proportional to their greatness - depending on their development. The greatness of the difference between a man and an animal is not related to matter but spirituality. Each member of humanity is like a species of other existent beings.

In terms of matter, the earth is not even as big as a dot in the universe and man is not even as big as a dot in the world.

“Each member of humanity is like a species of other existent beings. The light of thought has broadened its scope of ambitions to the extent that even if it swallowed all of time, it would not become full. The nature, value, viewpoints, perfectibility, pleasures, and pains of the members of other species are restricted, while those of humanity are constant, universal, and unrestricted.”⁸⁷

There is not much difference between people in terms of material limbs or organs, and they are all identical. Although the height and weight of people vary slightly, the value of a person and the size of the pleasures and pains he takes from life have little to do with the size of the body.

When someone is called a great person, we do not think about the tallness or weight of that person. The difference between two people can be as big as the world in terms of spiritual organs. For example, a mother who endangers her life for her baby is appreciated and praised as a hero of compassion but a person who kills an innocent baby is despised as a monster. People who deal with science and become exalted mentally are held in high esteem but big masses of people are treated as ordinary people. A person becomes a cure like medicine for the society with his high ethics while another can be poison for humanity with his ambition and fury. In short, the difference between two people can be much more than the difference between two animal species; and this difference is not related to matter, but related entirely to meaning, that is, spirit.

For example, mind is a stomach and its food is knowledge. The feeling of love is a stomach; its food is love. The feeling of generosity is a stomach and its food is treating people food.

4.3.4-Manhas different stomachs

The most striking difference between humans and animals is in the number of stomachs they have. Animals have one stomach but humans have several stomachs. The material stomach that we all know and that grinds what we eat when we are hungry does essentially the same thing in both humans and animals. The food of this material stomach is all kinds of food that turn the earth into an exceptional dinner table.

The other stomachs in humans are related to being humane and they are all non-matter, that is, spiritual. For example, mind is a stomach and its food is

knowledge. The feeling of love is a stomach; its food is love. The feeling of generosity is a stomach and its food is treating people food. All stomachs, whether material or spiritual, grow as they are fed, and become weak as they remain hungry. The hunger of all stomachs is painful and their fullness is pleasure.

There is a limit to the growth of the material organs that are fed by the stomach we know. However, there is no such limit for spiritual organs. Sometimes a single feeling, such as ambition or enmity, develops and is rooted so deeply that it virtually dominates the whole world of man. All of the physical organs in the body are good and serve something. Goodness is also essential for the spiritual organs that are sown in human nature as seeds of talent and ability. However, their education is subject to man's will; and the ones that are watered and fed among them will develop. The others continue to sleep as dry seeds. If they are misused and misdirected, they will yield poisonous fruits. The human body is like the soil of a garden. The value of the garden is proportional to the value of the plants growing on it rather than the soil.

4.3.5-The viewpoints based on matter and names of Allah

The materialist worldview claims that everything, including man, is a meaningless being composed of matter-energy and that occurred as a result of a chain of coincidences that began with the big bang.

On the other hand, Badiuzzaman Said Nursi states that matter is a tulle placed on the realms of meaning/spirit; he says that the real being is non-material, that is, spiritual. If we regard the universe as a stack of paper with ink instead of a book, it is not possible to understand the nature of the realm of beings. According to him, the real skill is to understand what is written by going beyond paper and ink.

The idea that everything is made of matter only cannot pass the simplest tests. For example, two identical roses are the same in terms of substance even if one of them is crushed and becomes like sludge. However, those two roses are quite different; and since all of those differences like beauty, art, and system are not material, they are non-material, that is, spiritual.

One of the most common presuppositions in science is the opinion that the source of everything is matter. This view is based on Stoic philosophers before Christ and is one of the most unquestioned facts in the modern age.

What is amazing is that this idea has never been tested, and that is why it is not even scientific. The big bang theory also helped this view of “pure matter” universe, which is a belief rather than a scientific fact, to settle deeply.

The first condition in scientific theses is that the thesis must be compatible with observations and scientific evidence that is available and it must pass the necessary tests. However, the idea that everything is made of matter only cannot pass the simplest tests. For example, two identical roses are the same in terms of substance even if one of them is crushed and becomes like sludge. However, those two roses are quite different; and since all of those differences like beauty, art, and system are not material, they are non-material, that is, spiritual.

We can perceive everything - strength, love, anger and even life, sight, hearing, etc. - only when their effects are seen on matter, and of course we fall into the illusion that the source of everything is matter. This prejudice, in which we find ourselves without questioning, form the platform on which science is founded.

Nursi never accepted the one-dimensional view consisting of matter (or energy) about the universe and beings, and he criticized those who did so. When people objected to him by saying, “*Who do you think you are to challenge these famous philosophers? You are like a mere fly and yet you meddle in the fight of eagles!*” he answered them as follows: “*Whatever caused them to become submerged did not even dampen my toes*”⁸⁸. According to him, matter-energy is only a manifestation of the name of Qadir (the All-Powerful). All of the non-matter qualifications are the reflections of the other holy names. For instance, life is a manifestation of the name in ‘Hayy (the Ever Living One)’, character is the manifestation of the name ‘Fard (the Individual One)’, compassion is the manifestation of the name ‘Rahim (the All-Merciful)’ and having a purpose is the manifestation of the name, ‘Hakim (the All-Wise)’. Thus, Nursi associates all beings with divine names and hence with Allah:

“Everything has numerous aspects that give onto God Almighty like windows. The realities of all beings and of the universe are based on the Divine Names. Each being’s reality is based on one Name or on many. The attributes of things and the arts they display are also based on and rely upon a Name. True natural science is based on the Name of All-Wise, true medicine on the Name of

*Healer, and geometry on the Name of Determiner, and so on. In the same way that all the sciences are based on and come to an end in a Name, the realities of all arts and sciences, and of all human attainments, are based on the Divine Names. Indeed, one group of the most learned of the saints stated that **the Divine Names constitute the true reality of things, while the essences of things are only shadows of that reality.** They said too that even only apparently as many as twenty manifestations and impresses of the Divine Names may be seen on a single living creature.”⁸⁹*

4.3.6-Man is a mirror that reflects the names of Allah in the best way

Nursi says that all beings are mirrors reflecting the names of Allah, and that the mirror that shows His names in the most comprehensive and brightest way is man and he invites people to read themselves:

*“Man acts as a mirror to the Divine Names, the imprint of which are upon him. **There are more than seventy names** the impresses of which are apparent in man’s comprehensive nature. These have been described to a degree at the start of the Third Stopping- Place of the Thirty-Second Word. For example, through his creation, man shows the Names of Maker and Creator; through his being on the ‘Most Excellent of Patterns,’ the Names of Most Merciful and All-Compassionate, and through the fine way he is nurtured and raised, the Names of All-Generous and Granter of Favors, and so on; he shows the differing impresses of different Names through all his members and faculties, all his organs and limbs, all his subtle senses and faculties, all his feelings and emotions. That is to say, just as among the Names there is a Greatest Name, so among the impresses of those Names there is a greatest impress, and that is man. O you who considers himself to be a true man! Read yourself! You may otherwise be either animal-like or inanimate!”⁹⁰*

This expression also explains the hadith “Allah created man in the form of *Rahman*”, which sometimes causes misunderstanding, and the statement “*Man was created in the image of Allah*”, which is its equivalent in the Christian world. He states the following while explaining that statement: “*In the impossibility of image regarding God Almighty, what is meant by image is character, ethics and attributes.*”⁹¹

What is meant by ethics here is to assume the divine ethics, to rely on God Almighty humbly and to be a slave in His presence by knowing his weakness, poverty and mistakes. That is, being a real slave of Allah. In other words, man's acting in accordance with the manifestation of the names of Allah in his deeds and behaviors. For instance, when he is compassionate and merciful, he will assume the attribute of His name Rahim, when he is clean, the name Quddus (Pure), when he is tidy, the name Nazim (Arranger), when he is measured, the name Muqaddir (Determiner), when he is good and generous, the names Muhsin (Benefactor), Karim (Generous) and Rahman (All-Merciful), when he acts wisely, the name Hakim (Wise). To act like that is a nice habit to arrange life as well as a nice deed of worship. In addition, being a slave of Allah necessitates such deeds.

The secret that elevates the Prophet to the highest level of ethics and worshipping is his being mirrors to the names of Allah in the highest degree.

4.3.7-Beings through a new viewpoint

We can do many simple mental experiments to shed light on immaterial or non-material beings. For example, let us consider a 100-gram book consisting of 99 grams of paper and 1 gram of ink and compare it with 99 grams of paper, on which 1 gram of ink is randomly spilled. There is no difference between a 100-gram book and 100 grams of inked paper in terms of matter. If we send them to a laboratory for substance analysis, both of them will come back with the same result. Since the 100-gram book and 100 grams of inked paper are the same in terms of matter, every difference between them is related to the meaning and hence spiritual. What is meant by meaning for the book is everything except paper and ink. The book is a visible and hand-held material composed of ink and paper in appearance. However, what makes the book a book is the meaning in it in reality; the substance of the book is almost nothing compared to its meaning, which is its spiritual being.

Besides, electronic e-books, which have become increasingly widespread in recent years and tens of which is included in a single CD or flash memory, have no paper or ink. Words can be written or deleted in the desired color with the electrical energy converted to light on the screen pages. It may even be said that what is called a book is a curtain, a screen, a sheath or binoculars that make the meaning appear on pages.

Another example that will help us understand the relationship between matter and meaning (spirit) is the rose. Let us take two roses that are completely identical, and smash one of them until it turns into sludge. Then let us ask if there is any difference between those two. Such a question would be regarded odd and it would be said that a rose could not be compared to a pile of sludge. However, if the rose and its sludge twin were sent to a chemistry laboratory for analysis, the laboratory report would state that both were identical. Thus, materially, there is no difference between a rose and the sludge of its smashed twin. However, they are different, and since the difference between them is not matter, it is entirely meaning. (Nobody would think of giving a person rose sludge instead of a rose thinking that they are the same.)

Since the 100-gram book and 100 grams of inked paper are the same in terms of matter, every difference between them is related to the meaning and hence spiritual. What is meant by meaning for the book is everything except paper and ink.

This means every attribute and quality that the sludge does not have is related to meaning; and the value of matter of rose is virtually nothing compared to the value of its meaning. In other words, what makes the rose a rose is not its matter, but the meaning that becomes manifest in that matter. The rose is virtually a carrier of meaning and it is the first thing that comes to mind when somebody wants to send nice meanings. The person who receives the rose receives the nice meanings sent through it, not the substance of the rose; he absorbs the rose with his feelings and takes pleasure. However, if it is sent, by mistake, to a being that sees nothing but matter – like a cow or a donkey - things will change. The most fundamental difference between a human and an animal is spiritual feelings and stomachs. That is, an animal has one stomach but a human has hundreds of stomachs; and all of those stomachs except one are related to meaning. Therefore, living in order to eat means being away from humanity.

What makes a rose beautiful is obviously not the beauty in its atoms since the hydrogen or nitrogen atom in a rose is identical to the one in a smashed rose - just like the carbon atoms in diamond and graphite being identical. Since what does not exist in the parts of something cannot exist in its whole, the beauty of a rose comes from outside, not from its matter - just like a diamonds' fascinating

glitter originating from a source of light outside. The property of rose and other beautiful things is their ability to receive and reflect this beauty just like diamond receiving light and reflecting it in a fascinating way. This requires a common beauty and therefore a beauty layer, which is not related to matter (and time) in the universe. Even the ancient Greeks felt this meaning that they sanctified this layer as Venus or Aphrodite, “the goddess of beauty”.

Let us observe a fly as another example. Like other living beings, the basic building blocks of the fly are hydrogen, oxygen, nitrogen and carbon atoms. They consist of electrons, protons and neutrons like other atoms. That is, all beings, whether living or non-living, are made up of atoms or subatomic particles: electrons, protons and neutrons. The mortar that holds these basic building blocks together is forces. Now, let us compare a fly that has just died with a living fly. Since there is no loss or gain of substance with death, these two flies are identical materially. Then we can say that the differences between the living fly and the dead fly is life, sight, hearing, system, beauty, consciousness, love, etc. are non-matter, that is, meaning.

What is life?

There is no such thing as life in atoms or molecules, which are the basic building blocks of living beings. Since what does not exist in the building blocks cannot exist in its whole, life cannot be matter. In that case, life is something out of matter, that is, it is meaning; and it is not subject to time and space. Then there is a common layer of ‘life’ in the universe, and everything that can take this light of life, whether or not it has a material body, is alive.

Life is something out of matter, that is, it is meaning; and it is not subject to time

Observations show that the common characteristic of all living beings in the world is that they contain water. Therefore, life is sought in other planets by searching for water. However, water is not and cannot be the source of life because there is no life in the water molecule consisting of two hydrogen atoms and an oxygen atom; and the claim that water is the source of something that does not exist in itself is nonsense just like the claim that the dazzling diamond with its colorful sparkles is the source of light, or that the source of the images seen on the screen of the television set is the screen itself.

4.3.8-There is nothing called willpower in matter

Everything is subject to the laws of physics in the material universe envisaged by the big band, and hence it is clear what movement every being, whether living or non-living, will do. According to this philosophical view known as ‘determinism’, there can be no such thing as willpower, which means violation of the laws of physics. In fact, there is no element of will in the building blocks of matter. However, the existence of will is definite by observations; it can be proved and hence a scientific fact. In non-living beings, the laws of physics are fully dominant; and it is obvious how non-living beings will react to an effect.

However, this is not the case in the living beings that have willpower. Even this observation alone is sufficient to refute the presupposition that the universe is composed of only matter-energy.

It might not be possible to prove the correctness of a theory, but it is easy to prove that it is wrong; and the simplest way of this is to show that it contradicts the observations. To give an example, it is possible to know in advance how a piece of wood put in a river will move and where it will be at a certain time. For, the movement depends on the physical conditions of the river and the wood at the time when it is put in the river and the laws of physics; the non-living wood cannot oppose them. The same is valid for a living plant thrown into the river because there is no will in plants even though they are alive.

Animals and humans are subject to the laws of physics but they are not their prisoners; and they can do many movements by their free will that cannot be predicted by physics.

However, if an animal or human being is put in the river, no one can foresee what exactly will happen. For animals and humans are subject to the laws of physics but they are not their prisoners; and they can do many movements by their free will that cannot be predicted by physics. They can even swim against the current.

As it can be understood from this simple experiment, the existence of a will in the universe along with matter and strength is definite by observations and hence it is a scientific fact. The laws of physics are fully dominant in non-living beings and generally in plants; and it is clear how these beings will react to an

effect. However, this is not the case in living beings that have willpower. Even this simple observation alone is sufficient to refute the presupposition that the universe is composed of only matter.

Besides, if it were not for a non-material dimension called willpower, the future would be clearly known and people would be like unconscious robots. And they would not be held responsible for what they did just like a robot that went out of order could not be held responsible for the damage it caused.

This confinement to matter put many leading thinkers in a difficult position. For example, Albert Einstein became a strict determinist because of his firm belief in physics and he stated that even people should not have free will:

“A person’s actions were just as determined as those of a billiard ball, planet, or star. Human actions are determined, beyond their control, by physical and psychological laws. Everything is determined, the beginning as well as the end, by forces over which we have no control. It is determined for the insect as well as for the star. Human beings, vegetables, or cosmic dust, we all dance to a mysterious tune, intoned in the distance by an invisible player.”⁹²

However, in terms of divine names, will is seen as a manifestation of the non-matter name ‘Murid’ (the One that wills) in the conscious living beings. That is, everybody has partial free will as a manifestation of this name. Although its nature is not known fully, everybody understands in his conscience that he has partial free will. The intention and desire to do or not to do something shows that man has partial free will. Man is not like a leaf that is driven by the wind.

Laws of Physics

Laws and rules are the foundations of order and peace all over the world, and that is the case in the universe. For example, if the law of gravity only were cancelled, everything would start to fly in the air and there would be a complete chaos. The laws in a country reflect the general will of those who live in that country, and the laws in the universe reflect the universal will of the universe dominant in the whole universe. Police forces in countries endure the obedience of individuals to

The laws of physics do not originate from the matter they rule; they come from the outside – that is, from the outside of the matter-energy universe we know.

the laws. In the universe, this task is done by universal forces and effects just like the force of gravity making everything in the world obey the law of gravity.

Laws are not matter and hence are not subject to the limitations of time and space. Thus, they are valid everywhere, but they are not anywhere. As Einstein puts it, *a spirit becomes manifest in the laws of the universe.*⁹³

The fact that every particle of matter obeys all laws fully and that the laws are known by only becoming manifest on matter formed the prejudice that the source of laws is a matter just like force. However, there is no element called law in the particles or waves, which are the basic building blocks of matter – similarly, there is no element called ‘law’ in the bodies of people who obey laws.

In his book called “A Different Universe”, Robert Laughlin, the winner of the 1998 Physics Nobel Prize, states that the source of the laws of physics is not in the micro-realm, and that it becomes manifest out of nothing in the macro-realm:

Laws are not matter and hence are not subject to the limitations of time and space. Thus, they are valid everywhere, but they are not

*“The most fundamental laws of physics – such as Newton’s laws of motion or quantum mechanics – are in fact emergent. They are properties of large assemblages of matter, and when their exactness is examined too closely, it vanishes into nothing.”*⁹⁴

In other words, the laws of physics do not originate from the matter they rule; they come from the outside – that is, from the outside of the matter-energy universe we know. After studying some simple organizational phenomena such as weather, Laughlin reaches the following conclusion:

*“We are able to prove in these simple cases that the organization can acquire meaning and life of its own and begin to transcend the parts from which it is made. What physical science thus has to tell us is that the whole being more than the sum of its parts is not merely a concept but a physical phenomenon. Nature is regulated not only by a microscopic rule base but by powerful and general principles of organization.”*⁹⁵

*“Physical law cannot generally be anticipated by pure thought, but must be discovered experimentally.”*⁹⁶

These are powerful statements asserting, on the basis of observations, that the whole is more than the sum of its parts made of matter-energy originating from the Big Bang universe.

Nursi expresses it as follows:

“Yes, a decree exists in the whole, but not in the individual.”⁹⁷

In that case, the ‘extras’ in the whole must be non-matter or meaning, and must be coming from ‘non-matter universes’, expressed as divine names by Nursi. He deals with the physical part of matter and its metaphysical aspect together and states the following:

“Yes, nature has two aspects. One of them is the apparent/external aspect, which is thought as reality by heedless and aberrant people. The other is the esoteric/internal aspect, which is divine art and the paint of the Merciful. The power added to nature is the power of the Creator, who is Wise and Knower.

Thus, nature has an apparent, that is, visible aspect. It is the aspect expressed as the supra-atomic realm. There is also the invisible sub-atomic aspect of nature, which is subject to quantum mechanics.

He states that the invisible part of these laws of nature, which is the subatomic realm, is the manifestation of the power of Allah, who knows everything and creates everything purposefully and usefully. In other words, the so-called natural forces are the realities that show Allah’s infinite power, wisdom, knowledge and will; those realities declare His existence and unity.

He draws attention to the mistakes in understanding nature which is the supra-atomic realm and draws attention to the issues that need to be known correctly:

“The blind coincidence and alliance that heedless people attribute to nature, which they regard as the creator are delusions suggested by devils emerging from heresy. For, as it was definitely proved many times in my books, if this art, which is wonderful and extraordinary, is not the work of the powerful hand of Khabir (The All-Aware) and Basir (The All-Seeing), who has all perfect attributes, is it ever possible for the garmentclothed on the universe to have been produced by nature, which is intense, lifeless, conditional and created? Or, did a mosquito or a turtle produce those nice patterns and embroideries on the realms? God forbid!”

There are as many witnesses as the number of beings that everything including man was made by the Pre-Eternal Creator. Examples:

1. *The universe. Yes, all of the particles and compounds the universe includes witness through fifty-five tongues.*

2. *The Quran. Yes, the Quran, all prophets, saints and monotheists, their books, and the created signs in the book of the universe and beings are just witnesses that the Creator created them.*

3. *The leader of the creatures, the Messenger, all prophets, saints and angels declare that Allah is the creator of everything.*

4. *All groups of people and jinn as species are witnesses with their natural needs.*

5. *Allah Himself witnesses that divinity and creation are peculiar to Allah⁹⁸.*

Character and Individuality

Atoms, which are the basic building blocks of elements, are made up of electrons, protons, and neutrons, and there are over 100 elements in nature, some naturally existing in the universe and some artificially made in laboratories by fusion. The basic difference between these elements is the number of protons in their nucleus. For example, a hydrogen atom contains 1 proton, carbon 6, iron 26, and gold 79 protons. However, all protons are the same – just like the grains of rice.

LET US THINK NOW!
If, when tightly wrapped, 6 grains of rice become a bean instead of a 6-grain rise stack, 26 grains become a corn, and 79 grains become a hazelnut, there is something curious going on.

Let us think now: If, when tightly wrapped, 6 grains of rice become a bean instead of a 6-grain rise stack, 26 grains become a corn, and 79 grains become a hazelnut, there is something curious going on. Or, if 6 white men become a single giant black man when tightly wrapped, and he then turns back to 6 white men when the rope is removed... Even more peculiar, if 2 engineers turn into a medical doctor when tightly wrapped, and 3 engineers turn into a lawyer. We will probably give up.

The characteristics of carbon, iron, and gold are very different from one another, and it is clear that these characteristics do not originate from the protons themselves. This is because the protons possess neither the characteristic of

carbon, nor iron nor gold. It also appears that it is quite possible to convert carbon or iron into gold – all we need to do is to split the carbon or iron atoms as we split uranium atoms in nuclear power plants, and recombine the released protons into groups of 79.

Similarly, if we mix two hydrogen atoms with one oxygen, this becomes a gas mixture with the properties of both hydrogen and oxygen. However, when the hydrogen and oxygen atoms combine with a chemical bond, “water” with completely different properties will occur. Considering that the force that provides the chemical bond does not possess the properties of water or any other compound, where do the characteristics of compounds come from? It seems that there is a common layer of individuality in the universe. The name “Fard” (the Individual One) shines on all beings like the sun.

Love and compassion

There is probably no doubt about the presence of love and different kinds and degrees of love in the universe. One of the causes of the existence of this universe is also seen as compassion.

“Love is the cause of the universe’s existence. And it is the bond of the universe.”⁹⁹

The noblest and the purest of all loves is compassion, which is above all material and non-material feelings. The presence of common motherly compassion in the universe is confirmed by observations, and the phrase “mother nature” is an expression of it. It is possible to see this compassion even in wild animals.

“[Mercy] makes the hen-birds search out the food and bring it their wingless, frail chicks in the nests at the tops of trees. He subjugates the hungry lions to her cubs, so she does not eat the meat she finds but gives it to them.”¹⁰⁰

The food for the feeling of compassion is to give and receive compassion; that is, to love and to be loved without any preconditions and without expecting anything in return. Therefore, there is no place for compassion in the materialistic

For instance, the mass of a cell is one billionth of a gram. However, the science that is observed in that cell, which is too small, fills books. That is why the material body of a cell is almost nothing compared to its scientific body. The cell is virtually the embodied state of this knowledge.

philosophy that is based on material interests and pleasures. After all, compassion, which is a very noble feeling, is confused with the lowly physical attraction or lust, and this mix up is presented as science. Compassion shines in the brightest way in mothers, and turns them into statues of embodied compassion.

However, there is no such component as “compassion” in the cells, the basic building blocks of living beings, and hence compassion, whose existence is definite based on experience, is meaning, not matter. In that case, there is a vast layer of ‘compassion’ that is beyond time and space in the universe, and the most compassionate beings are those who receive and scatter the rays of compassion emanating from that layer like a diamond most intensely.

This apparent world of compassion is expressed as a reflection of the divine name ‘Rahim (Most Compassionate)’:

*“The existence and reality of a boundless mercy is as clearly apparent in the universe as the light of the sun. As certainly as light testifies to the sun, so this extensive mercy testifies to a Most Merciful and Compassionate One behind the veil of the Unseen.”*¹⁰¹

And *“the compassion of all mothers is but a flash of the manifestation of divine mercy.”*¹⁰²

Giving gratuitously

One of the traits best loved in people is generosity and courtesy. Everyone likes to receive gifts and bounties, and gets a pleasure proportionately. This pleasure has a momentary material dimension - which also exists in animals, and a timeless non-material dimension that is specific to human beings. For example, the greatest pleasure in a box of chocolate given as a gift is not the temporary pleasure that occurs in the taste buds while eating the chocolate, but rather, the permanent pleasure that occurs in the heart while receiving the gift which carries with it meanings like love, thought, and appreciation, and renews itself as it is remembered and as the memory is stirred with thought. Otherwise, rushing to open the box and attacking the chocolates inside is

Not being aware of this major dimension of humanity and spending a life time by chasing after temporary physical pleasures as animals do is deprivation and a waste of human traits.

virtually animalism. A bouquet of roses is probably nothing more than an instant of eating pleasure for a cow.

But the same bouquet of roses is an endless pleasure for a human being because of the meanings it carries – although it offers no material pleasure to taste buds. Not being aware of this major dimension of humanity and spending a life time by chasing after temporary physical pleasures as animals do is deprivation and a waste of human traits.

When viewed from a materialistic angle, giving without receiving anything in return is against the interest of the giver, and hence it is a foolish act. And this is totally against the materialistic philosophy, which views the purpose of life as ‘common interest’ and the basis of relations as ‘mutual interest’. On the surface, it looks like the one who gives is at a loss and the one who receives is at a gain. However, beneath the surface is a spiritual pleasure called ‘the pleasure of giving’ that generous people receive as they give. Generosity is one of the noblest feelings in people. The food of this feeling is to give without expecting anything in return. This immaterial stomach nourishes and grows by giving, and it becomes an endless source of pleasure for the person. The pleasure that the giver gets out of this human trait is probably far greater than the sum of the pleasures of the receivers. For people with a well-developed sense of pleasing others or a large stomach of humanity, giving and making others happy, even if it is with a mere pleasant word or a smile, is a source of permanent pleasure and happiness.

Generosity is one of the noblest feelings in people. The food of this feeling is to give without expecting anything in return. This immaterial stomach nourishes and grows by giving, and it becomes an endless

A light of knowledge that penetrates into everything is seen in the universe

It is definite by observations that everything, from atoms to galaxies, has a strong, non-matter scientific structure and everything is woven with a net of science (like cells and cell phones). What is called scientific work consists of efforts to reveal this scientific body of beings fully and accurately. This is done by observing the glitters of knowledge and by seeing and showing the universal sun

of knowledge, which is the source of glitters. For instance, the mass of a cell is one billionth of a gram. However, the science that is observed in that cell, which is too small, fills books. That is why the material body of a cell is almost nothing compared to its scientific body. The cell is virtually the embodied state of this knowledge.

That everything is made with knowledge shows that there is a common ‘ray of knowledge’ that penetrates into everything – just like the glitters of light from a diamond showing the presence of a source of light around. However, there is no such component as “knowledge” in the basic building blocks of beings. Therefore, knowledge about whose existence there is no doubt is not matter but meaning. There is a widespread non-material layer of “knowledge” that penetrates into everything in the universe like the force of gravity and that is beyond space and time. Unlike the ordinary light, this light of knowledge coming from the non-material (meaning) layer of knowledge can be sensed with the non-material mental eye rather than the ordinary bodily eye. This luminous universe is associated with the divine name ‘Alim (All-knowing)’:

There is a widespread non-material layer of “knowledge” that penetrates into everything in the universe like the force of gravity and that is beyond space and time. Unlike the ordinary light, this light of knowledge coming from the non-material (meaning)

*“All the evidences for knowledge are evidences also for the existence of the All-Knowing One. Since it is impossible and precluded that there should be an attribute without the one it qualifies, all the proofs of knowledge form a powerful and completely certain supreme proof of the Pre-Eternal All-Knowing One’s necessary existence.”*¹⁰³

Five senses and beyond

In addition to the five senses like sight, touch, and smell that are related to matter, people have countless senses such as justice, motivation, and even the sixth sense that are not related to matter directly. When we perceive the environment and beings, we usually rely on the five primary sensory organs like the eye and the ear, and the brain, which is the center all five sensory organs are

connected to. As a result of limiting the world of existence to matter, we see the five senses as the making of matter, and other senses as the manifestations of interactions of matter. As a result of this viewpoint, we regard the brain as miraculous and admit that we are too weak to understand the brain. Actually, what we do not understand is the reality of things, not the brain. The mystery of the brain is not due to its matter, but rather, its use as a black box in which we hide all our inconsistencies and ignorance.

For instance, let us consider the process of seeing. Based on the simple observation that we see when our eyes are open and do not see when they are closed, we quickly draw the conclusion that ‘it is the eye that sees’. In fact, this is no different than for a person who depends on glasses for sight and sees only with glasses to say that ‘it is the glasses that see’. As a matter of fact, we can see in our dreams quite clearly with our eyes closed. Those who take a more holistic approach also consider the nerves that transmit the signal to the vision center in the brain, and claim that seeing occurs in a wondrous way at the vision center in the brain. That is, seeing just happens out of nowhere. Here the brain is used as a black

Smell is non-matter, that is, meaning, and each molecule has a certain ability to receive smell and to reflect it. However, the source of smell is not the arrangement of the atoms – just like the source of the glitter of a diamond being the light coming from outside, and not the arrangement of carbon

curtain to cover up our ignorance. In other words, the brain is turned into a black hole that gobbles up information and does not allow even information to escape. But what is called the ‘vision center’ in the brain is nothing more than the end-point of the sight nerves coming from the eyes. The basic building blocks of the entire brain, including the vision center, are simply the elements,

All fruits from oranges to apples are made of the same atoms. However, the taste has nothing to do with the atoms in the fruits.

and their components electrons, protons, and neutrons. That is, whatever is in a wood is also in the brain. And the electric current that occurs in the brain as a result of the flow of the charged particles is no different than the electric current in a computer processor.

There is no such element as ‘eyesight’ in the building blocks of the eyes and the brain, and what is not in the parts cannot be in the whole. If it is, then it must be coming from somewhere else. The eyes and brain consist of atoms like carbon, hydrogen, and oxygen. The seeing ability of the eye and the brain is no more than that of a slice of bread which is made of basically the same atoms. The cells that make up the eye-nerve-brain trio do not contain a material element called ‘eyesight’, and hence vision, whose existence is definite based on experience, is non-matter, that is meaning. In that case, there is a widespread ‘vision’ layer, which is beyond time and space, in the universe; and the beings that are capable of receiving these rays of vision coming from that layer are beings that see. According to Nursi, this realm of vision world is a manifestation of the divine name ‘Basir (All-Seeing)’.

The loss of eyesight when a fault develops in the eye or the vision center of the brain does not show that these organs are the source of vision – just like the glasses not being the source of vision for wearers of glasses. That is, the eye-nerve-brain combination for eyesight is what glasses are for the eye. It seems that what is called the ‘vision center’ is simply the manifestation point of the immaterial eyesight attribute in the brain. In other words, the vision center in the brain is the welding spot of the body and the sense of seeing of the spirit, and the cross over from matter to non-matter.

Likewise, all perfumes and nice-smelling flowers are made of atoms like hydrogen, oxygen, and carbon, and there is no element of ‘smell’ in any of these atoms. The hydrogen atom in water is the same as that in a flower, and all atoms are made of electrons, protons, and neutrons. Then we should ask, ‘where in the perfume or flower is the smell?’ Interestingly, even the bad-smelling things are made of the same atoms. It seems that smell manifests itself on matter, is transmitted with matter, but it is not matter. Therefore, smell must be non-matter, that is, meaning, and each molecule has a certain ability to receive smell and to reflect it. However, the source of smell is not the arrangement of the atoms – just like the source of the glitter of a diamond being the light coming from outside, and not the arrangement of carbon atoms in a crystalline form. The cause of deception here is the emergence of two things together and thinking that one cannot be without the other. That is, when one of them goes, so does the other; thus, a person is conditioned to think that one is the source of the other.

Similar things can also be said about taste. For example, all fruits from oranges to apples are made of the same atoms. However, the taste has nothing to do with the atoms in the fruits. That is, oxygen or hydrogen does not have a particular taste of their own, and water, which is a compound of these two elements, does not have an intermediate taste that will remind us this mixture. Therefore, no one can predict the taste of an organic molecule by looking at the atoms in its structure. It appears that taste is also a meaning that reflects differently on different arrangement of atoms – yet independent of the atoms themselves – and the taste of a substance can only be known by experimenting. A chemist who comes across salt for the first time in his life can predict many chemical properties of the salt by examining its atomic structure but he cannot say anything about its taste by looking at the chlorine atoms.

Diamond: Its matter and glitter

What the word diamond brings into one's mind is not the material of it, but its lively colorful, enchanting glitter that flatters the eyes and the hearts. In fact, the basic structural element of diamond is carbon, which is known by its matte black color, absorbing almost the entire light incident on it (and thus the black color). The reason behind diamond's charm is not the value or the amount of its dense material, but its ability to take in a translucent world (the world of light) outside and to scatter its rays. Therefore, the most precious diamond is not the largest and the heaviest one, but rather the one with highest clarity, purity, and perfection and thus the one with the best light scattering ability. That is, it is the diamond that exhibits the glitter of light best while remaining virtually invisible to the point that one who looks at the diamond sees only the array of fascinating beauty displayed by light and does not notice its raw material: carbon.

Everyone knows that the source of a diamond's fascinating glitter is not its material, but the light that comes from an external source. That is, those captivating glitters do not emanate from the carbon atoms, the building blocks of diamonds, but from an external source of light like the sun or a lamp. This can easily be proved by taking the diamond into a dark room. It will be observed that all the glitter will disappear and even the diamond itself can no longer be seen. It appears that what makes the diamond a diamond and gives the diamond its

beauty, charm, and fascination is the light incident on it. A diamond without the light is like a dead corpse without the soul.

Attempting to explain that the source of light that seems to be coming from the diamond is something external may be stating the obvious and may even look ridiculous since no one would claim otherwise. However, this simple observation is of great importance since it may serve as a ladder to climb to important phenomena that are hard to reach.

To begin with, let us ask the following question: If there existed no darkness in the universe, and light sources such as the sun were not visible, that is, there existed abundant light everywhere all the time, how would we explain the light constantly coming from the diamond which would shine continually? Would we still easily say that the light comes from an external source that we cannot see, or would we claim that the source of those charming glitters was the diamond itself? Considering how short-sighted people are in general and how they take things at face value, the answer is not going to be so easy this time. In this case, since we would not be aware of an all-encompassing spread-out light layer, we would claim that those glittering lights came from the diamond itself without a second thought, even if we did not understand how. Thus, we would fall into a “deep” illusion and constantly struggle with dilemmas and deadlocks. For example, we would see that a single carbon atom (or a group of carbon atoms arranged as graphite) did not glitter, and would seek an answer to the fundamental question “How can a feature that does not exist in its basic structural elements exist in its whole?”

While some of researchers examine the carbon atom in its finest detail and try to understand where in the atom the light originates, others who realize that the light-emitting diamond and non-emitting graphite differ not in the atoms but in their arrangement, would search for the secret of light in the bonds between the atoms rather than within the atoms themselves. They would show the variation of emitted light with the changes in the shape and cut of the diamond as evidence. Finally, many contradicting and confusing theories would be proposed; and while some theories were rejected, others would be accepted at least on temporary basis for the lack of better ones. And these fundamentally wrong researches would be introduced as “exact sciences”, and those involved in these research projects as “scientists”. Any suggestions on searching the origin of light outside the diamond

would be judged as fictive or an “unscientific” approach by these researchers whose minds are blocked by their eyesight, and would not be given any consideration.

This prejudiced approach would build a wall on the path of sciences rather than opening a pathway, and would block its progress. When we look at the history of science, we see that the greatest breakthroughs in the world of science occurred when unorthodox approaches that counteracted the established ones were taken – like Einstein’s stripping himself off the hard rules of classical mechanics a century ago and proposing the theory of relativity.

In the light of the discussions above, we may express the diamond as follows: $\text{Diamond} = \text{Carbon} + \text{Light}$. That is, what makes the diamond a diamond is light; or rather, its ability to take in and reflect light. It is interesting that the diamond’s vicinity is also filled with light, but we do not even notice that all-encompassing light. This invisible light is present everywhere including space, but we can see light only via things such as diamonds that receive light and reflect it. Hence, it can be said that a substance made of carbon is diamond if it reflects light, and graphite otherwise. The most magnificent diamond is the one that reflects the light in the most fascinating way in accordance with the laws of optics. Therefore, in cutting and processing diamonds, the main factor taken into consideration is the light and the ability to reflect light. The first requirement for becoming a diamond craftsman is also to know light and its characteristics well.

As it is seen, the reality of diamond and the secret behind its captivating glitter can only be understood when the presence of an all-encompassing world of light is noticed, and the diamond is viewed as a compatible composition of the realms of carbon and light. This simple observation would play a key role in trying to understand the true nature of beings, and deeply affect our perception of the environment and our understanding of creation. The approach to separate beings into their fundamental layers will provide a breakthrough in scientific approach, and it will form the seed of human progress and the establishment of a true civilization on earth.

The body and the spirit

The materialistic philosophy views man, like all other beings, as a collection of matter, and denies the existence of anything other than the body,

which we know to consist of nearly 40 trillion cells. That is, in terms of basic building blocks, man is the same a handful of soil. Like all other beings, man consists of matter (or energy) only, and is subject to laws of physics. This view also forms the foundation of the deterministic philosophy. Upon decomposition of these cells after death and becoming part of the soil, a person ceases to exist.

Every difference between a live person and a dead one – life, seeing, hearing, consciousness, knowledge, free will, love, pain, pleasure, imagination, dreaming, individuality, greed, generosity, art appreciation, sense of justice, and the desire for immortality – is non-material. The collection of all these non-material attributes that are beyond time and space is called meaning or spirit. The materialistic philosophy views these meanings as the outcomes of the temporary manifestations of material interactions (whatever that means).

Those who view meaning or the spirit as the kernel and the essence of being, and matter as the shell or clothing evaluate death as simply the departure of this essence of human being from the sheath of body:

*“In the course of life, the spirit gradually changes its body-clothes, and at the time of death, it is suddenly undressed. It has been established through certain conjecture, indeed, through observation, that **the body subsists through the spirit.**”¹⁰⁴*

Those who regard beings as consisting of matter only and thus deny the existence of the spirit are also aware of the existence of a meaning that transcends the body and its non-matter attributes. However, they take the easy way out and associate all attributes of the spirit like to express preference and to give orders with the brain. Consequently, they are obliged to attach to the brain, which is no different materially than a piece of meat, a hard-to-comprehend extraordinary status approaching divineness. The brain is simply the control center of the human body – just like the pilot cabin is the command center of the huge body of an airplane. All parts of an airplane are connected through wires to the pilot cabin, like the network of nerves in the human body being connected to the brain; and they receive all commands from there. However, the thing that is in full command of the airplane and makes the necessary decisions is the pilot that is not of the same kind as the cabin, and that

The brain is simply the control center of the human body – just like the pilot cabin is the command center of the huge body of an airplane.

has attributes like consciousness, sight, hearing, and free will that do not exist in the material of the airplane. When pilots go on strike, all airplanes are still fully equipped with everything including the command center, but they remain grounded. Just like it is impossible to understand the true nature of a flying airplane by insisting on denying the existence of a pilot (or remote operator if remote controlled) and attributing all wondrous acts to the command center in the pilot cabin so too is it impossible to understand the true nature of human beings by insisting on denying the existence of a spirit and attributing all beyond-matter wondrous trait like life, consciousness, imagination, sight, and free will to the material of the brain sealed in a dark thick shell. Spirit is non-matter and hence is not subject to the limitations of time and space

The spirit is non-matter and thus beyond space and time, and as such it is not subject to any of the restrictions that matter is subject to, like the

Man is not a robot

When viewed as something that consists of matter, the highest level that a human being can attain is a highly advanced robot. A robot that is a technological wonder can walk, perform certain chores very well, take orders, and see its vicinity mechanically. It can even laugh loudly with a mechanical sound but it cannot feel anything and cannot be aware of anything. Even if it is loaded with a library full of knowledge, it cannot know what it knows. For, even if it has a state-of-the-art processor, it cannot have conscience. It cannot suddenly get hit with ideas. It cannot love or get angry with other robots, and it cannot make plans to destroy the other robots. Such a robot cannot enjoy the beauty of a flower, and cannot desire to see new places. It can play the best music and even do the job of an orchestra, but it can never know the joy of listening to a beautiful sound. It cannot show compassion by embracing a smaller robot. It cannot get a taste of the energy or the fuel it is consuming. It cannot feel pity for another robot and attempt to help it. It cannot comprehend anything happening around itself; it cannot rejoice at good news and be sad at bad news. It cannot know what depression is. It cannot worry about getting old someday and being taken to a robot cemetery to be discarded. It cannot know what longing for immortality is. It cannot think about

the past and be concerned about the future. It cannot daydream or dream at night. It cannot laugh at the funny acts of other robots. It can be loaded with a huge amount of information in a few minutes and can learn a foreign language in an instant, but it cannot enjoy learning new things, it cannot get amused, and it cannot make comments. It cannot generate new knowledge and it cannot take the initiative to try new things for which it is not programmed for. It can communicate with another robot, but it cannot carry a casual conversation which is an enjoyable exchange of warm feelings – even if it has the most advanced electronic processor.

That is, this wonderful robot cannot have any features that make humans what they are. This is because none of these traits originates from matter. All the differences between a human being and a robot equipped with all of the wondrous features of the human body are non-matter, that is, meaning. And the entirety of all these meanings that transcend through the body just like the penetration of light into the diamond is the spirit.

1998 Physics Nobel Winner Robert Laughlin expresses the meaning that penetrates into the body as follows:

*“If a simple physical phenomenon can become effectively independent of the more fundamental laws from which it descends, so can we. I am carbon, but I need not have been. I have a meaning transcending the atoms from which I am made”*¹⁰⁵

As Nursi states, the body subsists through the spirit and it is the spirit that gives the body a value. The spirit is non-matter and thus beyond space and time, and as such it is not subject to any of the restrictions that matter is subject to, like the physical laws. The starting point for the understanding of the true nature of man will be the stripping off the matter we are buried in, and turn our attention beyond matter.

4.3.9-Enlightenment will start when meaning will also be taken into consideration

The source of positive sciences is observation. In the 5th century B.C., it had been stated that everything was made up of air, earth, water, and fire by Empedocles as a result of simple observations; and this theory dominated science for many centuries. However, since 17th century, re-questioning of the universe

and the discovery of the elements have caused a serious leap in scientific advancement, and many new branches of sciences have emerged. Today, we know very well that everything is made up of 100 or so elements, and every matter can be expressed as a combination of those elements. This initiative has also resulted in the discovery of many chemical compounds and development of modern chemistry.

The *idée fixe* of the modern scientific community is the deeply rooted preconceived notion that the source of everything is matter (or its equivalent energy). And this causes barriers and deadlocks in sciences on the path of progress. The scientific community should recognize and openly declare that there are no such things as force, willpower, life, consciousness, sight, love, beauty, etc. in the basic building blocks of matter, regardless of whether they are particles or waves, and that something cannot exist in the whole if it is not present in its parts. If there are (yes, there are), it means they come from somewhere else. It is about time that the approach that the universe is single-layered and is made of matter or energy was abandoned, and a multi-layered view of the universe – that all beings consisting of numerous independent immaterial layers of force, willpower, life, consciousness, sight, love, beauty, etc. as well as matter or energy, was seriously considered. This view is fully consistent with observations, which is the primary source of sciences. The philosophical discussions on the sources of these layers are no different than the discussions on the source of matter and energy before Big Bang. In the old Greek philosophy, the sources of these layers were attributed to Gods like Venus, Eros, and Themes.

For positive scientists, the approach is like “ask no questions and hear no lies.” According to Nursi, the sources of all non-matter features are the Divine Names of Allah. Therefore, for the followers of heavenly religions, to understand beings is to understand the Divine Names and thus to understand Allah.

Newton’s questioning of the fall of an apple opened a new age in physics. The impact of the answers to the questions raised here will probably not be any less. It is hoped that articulate researchers that manage to strip themselves off prejudices and preconceived ideas brought about for hundreds of years will observe and show that the universe is not just one or two-dimensional, but multi-dimensional. And only one of those dimensions is associated with matter into which we are confined.

The reality of diamond can be understood only when it is noticed that the origin of its glitter is a light source outside and not the carbon atoms themselves

or the bonds connecting them. The reality of television can be understood only when it is noticed that the origin of various channels of video and audio is the dozens of broadcasts surrounding the TV set, and not the TV set itself; that is, when it is realized that the television is only the receiver of the broadcasts, not the

source of them. Likewise, the reality of beings, especially the human beings, shall be understood only when it is realized that tens of immaterial glitters such as life, consciousness, art, and beauty in matter come from immaterial layers or parallel universes, not from the particles of matter. Only then will true enlightenment start for humanity.

EVALUATION QUESTIONS

- 1-What does "*I saw eighteen thousand realms in a single particle*" mean?
- 2-What does man's having different stomachs mean?
- 3- How does man become a mirror to the names of Allah?
- 4-Why does the understanding of the nature of man depend on the consideration of the metaphysical world as well as the physical world?

CHAPTER 5

5-THE CREATION OF FIRST MAN

5.1-THE STAGES OF THE CREATION OF MAN IN THE QURAN¹⁰⁶

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LEARNING OUTCOMES OF	EVALUATION
1-The student understands the fact that the first man was created from soil 2-He learns when the spirit is sent to the fetus. 3- He understands the evaluation of the Quran and modern medicine about human creation. 4-He learns what nutfah means. 5-He understands the phases nutfah undergoes.	1-What are the views about the first creation of man? 2-Does spirit exist in the first cell in the creation of man in the womb? 3- Is it the same thing for the first cell's being alive and having a spirit? 4-What are the characteristics of the spirit? 5-When the cell divides, does the

Tafsir, Hadith and Fiqh are regarded as branches of science according to the Quran; Medicine, Cosmology, History, Geography, etc. are also regarded as

branches of science. Muslims are obliged to study all branches of science that are beneficial for humanity. A faqih, a mufassir and a muhaddith is considered as a scholar; so is a physicist and a doctor. Indeed, in the context of the verses about Cosmology, Botany and Zoology, Allah states the following: *“Those truly fear Allah, among His Servants, who have knowledge.”*¹⁰⁷

The Quran, which invites man to meditate on why and how he was created, mentions two dimensions in order to determine where to start: The creation of Hz. Adam from soil and the formation of man in the womb in stages.

5.1.1. Creation from Clay

The theory of evolution, which claims that all living beings were derived from a single root, and the creation stages that the Quran informs us, are different from each other in all aspects. Evolution is a theory that was put forward to deny creation and hence a theory that cannot be proved; creation, on the other hand, is a fact that has taken place billions of times for thousands of years. However, some Muslims say that the monkeys and humans may have descended from a common root based on the following verse:¹⁰⁸

*“And well ye knew those amongst you who transgressed in the matter of the Sabbath: We said to them: ‘Be ye apes, despised and rejected’.”*¹⁰⁹

This verse, which those who claim that the Quran does not reject evolution use as evidence, warned the Jews who were thinking of catching the fish that accumulated on Saturday in the pool they made next to the sea on Sunday and who thought that they obeyed the command of allocating Saturday to worshipping and that they did not flout the ban of fishing and asked them to repent.

The Jews who did not obey Allah’s command were suddenly converted into despised monkeys. However, it did not happen over a long time, as evolutionists claim; the people who were converted into monkeys died three days later; none of them could reproduce as

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The first man and the first prophet, Hz. Adam, was created as a human being; his children married and reproduced for

monkeys.¹¹⁰Besides, evolving is essential in evolution. In the incident mentioned above, the human beings' conversion into animals is in question.

The first man and the first prophet, Hz. Adam, was created as a human being; his children married and reproduced for generations. The Holy Quran states clearly declares that Hz. Adam was the only one and he was created from clay. As a matter of fact, Allah states the following:

“O mankind! Reverence your Guardian-Lord, who created you from a single person, created, of like nature, His mate, and from them twain scattered (like seeds) countless men and women.”¹¹¹

It is pointed out with the statement (*وَإِذْ نَفَسْنَا عَلَيْكُمْ*) “created you from a single person” in the verse that Hz. Adam was created, with the statement (*رُؤُوسَهُمْ وَأَنْوَارُهُمْ*) “created, of like nature, His mate” that Hz. Hawwa (Eve) was created from Hz. Adam, with the statement (*وَمِنْ ذُرِّيَّتِهِمَا آبَاءُكُمْ وَأَبْنَاؤُكُمْ وَمِمَّنْ سَاءَ مَا يَحْكُمُونَ*) “and from them twain scattered (like seeds) countless men and women” that all humans were derived from Hz. Adam and Hawwa. In the chapter of az-Zumar, two aspects of creation are mentioned: “He created you (all) from a single person (from Adam), then created, of like nature, his mate.” Then, the following statement follows: “He makes you, in the wombs of your mothers, in stages, one after another, in three veils of darkness.”¹¹² It is pointed out that Hz. Adam was created from soil but that his children were created in wombs.

The Holy Quran clearly states that Hz. Adam was created from clay and that his wife was created from him. Accordingly, the stages Hz. Adam went through – until he became a human being – are pointed out in the verses in question and creation is attributed to those stages.

Allah states that He created Adam from turab/soil¹¹³, tin lazib/sticky clay,¹¹⁴ sulala min tin/ quintessence of clay,¹¹⁵ hamamasnun/mud molded into shape¹¹⁶ salsal/sounding clay¹¹⁷.

Each of the five words mentioned in the verses corresponds to a stage of creation. It is no different from a person's saying his house was built of soil, mud

The Jews who did not obey Allah's command were suddenly converted into despised monkeys. However, it did not happen over a long time, as evolutionists claim; the people who were converted into monkeys died three days later; none of them could reproduce as

or brick. In this statement, information is given about the formation process of the material used in the construction of the house. The type of material used in the construction of the house is soil. Soil turned into mud to become a brick. Brick is the baked clay. As it is seen in the example, there is a development from soil to brick. In that case, it is not wrong to say “the house is made of clay or brick” based on any of the phases of the soil; besides, it will be a wise explanation as it gives specific information about the formation process.

The verses that mention the creation of Hz. Adam from soil are like that too. Allah meant soil, sticky clay, quintessence of clay, mud molded into shape and sounding clay according to the context.

5.1.2-Creation in the Womb according to the Quran and the Sunnah

In many places, the Quran attracts attention to creation from different aspects in many places and gives detailed information about the stages the fetus undergoes in the womb. The verses in the chapter of al-Mu'minun mention Hz. Adam's creation from clay, the phases of the fetus in the womb, the events of death and resurrection together and describe where man comes from and how, and where he goes as follows:

In many places, the Quran attracts attention to creation from different aspects in many places and gives detailed information about the stages the fetus

“Man We did create from a quintessence (of clay); Then We placed him as (a drop of) sperm in a place of rest, firmly fixed; Then We made the sperm into a clot of congealed blood; then of that clot We made a (fetus) lump; then we made out of that lump bones and clothed the bones with flesh; then we developed out of it another creature. So blessed be Allah, the best to create! After that, at length ye will die. Again, on the Day of Judgment, will ye be raised up.”⁶

Many hadiths are narrated related to the creation of man and the stages he undergoes in the womb. The hadith reported by Abdullah b. Mas'ud is like an

⁶al-Mu'minun, 12-14. Many tafsir scholars of the Companions and Tabiun like Ibn Abbas, Sha'bi, Abul-Aliya, Dahhak and Ibn Zayd state that what is meant by 'then we developed out of it another creature' in the verse is the blowing into the spirit, which takes place after the completion of creation. See AbuJa'far Muhammad Ibn Jarirat-Tabari, Jamiul-Bayan an Ta'wilil-Quran, Darus-Salam, Beirut, 2007, VII, 5910.

interpretation of the verse that gives detailed information about creation¹¹⁸:

*“The creation of each one of you is put together in the womb of the mother in forty days; then, he becomes a clot of thick blood (alaqah), and then he becomes a piece of flesh (mudghah). Then, Allah sends an angel and he is ordered to write four things: the livelihood (rizq), date of death (ajal), deeds of this creature and whether he will be a person of Paradise or Hell. Then, spirit is blown into him.”*¹¹⁹

The beginning of the creation of man is mentioned in the hadith above; in addition, the stages the fetus undergoes in the womb and the time of the blowing into the spirit are stated.

Whether the phrase “*forty days*” repeated three times in the hadith means one thing happening after the other or within the other, and whether the word *thumma*/then means after the time or after the deed are issues related to *ijtihad*.

In addition, what is meant with the term “the beginning of man’s life”, whether fertilization, creation of the nervous system, the formation of voluntary movements or the blowing of the spirit, caused the formation of different views. Accordingly, the majority accepted the time when the egg was fertilized with the sperm and settled in the uterus as the beginning of man’s life; the other scholars accept it as the end of the fourth month and the beginning of the fifth month¹²⁰, one hundred and twenty days after fertilization, eighty-fourth day, three months, twelve weeks and more than a month.¹²¹

The Messenger of Allah (pbuh) mentions only the beginning of fertilization in another hadith:

*“When forty-two nights pass after the semen gets into the womb, Allah sends the angel and gives it the shape. Then, He creates its sense of hearing, sense of sight, its skin, its flesh, its bones.”*¹²²

The beginning of life in the fetus and the blowing of the spirit into it are different events. Therefore, life continues in cells for a while after death.

When those two hadiths are evaluated together, the following fact appears: The first hadith states that the spirit is blown at the end of the third period, that is, one hundred twenty days after the fetus, and the second one states that organs are created on the forty-second day.¹²³

Both the verses and hadiths related to creation and medical data support the view of the majority. As a matter of fact, it is stated in the second hadith that

many stages of creation are completed on the forty-second day; only the blowing of the spirit is not mentioned.¹²⁴

Accordingly, the blowing of the spirit and the creation of man are different from each other.

When the hadith is evaluated in the context of the duties of the angels, it is possible to understand the second hadith by attributing it to the first one. Accordingly, the word “nutfah” in the second hadith is used instead of the word “mudghah”. When this determination is considered, the meaning is as follows: when forty-two days pass after the mudghah, that is, when the fetus completes the three periods of forty days consisting of nutfah, alaqah and mudghah; Allah sends another angel (an angel other than the one responsible for the affairs in the womb) to the nutfah that is converted into mudghah and gives it the full shape of a full human being.¹²⁵

The summary of the issue is as follows: The Messenger of Allah (pbuh) used the word “nutfah” which is the first stage of the three periods of forty days and meant “mudghah”, which is the last one.

According to what is understood from verses and hadiths, the development of the fetus takes place in two areas. The first one is the material development that can be perceived. In this area, the states of creation that occur one after the other in the body are seen.

The second is a development that is attributed to the growing body but that cannot be perceived; abilities like life, reasoning, will and meditation occur with it. This second development begins when the spirit is blown into the body.¹²⁶

Thus, the beginning of life in the fetus and the blowing of the spirit into it are different events. Therefore, life continues in cells for a while after death.¹²⁷

The stages of the fetus mentioned in the Quran and the Sunnah do not differ very much from the data obtained by modern medicine after long researches. As a matter of fact, Professor Keith Leon Moore, from Anatomy Department of the University of Toronto, states that the classification made by the Quran related to stages the fetus undergoes in the mother’s womb is superior and more accurate

The stages of the fetus mentioned in the Quran and the Sunnah do not differ very much from the data obtained by modern medicine after long researches.

than the descriptions and classifications made by the embryologists in the 20th century.¹²⁸

Accordingly, if there are a few differences between modern medicine and the Quran regarding the issue, this indicates that modern medicine will attain the facts informed by the Quran many centuries ago with the new discoveries.

5.1.3-The Blowing of Spirit into the Fetus

Islamic scholars had two different views about the time when spirit is blown into the fetus:

The majority of the scholars that includes Hanafi, Shafii, Hanbali and Zahiri fiqhscholars states that spirit is blown into the fetus at the end of four months or on the one hundred and twenty-first day. Ibn Hajar states that fiqh scholars agree unanimously on it.¹²⁹

The scholars who hold this view base their views on the following evidence:

-As it is mentioned in the previous part, the Prophet (pbuh) states the following in the hadith reported by Ibn Mas'ud:

*“The creation of each one of you is put together in the womb of the mother in forty days; then, he becomes a clot of thick blood (alaqah), and then he becomes a piece of flesh (mudghah). Then, Allah sends an angel and he is ordered to write four things: the livelihood (rizq), date of death (ajal), deeds of this creature and whether he will be a person of Paradise or Hell. Then, spirit is blown into him.”*¹³⁰

Abu Hatim states that what is meant with the verse *“then we developed out of it another creature”*¹³¹ is that when four months pass after the occurrence of nutfah, the angel is sent to it to blow spirit.¹³²

The majority of the scholars that includes Hanafi, Shafii, Hanbali and Zahiri fiqhscholars states that spirit is blown into the fetus at the end of four months.

According to some scholars including Qurtubi, the blowing of the spirit takes place after four months and ten days pass, that is, at the end of one hundred and thirty days.¹³³

The scholars who adopt this view base their view on the following evidence:

Ibn Abbas states that spirit will be blown into the fetus after four months and ten days pass, which is the iddah period of a woman whose husband dies.¹³⁴

Furthermore, Qurtubi states that the spirit is blown at the end of the fourth month and the beginning of the fifth month and that the fact that the fetus moves after that indicates it.¹³⁵

However, Muhammad b. Humaydar-Razi, who is in the chain of narrators of this hadith reported by Ibn Abbas, was rejected by many hadith scholars, especially Bukhari and Nasai.¹³⁶ Therefore, the narration in question is weak. In addition, various medical instruments today indicate that the movements of the fetus begin in earlier periods.

It is also possible to combine those narratives by regarding the first one as the basis as follows:

If the spirit is blown after one hundred and twenty days, it reaches one hundred and thirty days if it is calculated from the time of insemination. In addition, it can be assumed that the blowing of the spirit starts on the one hundred and twentieth day and continues until one hundred and thirtieth day; that is, it can be accepted that the first narration states the beginning of the incident and the other the end of it.

Acting upon the verse, hadiths and current medical data, the following can be said about the fetus:

1. The creation of the fetus begins early in the first forty days and is completed at the beginning of the second forty days. With the formation of the brain and nervous system, the fetus assumes a full human appearance at the end of the third forty days and the beginning of the fourth. This process up to the birth is the stage where the fetus develops normally.⁷

2. According to the majority of fiqh scholars, the human life of the fetus begins with the blowing of the spirit because the legal identity of the fetus as a human being is not realized with the brain, but with the spirit.

3. As it is understood from the hadith above, the blowing of the spirit takes

⁷This combination eliminates the confusion of Hayreddin Karaman, who regards the hadiths problematic due to the numbers 40, 45 and 42. Different numbers show the lower limit and the upper limit. (It is not an appropriate approach for Hayreddin Karaman to say that there is a problem in the hadiths related to the blowing of the spirit, that they have no connection with the issue of "killing the fetus and doing something to the fetus" and hence that they are mentioned within the context of the explanations related to the creation of man and determination of his qadar (destiny). Since Karaman regards blowing the spirit as the beginning of creation, he regards hadiths to be contrary to the data modern medicine has reached. In fact, creation and blowing the spirit are different events. See: <http://www.hayrettinkaraman.net/yazi/hayat/0077.htm>

place after one hundred and twentieth day. As a matter of fact, many scholars, especially Nawawi, Qurtubi, Ibn Hajar, Ibn Rajab al-Hanbali and Ibn Abidin hold this view.¹³⁷

5.1.4- The Miracle of Creation in the Quran

The strongest of the scientific theories related to the development of the fetus is the theory of “dwarf fetus”.¹³⁸

It used to be thought that the fetus developed like a small tree coming out of a seed and that the only difference between its first state and the last state was a difference of growth until 1940’s, when microscope, which was invented in the 17th century, reached its advanced state.¹³⁹

No book other than the Quran mentioned fertilization in the form and content that modern medicine explained before the microscope was developed and the creation and development phases of the fetus were

Before the discovery of devices that display stages of the formation and development of the fertilized egg, one of the important controversies of the medical authorities was whether man was created from the male’s sperm or from the female’s menstrual blood.

On the other hand, modern Medicine states that the development of the fetus in the womb does not take place in one phase and that it passes through different stages before it reaches the stage of birth. Accordingly, the fetus is created from the menstrual blood. The sperm has a duty like the yeast’s turning milk into cheese. Just like the yeast’s transforming milk into cheese, the sperm does not have any other function than fertilizing the fetus. Until 1775, however, no physician whose knowledge was trusted in the West said that the fetus was the result of the encounter of the male’s sperm with the female’s egg.¹⁴⁰

No book other than the Quran mentioned fertilization in the form and content that modern medicine explained before the microscope was developed and the creation and development phases of the fetus were determined.

Fourteen centuries ago, the Quran rejected both views related to creation and stated that man was created from a mixture of a man’s sperm and a woman’s egg.¹⁴¹

At a time when it was accepted that man grew up unchanged in the woman's womb like a "dwarf tree", the Quran stated that the fetus was created by passing from one stage to another.¹⁴²

When AbdulmajidZindani told E. Marshall Johnson, the Professor of Anatomy from USA in a session, that the Quran states that the fetus was created through certain stages, not in a moment, the American scientist said, "This cannot be true." Then the following conversation took place between the two: Zindani:

- It is a knownfact that the Quran statedin the 7th century that manwas created by passing through different stages in the womb.

- No! That cannot be true.

- Why do you say it is impossible? The verses of the Quran regarding the issue are very clear; "*He makes you, in the wombs of your mothers, in stages, one after another, in three veils of darkness.*"¹⁴³; "*What is the matter with you, that ye place not your hope for kindness and long-suffering in Allah,- Seeing that it is He that has created you in diverse stages?.*"¹⁴⁴

Shaken by hearing those verses, the American scientist though for a while and said, "There are three possibilities here." Then, he added the following:

1. Muhammad, who said that the fetus was created in stages, must have had a high-tech microscope or imaging device. Hemust have done research on the fetus by using that device and reached the results that no one knew, and gave us this information.

2.This information is included in the Quran coincidentally.

3. Muhammad is the Messenger of Allah.

AbdulmajidZindani argued with the American scientist about the possibilities one by one, and finally the American scientist had to accept the miracle of the Quran.

The following can be said about the first possibility:

In the century when the Messenger of Allah (pbuh) lived, people did not have the industrial infrastructure necessary for the construction of a magnifying glass or a microscope. Neither Rome nor Iran had any technological infrastructure to produce a microscope. Accordingly, it was impossible for the Messenger of Allah (pbuh) to examine the developments of the fetus in the womb in a laboratory and to determine the stages and then share them with people.

It cannot be a coincidence that the Quran mentions the stages of the fetus because the Quran mentions in several verses, not in one verse, the stages of fetus

concisely or in detail. The explanation of the issue in several verses cannot be a coincidence.

After Zindanireadand explained the verses mentioning the stages the fetus undergoes in the womb, the American scientist had to admit that the claim that the information in the Quran may have been a coincidence was untrue. Johnson accepted the third possibility that the only point of reference to the information related to creation in the Quran was revelation coming from heavens.¹⁴⁵

5.1.5-Creation According to Modern Medicine and Islam

According to modern medicine, pregnancy begins fourteen days after the last menstrual bleeding of the woman. Between the twenty-first and thirtieth days after fertilization, “alaqah” is transformed into “mudghah”. The formation of nervous system is initiated between the twenty-first and twenty-eighth days. The upper regions are formed on the thirty-fifth day, and lower regions on the forty-second day. One week later, first the upper muscles and then the lower muscles are formed and blood circulation is initiated. The heart, which starts to work at the end of the sixth week and the beginning of the seventh week, continues its activities until the end of man’s life. The shaping of the face is completed in the eighth week. The development process of the fetus continues.

In the sixteenth week (one hundred and twentieth day), a new creation begins. This continues until the twentieth week. During this period, the brain, upper regions of the brain and nerve cells are produced. In this period, the fetus owns all of the organs that it will need in life and that it will use for his deliberate deeds. It performs abstract operations such as feeling, thinking, remembering and dreaming with them.¹⁴⁶

The First Stage

A Place of Rest, Firmly Fixed

Nutfah lexically means a little water or pure

***“Then We placed
him as (a drop of)
sperm in a place of
rest, firmly fixed.”***
Verse (Quran)

water.¹⁴⁷ As a term, it means *male* reproduction cell (sperm), female reproduction cell (ovum) and fertilized ovum (zygote).⁸

The meaning of “nutfah” as “zygote” (fertilized ovum/egg) in the Quran is in the foreground.¹⁴⁸

In the intercourse of a man and a woman, only a few hundred of the 200-300 million sperm coming from the man reach the egg. When the first sperm contacts the egg, fertilization occurs. In a few minutes, the outer membranes fuse. Meanwhile, the egg sucks the sperm inside to prevent other sperm from attaching it, and a chemical substance that pushes the other sperm away is released. Consequently, a membrane in which no other sperm can penetrate is formed, and this membrane gradually becomes stiff. The new single cell formed after the sperm and egg cell unite in the tube is called zygote (nutfah). The zygote is divided and sent into the womb; it is placed in the womb by being stuck on the wall of the womb due to some wisdom.¹⁴⁹

The Quran, which describes in detail all of the stages of creation at a time when man was assumed to grow in the womb like a tree, states that the sperm is converted into a zygote in a sheltered place where nothing can enter it as follows:

“Then We placed him as (a drop of) sperm in a place of rest, firmly fixed.”¹⁵⁰

Who but Allah may have informed Hz. Muhammad (pbuh), who was illiterate, that the zygote developed in a firmly protected shelter?

The Being Shaped within the Nutfah

Hundreds of characteristics of man, including hair and eye color, exist in the sperm that unites with the egg when it is in the state of “nutfah”. Scientists were able to determine it many centuries later. Is it possible to attribute the following verse, which states that the fetus is shaped as a human being in the first encounter in the nutfah, to a power other than Allah, who

Can it be imagined for a person to know the characteristics of the fetus, which is smaller than a pinpoint, in the 7th century AD without

⁸The following is stated in al-Mawsuatul-Fiqhiyya: “Some tafsir scholars hold the view that nutfah consists of the sperm of man. They use the verse stating that man is created from “a drop emitted” (at-Tariq 86/6) as the reason for their view that it is the sperm of man. Other scholars say it is nutfah consisting of man’s sperm and woman’s liquid. That is the view of the majority of scholars and tafsir scholars.” See Wizaratul-Awqaf wash-Shuunil-Islamiyya, al-Mawsuatul-Fiqhiyya, Kuwait 1409/1989, “Janin” item, XVI, 117, 118.

created and shaped man?

“Woe to man! What hath made him reject Allah; From what stuff hath He created him? From a sperm-drop: He hath created him, and then mouldeth him in due proportions.”¹⁵¹

According to the verse, the sperm had many characteristics of man as it was transformed into fetus. Can it be imagined for a person to know the characteristics of the fetus, which is smaller than a pinpoint, in the 7th century AD without revelation?

Determination of the Gender

The Quran states that the gender is determined when the fetus is in the form of nutfah as follows:

“That He did create in pairs,- male and female, From a seed when lodged (in its place).”¹⁵²

The verse states that nutfah (fertilized cell) occurs when the sperm enters into the egg. Scientists managed to determine the gender of the fetus, whether it was male or female at this stage of nutfah only with the advanced models of electron microscope, which was invented in 1932.

However, the Quran states in the 7th century AD that the gender is determined when the sperm enters into the egg. When the medical books written half a century ago are compared with the tafsir books written centuries ago, it will be seen that many tafsir scholars stated that gender was determined in the stage of nutfah.¹⁵³

Nutfah’s Walk

After the male’s sperm unites with the female egg, the journey of nutfah (fertilized cell) continues until it is placed in the womb. The Messenger of Allah (pbuh) states the following regarding the issue:

“When the drop (of semen) remains in the womb for forty or fifty- five nights, the angel comes and asks: My Lord, will it be good or evil? And one of these things is written. Then, the angel says: My Lord, will it be male or female? And one of these things is written. And his footprints on earth, his death, his livelihood are also recorded. Then his document of destiny is rolled and there is no addition to nor subtraction from it.”¹⁵⁴

Scientists state that sperm enters into the egg and moves toward the womb for a

while as nutfah; when it reaches the womb, its movement is stopped and it settles there. The Messenger of Allah (pbuh) states that sperm does not remain in a fixed place until it is placed in the womb after fertilization, and that its gender is created in that stage and recorded by the angel. Is there anything other than revelation that the Messenger of Allah (pbuh) speaks of the course and stability in the womb at a time when there are no imaging devices? Can the source of what the Messenger of Allah (pbuh) says about the movement and settlement in the womb at a time when there is no imaging device be anything other than revelation?

Women are a field for you

The nutfah splits the wall of the womb and enters into the womb like a seed entering split soil; then, it is pulled inward and it is covered. For this reason, Medicine and Anatomy books call this period “sowing period”. Embryologists compare this state of the womb to the soil in which seeds are planted. The Quran mentioned this relationship, which scientists have observed recently, many centuries ago: *“Your wives are as a tilth unto you.”*¹⁵⁵

The use of “Ma” (What) instead of “Man” (Who)

The following is stated in a verse related to creation:

*“Allah doth know what every female (womb) doth bear, by how much the wombs fall short (of their time or number) or do exceed. Every single thing is before His sight, in (due) proportion.”*¹⁵⁶

Although the gender is certain when the sperm enters into the egg, the word “ما” (what), which is used for non-living beings, is used instead of “من” (who), which is used for living beings; the verse does not say *“أَنْشَأْتُمْ حَمْلًا مِّنْ عَلْمِ اللَّهِ”*. The wisdom behind this use is to emphasize that gender is an ordinary event compared to the numerous features from the color of the hair to the shape of the eye.

Falling Short and Exceeding in the Womb

After the mother’s egg and the father’s sperm cell combine and are fertilized, they are divided and reproduced. The placenta is produced from some cells and the baby is formed from the rest of the cells through differentiation.¹⁵⁷

That the Quran mentions the diminishing occurring as a result of the cells that are separated from the nutfah and transformed into “placenta” and mentioning the growth of the rest to become a baby cannot be

“Falling short” mentioned in the verse is related to the division in the formation process of the placenta and the separation in “nutfah” as a result of it; the word exceed “تَزْدَادُومًا” describes the formation of the child by the growing of the remaining nutfah. As a matter of fact, the “placenta” that is separated from the nutfah remains about half a kilo while the nutfah grows up and is transformed into a baby.

That the Quran mentions the diminishing occurring as a result of the cells that are separated from the nutfah and transformed into “placenta” and mentioning the growth of the rest to become a baby cannot be explained in any other way except as a miracle.

The second Stage

Nutfah is converted into “alaqah” after a while. As a matter of fact, Allah states the following: *“Then We made the sperm into a clot of congealed blood.”*¹⁵⁸. That is the second great transformation occurring in the fetus.

The Miracle of Alaqah

“Alaqah” lexically means attaching to something and sticking to it. Blood in general is called alaqah but some scholars interpret alaqah as “frozen blood”.¹⁵⁹

It is stated in the chapter of al-Alaq based on this second stage that man is created from “alaq”.¹⁶⁰ In Arabic, leech is also called “alaqah”. The following relationship exists between the fetus, which is an “alaqah” and a leech: Leeches living in the ponds attach themselves to the mouths of sheep and cattle that drink water and suck their blood. The state of “alaqah” in water is the same as that of the fetus, which is transformed into “alaqah” from nutfah.

The “alaqah (leech)” in water sucks blood by attaching itself to the mouth of the cow and the “alaqah” in the woman sucks blood by attaching itself to the womb. It is not possible for the Messenger of Allah to have received the knowledge that the nutfah attaches to the womb by being converted into “alaqah” and feeds on blood like the “alaqah” in water and that it is likened to alaqah (leech) so as to be expressed concretely from anyone but Allah.

Both the fetus and the alaqah are surrounded by water.

The “alaqah” in water sucks blood by attaching itself to the mouth of the cow and the “alaqah” in the woman sucks blood by attaching itself to the womb. It is not possible for the Messenger of Allah to have received the knowledge that the nutfah attaches to the womb by being converted into “alaqah” and feeds on blood like the “alaqah” in water and that it is likened to alaqah so as to be expressed concretely from anyone but Allah.

Mudghah

“Mudghah”, which means “*a piece of chewed meat*”¹⁶¹ is the name given to the stage of the fetus after “alaqah”. In that stage, an image like something chewed occurs on “alaqah”. Keith Leon Moore, the American embryologist, takes a piece of soil from the ground, chews it with his teeth, and puts it next to the “mudghah” to show the similarity between the mudghah and something that is chewed and says, “This is the mudghah state of the fetus and the other is the mudghah chewed by the teeth.”¹⁶²

It is not possible for the Messenger of Allah (pbuh) to learn that the fetus, which is far smaller than a grain of rice, is in the form of something chewed in any way other than revelation.

The mudghah assumes different shapes like a piece of meat chewed in the mouth but it always maintains the signs that resemble teeth marks. It is not possible for the Messenger of Allah (pbuh) to learn that the fetus, which is far smaller than a grain of rice, is in the form of something chewed in any way other than revelation.

The bones of the fetus originate from that “mudghah”. The Quran describes it as follows:

*“Then We made the sperm into a clot of congealed blood; then of that clot We made a (fetus) lump; then we made out of that lump bones and clothed the bones with flesh.”*¹⁶³

The mudghah is not converted into bone at once. In some part of it, the cells are not formed fully while in the other part, the mudghah, which forms the basis of the human body, approaches the final stage: The Quran explains it as follows:

“We created you out of dust, then out of sperm, then out of a leech-like clot, then out of a morsel of flesh, partly formed and partly unformed.”¹⁶⁴

Can a statement made by an illiterate prophet that some of the organs of the fetus form in it in that state and that the others do not appear yet be explained by anything except a miracle?

The Hadith of Forty-Two Days

By the end of the sixth week, the brain, eyes, mouth, inner ears, heart, lungs and digestive system begin to take shape in the fetus, which is smaller than the rice grain. In this period, the ears of the fetus are in the form of small dots. The arms and legs start to take shape. The Messenger of Allah (pbuh) states the following about those stages, which can be observed after the fetus is magnified tens of thousands of times under the microscope:

By the end of the sixth week, the brain, eyes, mouth, inner ears, heart, lungs and digestive system begin to take shape in the fetus, which is smaller than the rice grain. Do they not show a Creator that has infinite knowledge, will and power?

“When forty-two nights pass after the semen gets into the womb, Allah sends the angel and gives it shape. Then, He creates its sense of hearing, sense of sight, its skin, its flesh, its bones.”¹⁶⁵

Bones are Created Earlier

Until recently, it was written in the books that flesh was created first in the fetus and that bone was created after that. However, God Almighty states in the Quran that bone is created before flesh: *“Then, we made out of that lump (fetus) bones and clothed the bones with flesh”*.¹⁶⁶ Afterwards, He clothed those bones with muscle.

In a British university, a teacher told the students that flesh was created first and that bone was created afterwards. When he discovered years later that bone was created first, he told his students that he made an important discovery and that bone was created first. A Muslim who was among his students said, “The Quran stated it fourteen centuries ago.” The teacher said it was impossible. Finally, the student read the verse from an English translation of the Quran and the teacher

had to accept that the Quran mentioned it before.

The Third Stage

After the bones are clothed with muscle, the third stage begins in the fetus. In this stage, the fetus continues to develop and the body continues to grow and finally it reaches a structure that will carry the soul. The phrase “آخَرَ خَلْقًا أَنشَأْنَا” mentioned in the verse means Allah Almighty constructs the fetus in another way and places the spirit in it.

The two important events of this stage are the continuation of the material development of the fetus and the blowing of the spirit into it. Therefore, Allah states the following about this incident: “Then, we developed out of it another creature.”¹⁶⁷

Nothing in the universe resembles man, who is created from matter and spirit. As the Quran states, he is a completely different being. An animal is born, grows, develops, lives as an animal and dies as an animal. However, man grows, becomes a genius, scholar, thinker, reformer, explorer and inventor because he is a completely different being with his spirit.

Today, science is unable to know in which stage of the fetus feelings and emotions occur and when and how the body and spirit merge. Therefore, when classifications and determinations are made related to creation, if Medicine and Biology, which still remain silent in many issues, take into account the verse of the Quran in which Allah says “We developed out of it (the fetus) another creature” and the hadiths stating that the spirit is blown at the end of the fourth month, they can cover more distances in the journey of discovery.

Conclusion

Allah states in the following verse that He creates human beings in three veils of darkness in three stages: “He makes you, in the wombs of your mothers, in stages, one after another, in three veils of darkness.”¹⁶⁸

Until recently, it was written in the books that flesh was created first in the fetus and that bone was created after that. However, God Almighty states in the Quran that bone is created before flesh: “Then, we made out of that lump (fetus) bones and clothed the bones with flesh” (al-Mu’minun, 14).

Embryologists say that the development of the fetus in the womb is completed through three embryological stages.¹⁶⁹ Accordingly, we can classify the stages of creation as the stages of “nutfah”, “mudghah” and “ruh (spirit)”, which starts with the blowing of the spirit and which distinguishes man from all other living beings.

Evolution is a theory invented to deny creation; on the other hand, the process of creation that begins as a result of the meeting of the zygote with the egg is a fact that Allah imposed as a law.

In order to understand creation, which is a miracle, better, it is necessary to read the Holy Quran, which is a

concise and miraculous word, more deeply. If some of the students of Islamic Sciences do their masters and doctorates in the faculties of medicine under the supervision of competent academicians, the miraculous declarations of the Quran related to creation will be understood more deeply.

Evolution, which does not and cannot exist, is a fairy tale and Creation is a fact. While Creation has been repeated billions of times for thousands of years, there is not a single notable fact showing that Evolution exists in any written source.

As our process of understanding man, whom we think we know but who is the great unknown, develops, humanity will be completely saved from the Tale of Evolution.

As our process of understanding man, whom we think we know but who is the great unknown, develops, humanity will be completely saved from the Tale of Evolution and face the reality of Creation.

An Explanation about Qadar (Destiny/Predestination)

The Prophet states the following in a hadith:

“The creation of each one of you is put together in the womb of the mother in forty days; then, he becomes a clot of thick blood (alaqah), and then he becomes a piece of flesh (mudghah). Then, Allah sends an angel and he is ordered to write four things: the livelihood (rizq), date of death (ajal), deeds of this creature and whether he will be a person of Paradise or Hell. Then, spirit is blown into him.” (Bukhari, Qadar, 1; Bad’ul-Khalq, 6; Anbiya, 2; Tawhid, 28; Muslim, Qadar, 1; Abu Dawud, Sunnah, 17; Tirmidhi, Qadar, 4, 8).

The following questions and similar ones are asked about the statement *“whether he will be a person of Paradise or Hell”* in the hadith:

“If it is known beforehand what man will do, how can he be held responsible for what he does?”

“If Allah knows what will happen in the future, can it be said that human beings who do the things that are known beforehand have free will?”

“Knowledge is dependent on the known”

In Qadar, God Almighty’s name al-Alim (the Knower of All) is dominant. Knowledge, which is the manifestation of that name, is essential in Qadar. This state is expressed as follows by Islamic scholars: *“Knowledge is dependent on the known”*. Allah knows the things that will happen because they will happen. However, His knowledge does not determine them. For, knowledge is dependent on the known; knowing does not determine what will happen. What is meant by the statement *“knowledge is dependent on the known”*? As it is known, knowledge means to learn and know the reality of something by reading, searching, seeing and listening. Knowledge is different from thought. Thought is view, preference, faith and idea that is not definite.

Then, *“what does known mean and what does the statement knowledge is dependent on the known mean?”* Known is the thing that is known and that is the topic of knowledge and science. The word known includes anything that is the topic of knowledge and science and anything that is created. We think the examples below will be helpful in understanding the issue:

First, let us try to understand the issue with the following example: The road between Antalya and Isparta has a certain length. This length is called *“known”* since it is the topic of knowledge. We know the existence of that road and that it is 120 km long. It is called *“knowledge/science”*. Our knowledge here is dependent on the known; it is in compliance with it and that is why it is called knowledge. We know that this road to be 120 km long because it is 120 km long. It is not 120 km long just because we say it is 120 km long.

If the known were dependent on knowledge, the road would be 150 km long when we said *“this road is 150 km”*.

There are other examples that explain the issue in scientific data. Scientists determine on what day and at what time the sun will be eclipsed based on experience and research. When that day and time come, the sun is eclipsed. Let us ask now:

“Was the sun eclipsed because they said ‘the sun will be eclipsed on that day and that time’ or did the scientists determine it like that because the sun was going to be eclipsed at that day and time?”

Let us deal with the issue in terms of qadar:

As the rule *“knowledge is dependent on the known”* indicates, Allah knows what happens and will happen with His pre-eternal knowledge. His knowledge is also dependent on the known. We do not do things because He knows them so; He knows them because we do or will do so. If the known were dependent on knowledge, we would do things because He knew; in that case, He would direct our will and prevent us from acting freely with our free will. However, Allah knows what happened and what will happen as they are. That is, His knowledge is also dependent on the known.

“Was everything known beforehand?”

Yes, the pre-eternal knowledge knew everything beforehand. Besides, knowing something beforehand and afterwards is not in question for Allah because Allah sees the past, the present and the future at the same time. The whole universe is like an atom in the eye of Allah. That is, he knows the immense universe and manages it as he knows and manages an atom. Less-more, big-small does not matter for His power; His knowledge encompasses everything in the past and in the future.

“Since God Almighty knows with His pre-eternal knowledge that we are people of Paradise or people of Hell, what is the point of making efforts based on our will?”¹

He knows whether we are people of Paradise or people of Hell. However, He knows it because He knows what we will do based on our free will. His knowing does not bind our will. For, the principle of knowledge is dependent on only knowing the known things and beings. Those beings are not managed from outside through knowledge. That is, a being does not exist because you know that it exists. It does not cease to exist because you know that it does not exist. In other words, you cannot change the properties and place of a being only with your knowledge. The manifestation of will and power is necessary to change the shape, nature and place of a being. Allah makes only His name al-Alim manifest in the issue of qadar just like the length of the road will not change by knowing in the example given above.

It is Allah who creates both the good and the evil. His universal will is dependent on our partial free will. If we want to go to a mosque, He will create that deed. If we want to go to a forbidden place, He will create it too. We are held responsible because we use our partial free will in the bad way..

EVALUATION QUESTIONS

- 1-How was first man created?
- 2-What are the similarities between the creation of the first man and the creation of man today?
- 3-What kind of a structure does nutfah have?
- 4-What stages does the fetus undergo in the mother's womb in the creation today?
- 5-When is the spirit sent to the fetus in the creation in the mother's womb?

5.2-IS THE CLAY FROM WHICH FIRST MAN WAS CREATED A DNA MOLECULE?¹⁷⁰

Dr. Uğur Dadalı

Medical Doctor

LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student understands the clay form and attribute related to the creation of the first man from soil.</p> <p>2- He understands that the clay shapes described in the verses can be compared with the different smell, shape and structure of the DNA molecule.</p> <p>3-He learns the similarity between the stages of creation of the first man from clay and the stages of creation in the mother's womb.</p>	<p>1-What kind of similarity can be established between the smell and structure of the clay shapes from which first man was created and the smell and shape of the DNA molecule?</p> <p>2-Can structures called clay in the creation of first man be accepted as DNA molecules?</p> <p>3- Is there a parallelism between the stages of creation from clay of the first man and the stages in the</p>

The Quran states in the verses below that man was basically created from clay: *“And certainly We created man of clay that gives forth sound, of black mud fashioned in shape”* ^{“al-Hijr, 26”}, *“Them have We created out of a sticky clay.”* ^{“as-Saaffat, 11”}, *“He (Allah) created man from sounding clay like unto pottery”* ^{“ar-Rahman, 14”} and *“He (Allah) began the creation of man with (nothing more than) clay.”* ^{“as-Sajda, 7”}

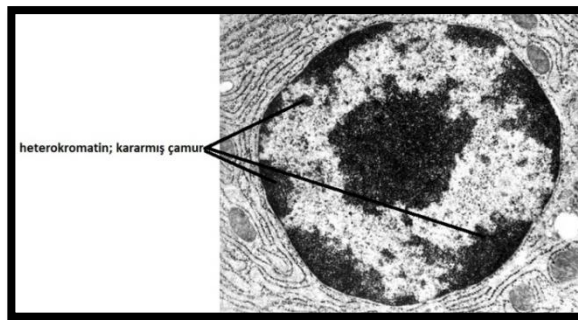
Science has revealed that man is made up of DNAs (Deoxyribonucleic Acid) because man consists of cells. Proteins form the basis of cell structure and its functions. The genetic information that provides protein synthesis is located in the DNA molecule. Therefore, human beings are mainly formed from DNA molecules.^{171,172, 173, 174, 175}

It is also possible for the clay mentioned in the verses regarding the creation of man from clay to be regarded and understood as a DNA molecule.

5.2.1-Black Mud DNA Molecule

Protein synthesis is carried out through the genetic information on DNA (Deoxyribonucleic Acid). This information, which is specific to each protein, exists in the DNA as encoded arrays of a certain sequence and length. These sequences are called genes. As a work of mercy, the synthesis of the necessary proteins in the required time and in the required cells is achieved by the activation and inactivation of those genes in appropriate cells and at appropriate times. This is achieved through a number of mechanisms called histone modification and DNA methylation. Of these, histone modifications result in the tightly packing and compression of the chromatin strands that make up the DNA molecule. The tightly packed and compressed DNA molecule is called heterochromatin. DNA molecule with heterochromatin structure is seen under the microscope as dark and black.^{176,177}

This dark-colored molecule can be interpreted as the **“black”** mud mentioned in the following verse of the Quran: *“And certainly We created man... of black mud ...”*“al-Hijr 26” (Picture 1).



Picture 1: Heterochromatin DNA: Black DNA: Black Mud.

5.2.2-Stinking Mud DNA Molecule

One of the well-known mechanisms by which suitable genes are expressed in appropriate cells and at appropriate times is DNA methylation. DNA

methylation is realized by the methylation of cytosine nucleotides, one of the four nucleotides that form it. A methylated compound is usually stinky.¹⁷⁸

As a matter of fact, dimethyl sulfite and methyl sulfite, which are methylated compounds, cause bad breath and trimethylamine compound causes severe foul fishy smell in trimethylaminuria. The DNA molecule is also a methylated compound due to the methyl groups contained in the cytosine nucleotide. Therefore, the DNA molecule is also a malodorous compound chemically and probably physically.

In the verse stating that first man being was created from black mud, it is also stated that first man being was created from stinking mud:

“And certainly We created man... of stinking mud” “al-Hijr 26”

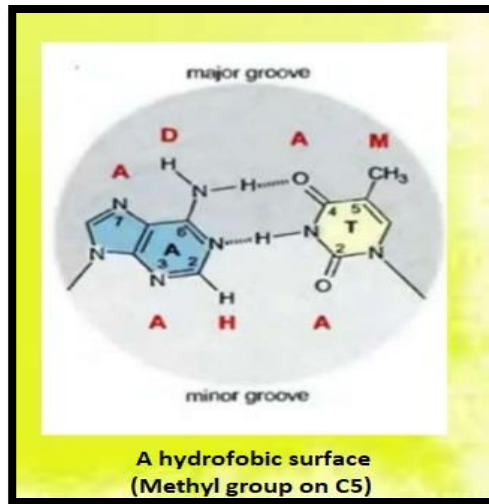
The stinking mud meant herein can be interpreted as a methylated malodourous DNA molecule.

5.2.3-Dry Mud DNA Molecule

Thymine, which is one of the four nucleotides that make up the DNA molecule, occurs as a result of methylation. The methyl group in this nucleotide makes the DNA molecule assume hydrophobic property, that is, its ability to escape from water. In addition, large and small groove-shaped structures consisting of hydrophobic pockets are placed wisely in the DNA.^{179, 180, 181}

Hydrophobia is the property of a molecule to avoid water.¹⁸² That is, the hydrophobic molecules do not get wet at all or get wet very little. Therefore, such molecules are dry. DNA is a hydrophobic molecule due to the methyl group it has. In other words, DNA is a dry molecule that escapes from water and that does not get wet.

This dry property of the DNA molecule due to the hydrophobia is in compliance with the word “**dry**” mentioned in the Quran: *“And certainly We created man... of dry mud”* “al-Hijr 26” (Picture 2)



Picture 2: Hydrophobic DNA: Dry DNA; Dry Mud.

5.2.4-Shaped Mud DNA Molecule

The chromatin strands that make up the DNA molecule are dispersed in the nucleus and they have a very homogeneous appearance under a microscope except during cell division. In the course of cell division, chromatin strands are organized to form structures that allow genetic information to be transferred and, due to some wisdom, the DNA molecules assume the shape of short and thick bars.¹⁸³

This state of the DNA molecule is called a chromosome. Chromosomes are viewed as short thick bars under the microscope. This shape assuming quality of the DNA molecule due to being converted into the form of chromosome corresponds to the phrase **“fashioned in shape”** in the verse of the Quran: *“And certainly We created man ... of mud fashioned in shape.”* ^{“al-Hijr 26”} (Figure 3)

5.2.5-Sticky Clay DNA Molecule

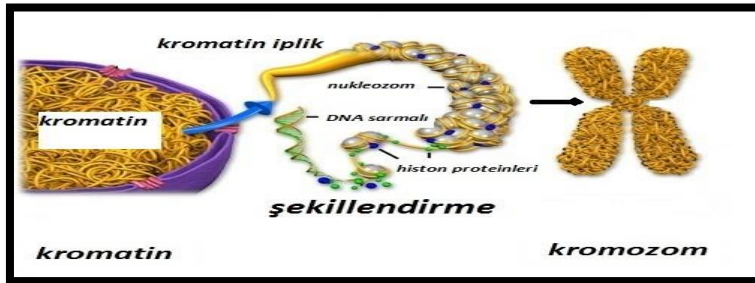
Carefully resolved natural DNA solutions have a high viscosity at room temperature: (25 °C) and pH 7.0.¹⁸⁴

High viscosity means that a molecule is highly viscous. Therefore, DNA is a sticky molecule. On the other hand, DNA ends formed by the cutting off the DNA chain at certain points by some enzymes for various purposes, such as copying,

duplicating or modifying genetic information have a high binding inclination to the ends of other DNA fragments to which they are to be joined. Because of those characteristics, those ends are called “**Sticky Ends**” in genetic terminology.¹⁸⁵

This viscous property of the DNA molecule originating from its high viscosity and cut off ends can be said to be in compliance with the “**sticky**” property of the clay mentioned in the following verse of the Quran: “*Them have We created out of a sticky clay.*” “as-Saaffat,11”

Protein synthesis is realized through genetic information on the DNA molecule. However, for synthesis, this information on DNA must first be copied to another molecule called RNA (ribonucleic acid) through some enzymes. Copying is carried out by some enzymes. Those enzymes are characterized by their ability to bind to the DNA molecule only when their chains are separated from one another. Therefore, for protein synthesis, the two chains that make up the DNA helix must be separated first.



Picture 3: Chromosome; Shaped DNA; Shaped Clay.

5.2.6-Clay Like Pottery DNA Molecule

Separation can be carried out in two different ways. The first one is the physical heating of the DNA molecule. Heating breaks off the hydrogen bonds holding the two chains together and separates the DNA chains from each other. This method has been used successfully in separating DNA chains in various tests carried out in the laboratory and in the tube.¹⁸⁶

However, this method cannot be used inside the cell because heat can damage other cell structures. Therefore, instead of heat energy, another enzyme-mediated method using chemical energy is used to separate DNA chains within the cell. In this method, the hydrogen bonds that hold the DNA strands together

are broken down by a command for several purposes and the double stranded DNA molecule is separated into single strands.¹⁸⁷

The heat-mediated method corresponds to the “method of baking on fire” because in this method, the DNA molecule is heated, in other words, the DNA molecule is baked on fire. Therefore, the DNA molecule obtained at the end of this method corresponds to DNA baked on fire. For, the DNA obtained at the end of this method is obtained as a result of heating, that is, baking on fire.

As for the enzyme-mediated method, it corresponds to the “method of baking on fire” because in this method, the DNA molecule is not heated, that is, is not baked on fire, but at the end of this method, the DNA strands are separated from each other as if they were heated, i.e. baked on fire. Therefore, the DNA molecule obtained at the end of this method corresponds to “DNA as if baked on fire”.

As it is mentioned above, the heating, i.e., baking, method cannot be used inside the cell because heat can damage other cell structures. Man is created from the DNA molecule in the cell. Therefore, the enzyme-mediated method, not the heating method, that is the method of baking on fire, is used in the cell.

Therefore, the Quran does not say “*He (Allah) created man from clay baked on fire*” but it says “*He (Allah) created man from sounding clay like unto pottery.*”^{“ar-Rahman, 14”}

The property of DNA molecule chains to be separated from each other through enzymes as if they were heated corresponds to the property of the clay “**like unto pottery**” mentioned in the verse of the Quran: “*He (Allah) created man from clay baked on fire.*”^{“ar-Rahman, 14”} (Picture 4, 5).

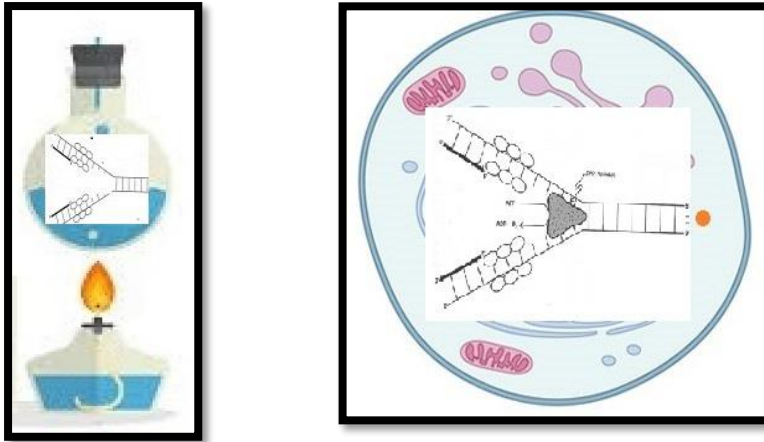
5.2.7-Sounding Clay DNA Molecule

Information in some genes in DNA cannot be expressed, i.e., no product can be obtained from it. Such genes are called “**silent genes**” in genetic terminology.^{188, 189}

Some genes, on the other hand, can express themselves, that is, they are involved in the production of some products. Such genes are called “**highly expressed genes**”, in other words, loud genes, in genetic terminology.

We think the “**sounding**” quality of the clay from which man was created mentioned in the following verse of the Quran corresponds to the ability of the

DNA molecule to express itself, that is, to take part in the formation of some products, in other words, to produce sound in genetic terminology: “*He (Allah) created man from sounding clay ...*” “ar-Rahman, 14”



Picture 4: In the tube; Picture 5: In the cell; DNA as if baked on fire; baked DNA . Clay as if baked on fire.

5.2.8- Clay DNA Molecule in First Creation

The first stage of protein synthesis is the copying of the genetic information of the protein onto the RNA through the DNA molecule; the second stage is the reading of this information on the RNA, and the final stage is the addition of the amino acids that are in compliance with that information to one another. In other words, the molecule involved in the first step of protein synthesis is DNA. That is, protein synthesis starts from the DNA molecule.¹⁹⁰

This means that man is made from proteins and hence creation of man begins with the DNA molecule. The fact that clay is the substance from which man's creation starts as it is stated in the following verse of the Quran: “*He began the creation of man with (nothing more than) clay*” “as-Sajda, 7” can be said to correspond to the DNA molecule's being the first substance to be used in the protein synthesis, that is, the beginning of the creation of man.

CONCLUSION

It is stated in the Quran that first man was created from clay. Various shapes and structures of the clay are mentioned in this creation. In the verses related to the issue, the following properties are mentioned: **“dark, stinking, dry, shaped, sticky clay, dry clay as if baked on fire and sounding clay”**.

Those properties of clay, which are mentioned in the Quran, are also seen in the structure of the DNA molecule. This DNA molecule forms the basis of the genetic structure in all living beings. Similarly, 46 chromosomes in every cell that make up the human genetic structure are created from DNA molecules

The DNA molecule’s **“dark, black, stinking, dry, shaped, sticky and sounding as if baked”** properties correspond with the properties of clay mentioned in the Quran about the creation of man. Therefore, what is meant by the clay material from which first man was created as it is stated by the Quran must be DNA molecule.

The structure of the DNA molecule was understood in the 1950s, in the years when it was understood that man came into being from DNA molecule. However, the Quran mentioned this structure and that man was created from this structure 14 centuries ago.

This proves that the Quran is a miracle. Showing that what the Quran states is true related to such a scientific issue proves that it is Allah, who has infinite knowledge, will and power, who sent down the Quran, creates man and knows everything.

It is also understood by this fact that science and religion are intertwined and confirm each other from the perspective of science-religion relationship. When it is examined carefully, it will be clearly seen that both religion and science lead man to Allah.

EVALUATION QUESTIONS

- 1-What are the attributes of the clay from which first man was created?
- 2- Can a parallelism be established between the clay from which first man was created and DNA molecule?
- 3-What is the similarity between the description of the clay from which first man was created as if clay baked on fire and DNA molecule?
- 4-What kind of a parallelism can be established between the sounding clay from which first man was created and DNA molecule?

5.3-THE COMMAND KUN (BE) AND CREATION¹⁹¹

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student understands the types of creation. 2- He understands Allah's attributes that become manifest in creation: Knowledge, Will and Power. 3-He understands the nature of the command "Be". 4-He understands the addressee of the command "Be".	1-Does Allah create beings out of nothing, or does He make them from existing atoms? 2-Does the effect of the command "Be" begin and end in an instant? 3-What do you understand from the statement, " <i>The creation of beings means taking them from the field of knowledge to the field of power</i> "?

We live in an immense realm whose boundaries we do not know. As it is explained in the works written in the field of astronomy, there are at least a hundred billion galaxies in the universe like the Milky Way Galaxy, in which we live. There are at least two hundred billion stars like our sun in our galaxy. When we look at ourselves and the realm around us, we are faced with a reality of "existence". Although we did not witness the first moments of creation, we know that we came into being out of nothing; we also see new ones coming into being.

When we look at ourselves and the realm around us, we are faced with a reality of "existence". Although we did not witness the first moments of creation, we know that we came into being out of nothing; we also see new ones coming into

The question whether this realm has a creator or not has occupied people for a long time. Almost all religions have a faith that there is a creator of the world and human beings. Philosophers who try to understand the universe with an independent mind generally accept the existence of a creator. However, there were and there are people who are not members of any religion. Some of them formed philosophical movements like positivism and materialism and inculcated their atheistic views into the masses.

Some of the ancient Greek philosophers who lived before Christ explained everything with atoms. According to them, atoms were not created and will never disappear. Everything comes into being with the combination of those atoms.¹⁹²

If this philosophy is examined carefully, it will be seen that the view of the pre-eternity of matter is put forward in order to avoid saying God.

There are two possibilities related to existence:

- 1- The pre-eternity of matter, which is advocated by atheists.
- 2- That matter is something created, which is accepted by all religions.

That is, matter is either pre-eternal and not created or it is not pre-eternal and is created. If it was created, there is definitely a Creator.

NON-EXISTENCE

We did not exist in the past. The world did not exist a long time ago. The universe we see did not exist billions of years ago. As the Prophet put it,

*“There was Allah, there was nothing else.”*¹⁹³

He determined with His knowledge, chose with His will, and created everything out of nothing with His power.

The science of physics, which examines the world, expresses that it is not pre-eternal. Hamdi Yazır expresses it as follows:

*“It is impossible for something non-existent to come into being on its own”*¹⁹⁴ *“Nothing can come into existence from non-existence on its own.”*¹⁹⁵

In Islamic works, non-existence is expressed by the word “adam” and existence by the word “wujud”.

The key we have lost is not with us (is non-existent), but it has an existence in the place where it fell. When things were first created, they were not completely non-

When the question, “does non-existence exist?” is answered as “Yes”, it is given a kind of “wujud” (existence). So, we can clarify adam and wujud as follows:

Wujud is the non-existence of adam, and adam is the non-existence of wujud.¹⁹⁶

Adam is divided into two parts:

1-Adam al-mahd (Absolute non-existence).

2-Adem al-idafi (Relative non-existence).

The first one is real non-existence. The other means non-existence based on certain conditions.¹⁹⁷

For example, the key we have lost is not with us (is non-existent), but it has an existence in the place where it fell. When things were first created, they were not completely non-existent; they had existence in the knowledge of Allah.

5.3.1-Types of Creation

When we look around carefully, we see very different beings. They are sent to the field of existence in different styles.

The Quran attributes all kinds of creation to divine knowledge with the following verse: “*He (Allah) is well-versed in every kind of creation*”¹⁹⁸. The verse is in a text where resurrection after death is narrated. Hamdi Yazır states the following while explaining the verse:

*“Allah knows every kind of creation, with matter and without matter, with tools and without tools, with models and without models, first and later.”*¹⁹⁹

There are two main types of Allah’s creation:

1-Ibda

2-Insha²⁰⁰

The first one expresses the first creation without any reason matter and means. As a matter of fact, the verse Allah “*To Him (Allah) is due the primal origin of the heavens and the earth*”²⁰¹ is related to this meaning.

Ibda means to create something out of nothing²⁰²; Badi’ means “the one who produces something without based on a previous model”. The word Badi’ is involved with having no model and similar thing and having beauty and extraordinariness.²⁰³

The first creation took place entirely with *ibda*. There was no precedent or model of this world and any being created in this world before the first creation.

If we liken this universe to a big book with countless books, the elements are its alphabet, and each being consisting of the elements is a separate book. There are twenty-six letters in the English alphabet. However, no book written with twenty-six letters is the same as any other book. We can reach the following conclusion:

“Every *insha* is an *ibda* in one aspect.” That is, everything that is created (*ibda*) constructed from existing matter is created with *ibda* except for its original matter because something the same as that thing did not exist before and will not exist afterwards either. Therefore, *ibdais* divided into two:

- 1-Real *ibda*.
- 2-Relative *ibda*.²⁰⁴

There is diversity and coloration in Allah’s creation. For example, the creation of people occurred in three ways:

- 1- The creation of Hz. Adam directly from soil without a mother and father.
- 2- The creation of Hz. Isa (Jesus) from his mother without a father.
- 3- The creation of other people from a mother and a father.

Hz. Adam is an independent, original copy; in fact, every human being is original and independent. A similar case applies to every being. For example, all snowflakes are hexagonal, but none of them has the same pattern. This magnificent fact is expressed as “*There is no repetition in manifestation*”.²⁰⁵ In other words, Allah creates every being “for the first time” so to speak; He does not create the same being again. Although his creation is very quick, there is no “mass production” in His activity because behind every creation, there is “an infinite knowledge, a will that encompasses everything, and a power capable of doing everything”.

5.3.2-The Attributes of Knowledge, Will and Power in Creation

Muhyiddin Şeyhzade, who wrote explanations for Baydawi, states the following about the command “be”:

*“It expresses Allah’s giving existence to beings with knowledge, will and power.”*²⁰⁶

Allah breathed into man from His own spirit²⁰⁷; that is to say, He gave man some of His attributes. The reason why we were given those attributes is to recognize Him with those attributes. Knowledge, will and power given are some of those attributes. We act by using those attributes when we produce something. For example, we need those attributes to write the letter A. We cannot write if we do not know; if we do not have power, we cannot write even if we know. When we have power, we do not write unless we want it with our will. So to speak, the existence of every being is realized by the manifestation of those three divine attributes. Therefore, the question “Does Allah know how to create out of nothing, or does He have the power to create?” is meaningless. If He had not known, wished, or had the power, such a creation would not have been in question; everything would have remained in the darkness of non-existence; or, more precisely, “there would have been nothing.”

The divine power that gives things existence out of nothing is unknown in terms of His nature but known in terms of His works. That is, we do not know what kind of power He has, but we always see the works of that power both in our own soul and

The divine power that gives things existence out of nothing is unknown in terms of His nature but known in terms of His works. That is, we do not know what kind of power He has, but we always see the works of that power both in our own soul and in the outside world. While interpreting the verses “So I do call to witness what ye see, what ye see not”²⁰⁸, Ata, one of the imams of Tabiun period, states the following:

“What is seen is the works of power and what is unseen is the secrets of power.”²⁰⁹

In other words, everything we see is the work of Allah’s power. However, we do not know what that power is like and how it is. The so-called “laws of nature” are nothing but manifestations of Allah’s power. He acts with those laws in the universe.

ALLAH – REALM RELATIONSHIP

Hamdi Yazır explains the relationship between Allah and the realm as follows:

“Allah - realm relationship is creation - creature relationship; it is not giving birth -reproduction relationship.”²¹⁰ That is, Allah is the Creator and the realm is one of His creatures. It is not part of Allah. We can understand it with the example of painter and painting. The painting reflects the art of the painter. The existence of the painting shows the existence of the painter but it is not a part of the painter. A similar relationship exists between Allah and this realm.

This realm was created to be a mirror to Allah.

This realm was created to be a mirror to Allah. Mawlana states the following regarding the issue:

“What is the mirror of existence? It is non-existence. Existence is seen only in non-existence. As a matter of fact, the rich give food, etc. to the poor.”²¹¹

A doctor shows his skill on those who need treatment. A tailor shapes shapeless fabrics. A carpenter turns timber to furniture. The non-existence and deficiency in all of them made them a mirror to Allah’s art.²¹²

Likewise, the mirror of Allah, who has a thousand and one names, is the realm of non-existence. He has created the world and shows His embroidery on it. And His creation of the world is through the command ‘Be!’

5.3.3- The Command “Be”

The conversion of the heavens and the earth from non-existence to existence with the creation of Allah is a hard and deep issue for man to understand. The Quran states in eight verses that things were given existence with Allah’s command “Be!” For example, the following is stated in a verse:

“Verily, when He intends a thing, His Command is, “be”, and it is!”²¹³

The so-called “laws of nature” are nothing but manifestations of Allah’s power. He acts with those laws in the universe.

The command “Be” is the orientation of the divine command toward the creature.²¹⁴ That statement expresses the type of the relationship between the Creature and the created beings. It tells us how those visible beings came into being from the Creator. However, it cannot be understood by the human mind how this penetrating will is related with things.²¹⁵

The phrase “...and it is” in the verse refers to the beginning of the process of existence; it does not tell that everything happens at once with all the details. For, Allah wanted to create things in an artistic way. For example, each of the stages of man in the mother’s womb has so many amazing states. Otherwise, if man had been created at the age of forty, life stages such as infancy, childhood and youth, which lasted for forty years and each of which had so many beauties, and the details in every moment of them would not have been seen. The fact that the verb in the verse is in present tense shows this important fact. That is, this occurrence takes a certain period that is determined. Other beings are generally created in such gradual manner too.

5.3.3.1- The addressee of the Command “Be”

Interesting views have been put forward regarding the addressee of the command “Be”: The command “Be” is before the existence of that thing; in that case, something that does not exist is addressed. Or, something that exists is addressed; in that case, something that already exists is told to "be"; both are troublesome.²¹⁶

MawlanaJalaluddin Rumi states the following regarding the issue:

“O Lord! We did not exist; we did not demand anything. Your grace heard what we did not say.”²¹⁷

He also says, “Every moment the following address comes from Allah: ‘Am I not your Lord?’ Then, matter and its qualities occur. If those things and their qualities do not say, ‘Yes’, their coming from non-existence to existence is actually the answer ‘Yes’.”²¹⁸

Allah has a knowledge that encompasses everything that happened and everything that will happen. The shapes and the scientific bodies of the things are present in the knowledge of Allah. It is definitely not difficult for Allah to bring them to this realm, which we see with our eyes. It is as easy as a match with burning ability to burn immediately with a contact. Or, it is as easy as something written with an invisible ink to appear when a substance that makes is visible is

Things existed in the knowledge of Allah before they were created in this realm. It is called “ayanthabita” (latent realities). In that case, it means the command “be” is not given to something absolutely non-existent, but

used or the image in the mirror of the photograph to transferred onto the paper with a very easy act.²¹⁹

When this issue is dealt with the levels of existence, it will be settled:

The levels of existence are different. For example, a poet designs his poetry in his mind; then, he writes it. Poetry in his mind is non-existent according to us but it is not non-existent according to the poet. Those two levels of existence are expressed as existence based on knowledge and visible existence. So to speak, things existed in the knowledge of Allah before they were created in this realm. It is called “*ayanhabita*” (latent realities). In that case, it means the command “be” is not given to something absolutely non-existent, but to the one whose existence has been determined in the knowledge of Allah. When Yunus Emre, the poet, said, “*I have taken on flesh and bones, I have appeared as Yunus*”, he virtually indicated this issue. In other words, Yunus Emre actually existed in the knowledge of Allah and was determined. However, his appearance in the realm of existence occurred in a certain period of time.

5.3.3.2- The Effect of the Command “Be”

The command given by an enlisted man and the command given by a marshal are definitely of different strength. The first one cannot activate even one person but the marshal activates, directs and maneuvers hundreds of thousands of soldiers with his commands and directives.

Allah’s command is omnipotent. Every being comes into being with His command and strictly obeys all His commands. This glorious universe is addressed by the divine command and will at any moment and time, and is the slave of that command and will. Both the sun, which appears to be the sultan of the day, and the moon and stars, which appear to be the kings of the night, have to obey and submit to the divine command given to them as the following verse indicates: “*He (Allah) assigned to each heaven its duty and command.*”²²⁰ Their nature is composed of obeying the command they take. They are all created beings; they are all subject to divine will. They walk if He says, “*Walk*”. They turn if He says, “*Turn*”. They stop if He says, “*Stop*”. They shine if He says, “*Shine*”. They blow out if He says, “*Blow out*”.²²¹ So to speak, if He says, “Be”, they exist and if He says, “Die” they die and leave the realm of existence.

This obedience that we see in the universe symbolizes a universal surrender (Islam). The whole universe is Muslim because everything acts in accordance with the laws that are inherent in their nature. That is, they surrender to the will of Allah.²²²

Responsible beings like humans and jinn have the right to prefer in their acts as a requirement of their tests because they will be rewarded or punished for those preferences.

We see something similar to the command “Be” in the Torah too:

“And God said, ‘Let there be light,’ and there was light.”²²³

The following verse of the Quran shows how much the things, whose plans, programs, and spiritual quantities are in the knowledge of Allah, want to come to the field of existence by Allah’s command:

*“Moreover, He comprehended in His design the sky, and it had been (as) smoke: He said to it and to the earth: “Come ye together, willingly or unwillingly.” They said: “We do come (together), in willing obedience.”*²²⁴

This conversation between the Creator and the creature is the expression of the effect of the creative will. What is meant by it is to show the perfection of the power of God Almighty and the effect of His will. It is not whether the heavens and the earth want to come to the field of existence.²²⁵

We can see another example regarding the issue in the following verse:

*“We said to them: ‘Be ye apes, despised and rejected’.”*²²⁶

The verse is about those from Sons of Israel who violated the prohibition of Saturday. Allah prohibited them from going fishing on Saturday. However, they did not heed the repeated warnings and eventually were punished like that.²²⁷ Their penalty is expressed as “Be...” in the verse.

The command “March” of a commander activates a soldier as well as a large army.²²⁸

In the face of Allah’s command “Be”, everything is equal. It does not matter whether the thing that is given the command is the sky or the earth, and a mosquito or an ant. Allah says, “Be” and it is. Difficulty or ease is not in question for Him; nor is nearness or distance. The divine will is enough for the creation of something.²²⁹

The command “Be” expresses the speed and ease in creation in one aspect. For, there is no distinction between difficult and easy for Allah; so to speak,

“everything is easy for Him.” We can explain this ease with the example of speaking acting upon the following verse:

“Then, by the Lord of heaven and earth, this is the very Truth, as much as the fact that ye can speak intelligently to each other.”²³⁰

Indeed, the sun is much bigger than a flower but it does not mean that it is more difficult to pronounce “sun”. The same thing is valid in creation.

Creation of the sun or any other being is not difficult for Allah. He creates them more easily than our pronouncing their names.

We can understand Allah’s creation more easily with the example of the talking of man. For instance, there is no difference in terms of ease and difficulty when we say “flower” and “sun”.

5.3.3.3- The Reality of the Command “Be”

It has long been debated whether the command "be" is literal or metaphorical. Although there are those who say “It is literal”, most of the interpreters of the Quran state that it is metaphorical. Fakhruddin Razi gives the following example in order to state that not all sentences can be understood literally:

“The wall asks the nail, “Why are you pricking me?’ The nail says, “Ask the person who is hitting me!”²³¹

There are similar idioms and examples in all languages. Those idioms are evaluated based on what their message is. They are not evaluated literally. When you ask someone, “*Why are acting so cautiously?*”, he says, “*Once bitten, twice shy.*” It does not necessarily mean that he was bitten. He uses this idiom to express the bad experiences he has had.

Therefore, the command “Be” is a metaphor to express the speed in creation. In fact, such a talk is not in question. When an obedient officer is given a command, he fulfils it without waiting, hesitating and resisting; similarly, it expresses that the things that Allah wants to be come into being without waiting and resisting.²³²

An Example Related to the Command “Be”

In the 1970s, we turned the television on and off manually; then, we turned it on off with the remote control, and zapped the channels. Nowadays, thanks to the system developed for those who cannot use their hands, it is possible to turn it on off with will (thought).

In the past, we used to dial the phone numbers one by one; then, we pressed the keys and now we can call with our voice.

With the advanced technology, we can create a virtual world in a room and rule this virtual world as we wish. So to speak, even if we do not know that the nature of Allah’s actions and deeds, it is clear that they are so easy for Him.

5.3.3.4- The Continuity of the Command “Be”

The strong and creative will of God Almighty is always active. The command “Be“ did not end in the first creation. The Quran tells us about it by saying, “**every day in (new) Splendor doth He (shine)**”.²³³As Hamdi Yazır puts it, “The letters and lines of the book of the universe are deleted on the one hand and written on the other hand.”²³⁴

The **deist philosophers** that emerged in Europe are the ones who reach the belief of Allah with their minds even if they do not accept religion. According to their acceptance, Allah placed mechanical principles in the universe. Even if He wants, He cannot oppose the rational system Even His will depends on those rational principles. There is no place for miracle in this world. Allah governs the universe with rational laws, not with miracles. He himself imposed those laws but after He created the universe, He no longer interfered with the course of the universe, leaving it to function on its own.²³⁵

The philosophers who think so are deprived of the important truth revealed by the above verse of the Quran. In fact, the world is renewed every moment, it is virtually re-created every moment. It will not be very difficult for us to understand this fact when we look at the realm and ourselves through the eye of sciences. For example, there are about 40 trillion cells in human body. Each of these cells is like a factory and a laboratory. Three thousand different reactions per second occur in each cell. The fact that even the most intelligent people cannot intervene in a single cell shows that a being with infinite knowledge, encompassing will and infinite power does something all the time in man and in the world.

An Important Point

Some people say that mentioning Allah in science classes is contrary to the scientific method. However, the opposite is true because a deed is attributed to its doer, a work to its master and a work of art to its artist. It is unthinkable not to mention Mehmet Akif while narrating the National Anthem of Turkey in literature class, not to include the Architect Sinan in the history of the Selimiye Mosque in art history class, and not to appreciate Leonardo Da Vinci while evaluating the Mona Lisa painting in art class. From this viewpoint, it will be seen that saying “Allah” in those classes is not a problem but a necessity.

Movements like positivism, materialism, Marxism, Darwinism, and secularism that acted against Christianity and religion in Europe became very influential in the nineteenth century. Many thinkers were alienated from religion. Those who liked religion started to find a solution by saying, “A scientist leaves his religious beliefs outside the door as if he takes off his coat when he enters a laboratory. When he comes out, he picks it and wears it again.”²³⁶ However, a Muslim scientist can say the following without being exposed to such pressure:

“I am trying to understand Allah’s art in the world, which is a great laboratory of Allah, and trying to find the laws that he imposed.”

CONCLUSION

From the Quranic perspective, it is quite clear that “existence is a creation and that a creator realized it”. The Quran expresses this with the command “kun fa yakun” (“Be and it is”). The manifestations of infinite knowledge and power seen in the smallest organism, even in an atom, are witnesses of the secret hand that works behind matter. Nowadays, science, which is advancing with giant steps, is gradually solving the secrets of matter and the universe and taking us closer to Allah. As human beings progress in science and technology, they can make a small analog of the command “Be”; they operate giant factories easily with full automation system and direct satellites in the sky easily from the place where they sit. Probably, one step forward will be “to use things with will” and then people will be able to understand the command “Be” much better. We glorify the Being who made the command kun (be) a source for things and hid His treasures in the letters kaf (k) and nun (n).

EVALUATION QUESTIONS

- 1-How many types creation does Allah have?
- 2-Is creation out of nothing going on any moment or did it take place only in the first creation and finish?
- 3-Who is the addressee of the command “Be”?
- 4-Does the effect of the command “Be” take place at once and finish?
- 5-When did the view that matter was pre-eternal come to the fore in the world of science for the first time?

SOME FREQUENTLY ASKED QUESTIONS ABOUT THE CREATION OF MAN

Question: “*And Allah has produced you from the earth growing (gradually)*”
How should we understand the statement above mentioned in verse 17 of the Chapter of Nuh?²³⁷

Answer: وَاللَّهِ أَنْبَتَكُمْ مِنَ الْأَرْضِ نَبَاتًا “And Allah has produced you from the earth growing (gradually)”. (Nuh, 17) Evolutionist interpretations were made about the verse above. The word **nabat**, which is an object in the verse, is a noun used for an infinitive in the sense of **inbat** as Qurtubi states, that is, it is used in order to strengthen the verb *anbata*-grew (created) but since the word *nabat* means plant, it was translated as plant and its position in the sentences was thought to be an adverb; therefore, in many translations of the Quran, it was translated as follows: “Allah grew you from the earth like plants” and “Allah grew you from the earth as plants”.

However, what is meant in the verse is the creation of Hz. Adam from soil in a nice way. That is, creation is expressed with a similar word (*anbata*). The word *nabatan* at the end of the verse is used in place of *inbat* in the sense of (growing-creating) is the object of the sentence. Thus, the meaning of the statement is “**Allah produced you** (your father Adam) **by creating you from the earth**”. This word is interpreted as building/constructing in tafsir books. For instance, Tabari interprets it as follows:

“*Allah built you by creating you from the soil of the earth*”.

Qurtubi states the following:

“The word *nabatan* in the verse is an infinitive other than the main infinitive because the main infinitive of the verb “*anbata*” is “*inbat*””. Thus, the noun (*nabat*) was used in place of the infinitive (*inbat*). Razi states the following:

“Instead of أَنْبَتَكُمْ نَبَاتًا، أَنْبَتَكُمْ إِنْبَاتًا is used in the verse. The point here is that “*inbat*” is an attribute of Allah and it cannot be observed.

When the verse immediately after it *ثُمَّ يُعِيدُكُمْ فِيهَا وَيُخْرِجُكُمْ إِخْرَاجًا* “*And in the End He will return you into the (earth), and raise you forth (again at the*

Resurrection)?” is viewed, the meaning of the verse will be understood better. For, Allah’s existence and power are expressed in the verse as well as the fact that resurrection is so easy for Allah. The verse states that Allah, who created you once, can create you again from the earth after you die and are mixed with soil. He definitely has power to do it.

The word *inbat*(growing/creating from earth) is used in order to make that comparison settle in the minds. A verse similar to that one is as follows: مِنْهَا خَلَقْنَاكُمْ وَفِيهَا نُعِيدُكُمْ وَمِنْهَا نُخْرِجُكُمْ تَارَةً أُخْرَى

“*From the (earth) did We create you, and into it shall We return you, and from it shall We bring you out once again.*”²³⁸

As it is seen, the difference between this verse and verse 17 of the Chapter of Nuh is that the word **anbata** is used in one of them and **khalaqna** in the other. Both verses were sent down based on the same purpose.

The word *nabat* used in the following verse to express that beauty of Hz. Maryam (Mary) is not in the sense of plant and it is clear that it is used in the sense of growing/creation:

“*He made her grow in purity and beauty (Waanbatahanabatanhasanan).*”²³⁹ (For, it is clear that Hz. Maryam was not created and grown as a plant and that she was not converted from a plant to a human being.) The same thing applies to verse 17 of the Chapter of Nuh. To sum up, the verb “*anbata*” is a word used in the sense of creating.

**

Question:How did the angels know about the blood-shedding characteristic of man?²⁴⁰

Answer: Another verse that evolutionist creationists use as evidence for evolution is as follows: “*Behold, thy Lord said to the angels: "I will create a vicegerent on earth."* They said: “*Wilt Thou place therein one who will make mischief therein and shed blood?- whilst we do celebrate Thy praises and glorify Thy holy (name)?*” He said: “*I know what ye know not.*”²⁴¹

Acting upon the statement “*Wilt Thou place therein one who will make mischief therein and shed blood?*” in the verse, some people say wild ancestors of man before the perfection of man are indicated by it. They say the angels uttered that statement by considering those ancestors of man. However, the traits of mischief and shedding blood were observed throughout the history of humanity and they

are also seen today. Besides, mischief is a characteristic peculiar to man, not apes. All animals serve the balance on earth. The only being that disturbs this balance and causes mischief is man.

We find the answer to the question "*How did the angels know this characteristic of man?*" in Tabari.

According to what Tabari reports from Ibn Abbas, Ibn Mas'ud and some other Companions, when Allah said to the angels, "*I will create a vicegerent on earth*", the angels said, "*O Lord! What will that vicegerent be like?*" He said, "*He will have offspring that will cause mischief on earth, that will envy and kill one another.*" Thus, the angels were informed about this being. This view presents the dialogue that is not mentioned in the verse. That is, it fills the gap between "*I will create a vicegerent on earth*" and "*They said: 'Wilt Thou place therein one who will make mischief therein and shed blood?'*"

As it can be seen, we witness that scholars approach the text based on an adopted view and they interpret religious texts in the direction of those views in such interpretations. In that case, rather than the approach "*what the text says*", the approach "*what can I make the text say*" dominates the process of interpretation. The tendency to search for the foundations of some scientific developments and theories in religious sources or in the words of ancient scholars often become effective in making different interpretations that are not correct.

**

Question: How did different races emerge if humanity came from Hz. Adam and Hz. Hawwa?

Answer: Hz. Adam is the first man and the first prophet. Hz. Hawwa (Eve) is Hz. Adam's his wife, who was created from his body. Therefore, humanity starts with Hz. Adam. DNAs (Deoxyribose Nucleic Acids), which constitute the human genetic structure, are equipped with a vast information capacity. Some researchers say that if it were possible to transfer the information in human DNA to a book, only an encyclopedia of 100 m² as tall as the distance between the earth and the moon could take this information. This evaluation may seem exaggerated at first glance but when we consider the information we upload to a flash drive or a DVD and the area it covers, we realize that it can be true.

In the genetic structure of our father Adam, the first man, the genetic structure of all his descendants, including all color and race traits, were present in the form of a password. There is nothing to object to it scientifically. Is it not true to say that the genetic structure of you and your spouse include the genetic structure of all your descendants to come up to Doomsday? Since the beginning of the genetic structure of Hz. Hawwa is Hz. Adam, this evaluation is appropriate logically and scientifically.

Another aspect of the issue is that not all color and race traits present in the genetic structure make themselves shown in the outer appearance that we call the phenotype. The ones that show themselves are dominant traits. Recessive traits have no effect on the phenotype. However, as reproduction continues in the same gene pool, that is, within the human community, recessive traits that get rid of the pressure of dominant traits appear in the offspring in certain proportions. Recessive traits emerge in the tribes and groups that separate from one another and that continue to reproduce within themselves, new combinations appear among those recessive traits; or, a trait that is in the middle of two traits having equal effects in different aspects may emerge. Thus, the diversity that emerged in the genetic structure combined with certain proportions and caused the formation of the colors and races that emerged in today's people.

**

Question: What is the wisdom behind the creation of different races?

“O mankind! We created you from a single (pair) of a male and a female, and made you into nations and tribes, that ye may know each other (not that ye may despise (each other). Verily the most honored of you in the sight of Allah is (he who is) the most righteous of you. And Allah has full knowledge and is well acquainted (with all things).” (al-Hujurat, 13).

“In the era when the Quran was sent down, there was a strong tradition of boasting among Arab tribes, and regarding themselves superior to others among Arabs. When Islam proclaimed the equality of people, there were some people who had difficulty in accepting it; some noble families and tribes did not want to marry their daughters off to their freed slaves and other tribes. The Prophet struggled against them, educated the believers and addressed all humanity as follows in his famous Farewell Sermon:”²⁴²

“O people! Your Lord is the same. Your father is the same. An Arab has no superiority over a non-Arab, nor does a non-Arab have any superiority over an Arab; a white has no superiority over a black, nor does a black have any superiority over a white except by piety and good action. Listen! Have I informed you about this divine truth?” Those who listened to him said all together, “Yes.” Then, he said, *“Let those who are here inform those who are not here about it.”* (Musnad, V/411)

Another interpretation of the same verse is as follows:

“I created you as peoples, nations, and tribes, so that you might know one another and the relations between you in social life, and assist one another; not so that you would regard each other as strangers, refuse to acknowledge one another, and nurture hostility and enmity.

In explanation of the principle of mutual acquaintance and assistance alluded to by the above verse, we say this:

An army is divided into divisions, the divisions into regiments, the regiments into battalions, and companies, and squads, so that all the soldiers may know their many different connections and related duties. In this way, they all will perform properly a general duty in accordance with the principle of mutual assistance, and the collectivity they form will be safe from the attacks of the enemy. The army is not arranged thus to be divided and split up, with one company competing with another, one battalion being hostile to another, and one division acting in opposition to another.

Similarly, Islamic society as a whole is a huge army that is divided into tribes and groups. Nevertheless, it has unity in numerous respects: its groups’ Creator is one and the same, their Provider is one and the same, their Prophet is one and the same, their qibla is one and the same, their Book is one and the same, their country is one and the same; a thousand things are one and the same....

All these things being one and the same necessitates brotherhood, love, and unity. That is to say, being divided into groups and tribes should lead to mutual acquaintance and mutual assistance, not to antipathy and mutual hostility.”²⁴³

* * *

Question: The following is stated in verses 7 and 8 of the Chapter of at-Tariq:

“He is created from a drop emitted-Proceeding from between the backbone and the ribs”. Evolutionists say that the verse above is not scientific. What is the truth about it?

Answer: It is necessary to know the following first: A Muslim accepts that every verse of the Quran is the word of Allah. Verses shows some truths in different ways. In other words, verses have levels of meaning. Some issues are expressed explicitly while some others are expressed by signs or analogy.

Allah explains the creation of man in various verses in the Holy Quran. In one verse, attention is drawn to the creation from sperm, and it is stated that sperm comes out between the backbone and the ribs:

“Now let man but think from what he is created! He is created from a drop emitted-Proceeding from between the backbone and the ribs: Surely (Allah) is able to bring him back (to life)!”²⁴⁴

The verse states the following for man: *He is created from a drop emitted*. That drop of liquid is the sperm of the male coming from between the backbone and the ribs. There are millions of sperm in it. One of them unites with the woman's egg and causes the formation of man.

It is stated in the verse that the liquid containing sperm comes from between the backbone and the ribs. However, it is known that the sperm of the male form in the testicles, which are the reproductive organs of the male, and the egg of the female forms in the ovary, which is the reproductive organ of the female. There seems to be an apparent contradiction here. There can be two explanations of it:

The first one: When man is in the stage of fetus in the mother's womb, the ovary and testicles develop between the backbone and the ribs of the fetus. That is, the testicles and the ovary are produced in the region between the backbone and the ribs. When the fetus reaches the seventh month, the testicles are slowly lowered into the bag outside the body and the ovary into the pelvis.

The second one: The testicles and the ovary take their food from the location between the backbone and the ribs. In other words, the arteries coming from the abdominal aorta and going to the testicles and the ovary pass between the backbone and the ribs. In the same way, the nerves that feed the ovary and

testicles come from the cluster of nerves under the stomach, which is literally in the region between the backbone and the ribs. Lymph vessels also emerge from between the backbone and the ribs²⁴⁵.

It is seen that both the testicles and the egg cell take their food, blood and nerves from the region referred to as the backbone and the ribs. This determination of science is in accordance with the concise expression of the Holy Quran about the creation of man.

The development of sperm, which are male reproductive cells, is ensured through testosterone, and the development of eggs, which are female reproductive cells, through estrogen hormones. Both testosterone, the male hormone, and estrogen, the female hormone, are steroid group hormones and their building blocks are cholesterol. The glands located on the kidneys are also involved in the production of testosterone and estrogen. About 20% of these sex hormones are secreted from the adrenal glands. In other words, the kidneys have an important role in both the production of sperm and the production of eggs. In addition, the kidneys are organs in which other hormones like growth hormones, which are important for growth and reaching puberty, are secreted. The kidneys are precisely in the region stated by the verse. They are the issues that we learn with the development of science. Perhaps many more miraculous aspects of this verse will be discovered in the future.

The explanation by the gynecologist Op. Dr. İsmail Selçuk on November 4, 2016 is as follows:

“Up to the eighth month of the embryological life, the testicles are located under kidneys around the waist, and the ovaries are located under the diaphragm in the abdomen, corresponding to the bottom of the breasts. The testicles descend into the bags through the inguinal canal close to delivery. If it is seen at birth that the testicles have not descended, they are probably stuck in the inguinal canal. If they do not descend to bags after a certain period of time passes, they are descended through an operation.”

As it is seen, 14 centuries ago, the Quran mentions an issue some of whose aspects contemporary science has been able to discover only recently in the following verse: *“He is created from a drop emitted-Proceeding from between the backbone and the ribs”*, which shows that the Quran is the word of Allah and that it is miraculous.

It is impossible for evolutionists' minds, which become narrow through materialism and are drowned in matter, to rise to the spiritual sky of the Quranic verses and to understand those realities. Due to their mentality, they deny what they cannot comprehend by calling them unscientific or superstitious. What is really unscientific and superstitious is their denying ideas.

CHAPTER 6

6-THE PURPOSE OF THE CREATION OF MAN

6.1.WHY WAS MAN CREATED?²⁴⁶

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student learns the purpose of the creation of man. 2-He knows different definitions of man according to the West and Islam. 3-He understands the responsibilities of man toward Allah. 4-He notices that Allah introduces beings. 5-He learns the definition of belief in various ways.	1-Why may man have been created? 2-What you understand from the statement, according to the West's description of man, the highest level man can attain is " <i>the level of happy animal</i> "? 3- Is there a miracle that shows the existence of Allah in the universe? 4-Why did Allah order worship? 5-How does belief expand the realm of man?

Every being in the universe shows the Creator who created it and becomes a mirror to the attributes of its Creator with its artistic, systematic, regular, wise and purposeful creation. It becomes a mirror to the names Sani (Maker), Bani (Constructor) and Khaliq (Creator) with its creation, the name Musawwir (Giver of Shape) with its nice shape, the names Nazim (Arranger) and

Muqaddir (Determiner) with its systematic and proportionate creation, the names Razzaq (Sustainer) and Rahman (All Merciful) with its sustenance, the names Hayy (Living) and Qayyum (Self-Subsisting) with its life, and so on.

The most valuable, intelligent and conscious being in this universe is man; and man is the most honorable and superior of all creatures with these qualities of his.

Every being has a reason and purpose of creation; similarly, man must also have a purpose of creation and a duty because every being in this world is created for one and sometimes more than one purpose and aim.

In that case, who is the one that can answer the question ‘why was man created’ the most correctly?

The one who knows best the purpose of the creation of man is his Creator, who creates man and places him in the most honorable rank.

*“The Possessor and Master of the universe surely does everything with knowledge, disposes every affair with wisdom, directs everything all-seeingly, treats everything all-knowingly, and arranges everything willing the instances of wisdom, purposes, and benefits that are apparent in them. Since, then, the One who creates knows, surely the One who knows will speak.”*²⁴⁷

The rule *“The One who creates knows, surely the One who knows will speak”* is an unchangeable rule. The one who makes and creates man is Allah. He states the purpose of the creation of man as follows:

*“I have only created Jinn and men, that they may serve Me.”*²⁴⁸

This verse is interpreted as follows:

“According to the meaning of this mighty verse, the purpose for the sending of man to this world and the wisdom implicit in it, consists of recognizing the Creator of all beings and believing in Him and worshipping Him. The primordial duty of man and the obligation incumbent upon him are to know God and believe in Him, to assent to His Being and unity in submission and perfect certainty.

For man, who by nature desires permanent life and immortal existence, whose unlimited hopes are matched by boundless afflictions, any object or accomplishment other than belief in God, knowledge of God and the means for attaining these, which are the fundament and key of eternal life — any such object

*or accomplishment must be regarded as lowly for man, or even worthless in many cases.*²⁴⁹.

That is to say, man's nature, in other words, his most important characteristic, is his desire to live eternally, his unlimited ambitions and desires, and his infinite sorrows and troubles. A person with this nature needs to rely on someone who will fulfill all his desires and seek refuge in someone who will protect him from all his enemies. Meeting this need is possible by believing in and worshipping someone who knows all kinds of desires of man and who has power to fulfill them, and who has infinite knowledge, will, power and compassion to protect him from all kinds of enemies.

The nature and desires of man are pointed out as follows in the interpretation of verse 87 of the Chapter of al-Anbiya:

*“Man, in accordance with the comprehensive nature of his being, as he suffers and shakes with malaria, so also he suffers from the shaking and tremors of the earth, and the supreme convulsion of all beings on the Day of Resurrection. As he fears the infinitesimal microbe, he also fears the shooting star that appears among the heavenly bodies. As he loves his home, he also loves the wide world. As he loves his little garden, he also ardently loves infinite and eternal paradise. Man's object of worship, Lord, refuge, savior, and goal then can only be the One in the grasp of whose power is the whole universe, under whose command are both atom and planet”*²⁵⁰.

Man's desire for eternal life in his nature is his greatest expectation from and his first desire in life. Unless this desire is satisfied, he cannot be happy. This is one of the biggest reasons for the unhappiness of today's man. In other words, the expectation that he will satisfy the desire of eternal life in this world. The idea that he came to the world just to enjoy and take pleasure deceives him and makes him miserable because it is impossible for the world life to meet this desire for eternal life originating from the nature of man.

That is, he needs to know the existence of an eternal life and that the world is a guesthouse, which will satisfy this desire for eternal life in man. This state is expressed as follows in the interpretation of verse 50 of the Chapter of ar-Rum:

“For example, if one servant and illustrator of the intellect called “the imaginative power,” is told that “you can have a million years of life and rule over the world, but in the end you shall become nothing,” it will react with sorrow

instead of pleasure, unless deceived by vain fancy and the interference of the soul. The greatest of transient things cannot, then, satisfy the smallest faculty of man.

It is, then, this disposition of man —his desires extending to eternity, his thoughts that embrace all of creation and his wishes that embrace the different varieties of eternal bliss— that demonstrates he has been created for eternity and will indeed proceed to eternity. This world is like a hospice for him, a waiting-room for the hereafter.’’²⁵¹

So, it is necessary to know the purpose of the creation of man, his natural structure and real nature. The Western world could not identify and introduce man correctly since it closed its mind and heart to Allah and the Quran. Therefore, it could not give an education appropriate to human nature and dragged eighty percent of humanity into despair and unhappiness. It was able to give a temporary bliss to the remaining twenty percent.

6.2- WHAT IS MAN?

There is a great difference between the description of man made by the Western philosophy and the Islamic philosophy.

Christianity accepts that man was born as a sinner. It regards the sin of Hz. Adam’s eating the forbidden fruit as the sin of every child that is born. However, Islam accepts that a newborn child is innocent and sinless and acknowledges that the innocence of the child continues until he/she reaches the age of puberty.

6.2.1-Definition of Man According to the Western Philosophy

Plato describes man as follows:

“Man is a featherless biped (a creature with two legs)”.

Diogenes stated that this definition of Plato’s did not represent man; he plucked a rooster, showed it to people and said, *“That is the human being Plato describes”.*

Aristotle describes man as follows:

“Man is a speaking animal”.

However, a parrot can also speak. Thus, this definition cannot express the nature of man, his loftiness and the wisdom behind his creation.

As it is seen, the philosophers who do not believe in a true religion describe man as a featherless biped or a speaking animal.

6.2.2- Definition of Man According to Islam

The Quran describes man in the best way. As a matter of fact, the explanation of the verses in the Chapter of at-Tin about the creation of man is as follows:²⁵²

*“Since man has been created on the most excellent of patterns and has been given most comprehensive abilities, he has been cast into an arena of trial and examination in which he may rise or fall to stations, ranks, and degrees from the lowest of the low to the highest of the high, from the earth to the Divine Throne, and from minute particles to the sun. He has been sent to this world as a miracle of Divine Power, the result of creation, and a wonder of Divine art before whom have been opened two roads leading either to infinite ascent or infinite descent.”*²⁵³

Thus, man differs from other creatures by reason, consciousness and belief. Man has been created in the most excellent and most capable way as a miracle of art and power.

Man has been sent to this world, which is a place of trial and examination, with the intelligence and abilities given to him. Those abilities can develop in a good or bad way. It is the Islamic religion that will develop them in the best way.

Besides, man has weakness, helplessness, impotence in his nature; therefore, he needs to believe in a merciful and powerful being from whom he will receive help and who has infinite knowledge and power.

When man uses those abilities in the best way, he can attain the highest ranks, degrees and posts. For example, Hz. Abu Bakr attained the level of veracity (sidq). The opposite is also possible. If he uses his abilities in the wrong way, he can go down to the worst and lowest levels like Abu Jahl.

Man is described as follows: in the tafsir book called Şualar:

“Also, since we see with our eyes and understand with our minds that

- *Man is the final and most comprehensive fruit of the tree of the universe,*
- *And in respect of the Muhammadan (peace and blessings be upon him) reality is its original seed,*
- *And the supreme sign of the Quran of the universe,*
- *And he is its throne verse bearing the greatest name,*
- *And the most honored guest in the palace of the universe,*

- *The most active functionary empowered over the other inhabitants of the palace,*
- *The official charged with overseeing the income and expenditure, and the planting and cultivation of the gardens in the quarter of the earth in the city of the universe,*
- *And is its most noisy and responsible minister, equipped with hundreds of sciences and thousands of arts,*
- *And an inspector and sort of vicegerent of the monarch of pre-eternity and post-eternity, under his close scrutiny, in the region of the earth in the country of the universe,*
- *And one with disposal over it whose actions, particular and universal, are all recorded,*
- *Who has undertaken the supreme trust, from which the heavens and earth and mountains shrank,*
- *And before whom are two roads, on one of which he is the most wretched of living beings, and on the other, the most fortunate,*
- *And he is a universal bondsman charged with most extensive worship,*
- *The place of manifestation of the greatest name of the monarch of the universe and a comprehensive mirror of all his names,*
- *A special addressee of his, with the best understanding of his divine addresses and speech. The mostneedy of the living beings of the universe,*
- *And is a wretched living creature who has innumerable desires and goals, numberless enemies and things that harm him, despite his infinite poverty and impotence,*
- *Is the richest in regard to abilities and potentialities,*
- *The most suffering in respect of the pleasures of life, whose enjoyment is marred by ghastly pains,*
- *And a wondrous miracle of the power of the eternally besought one and marvel of divine power who is the most needy and wanting, and worthy and deserving of immortality, and seeks and beseeches eternal happiness with endless prayers, and if all the pleasures of this world were given him, his desire for immortality would not be satisfied,*

- *And who loves to the degree of worshipping Him the one who bestows bounties on him, and makes him loved and is loved,*
- *And all of whose faculties, which encompass the universe, testify that he was created to go to eternity, and through the above twenty universal truths is bound to Almighty God's name of Truth,*
- *And whose actions are continuously recorded by the All-Glorious Preserver's Name of Preserver, who sees the most insignificant need of the tiniest animate being, hears its plaint and responds in action; and being related to the whole universe whose deeds are written down by the "noble scribes" of that Name and who more than anything else receives its attentions required by the above twenty truths, most certainly and without any doubt there will be a resurrection and judgement for man, and in accordance with the Name of Truth, he will receive reward for his above duties and punishment for his faults, and in accordance with the Name of Preserver, he will be questioned and called to account for his actions, all of which have been recorded, and the doors will be opened of the feasting halls of everlasting bliss in the eternal realm, and of the prison of eternal misery; man, who has been an officer with command over numerous species of beings in this world, and has intervened in them and sometimes thrown them into confusion, will not enter the soil never to be questioned concerning his actions, nor lay down in concealment not to be roused¹254.*

Thus, man is a guest, a traveler, an official, an inspector in the world and the most honorable being that can be addressed by Allah.

If we liken the universe to a palace, man is the most honorable guest of that palace. In other words, he is a guest before whom even the angels are ordered to prostrate, at whose disposal all the beings in the universe are put and who is entertained generously.

He is also an official who is allowed to benefit from the other beings in the palace of the universe as he wishes, a vicegerent and a traveler who is an addressee of Allah.

Thus, man is both a guest and a traveler, both an official and a vicegerent in the world.

Man is also the last and most fertile fruit of the universe tree, the supreme sign of the Quran of the universe.

There are two ways in front of man. It is either the way to Paradise, the place of eternal bliss, or the way to Hell, the place of eternal torment. Therefore, man should make his evaluation accordingly.

Let us briefly explain those various descriptions of man.

What Does Man's Being a Guest Mean?

Man is a guest and the world is a guesthouse. Each guesthouse has a manual and an official who guides the guests; the manual of the world guesthouse is the heavenly books and its guide is prophets. The last of manual is the Quran and the last guide is the Prophet Muhammad (pbuh).

The guest has to act based on the requests of the host. He cannot do the things that the host will not consent. He cannot waste, give the food of the host to others, take the food from the table and give others as charity or throw the food away.

Everything in the universe belongs to Allah. Man belongs to Him too. That is, man's body, material and spiritual feelings, eye, ear, mind, etc. have been entrusted to him temporarily.²⁵⁵

Man has been equipped with those feelings and emotions just like the equipment entrusted to a soldier by the state. A soldier cannot use the things entrusted to him as he wishes; similarly, man cannot use the means and emotions given to him by Allah as he wishes.

One cannot end his life, which has been entrusted to him by God Almighty, by committing suicide. He cannot blind his eye deliberately; he cannot look at haram things, which means blinding the eye spiritually, without the consent of the one who has given him the eye. He cannot kill his ears, tongue and other organs spiritually by using them to commit haram deeds. He cannot say:

— It is my eye. I can look at whomever I wish.

— It is my ear. I can listen to whatever I wish.

— It is my mouth. I can speak however I wish. All of our organs have been entrusted to us. If we use them without the permission of our Lord, who is the real owner of them, we will be regarded to have killed them spiritually:

Animals are also entrusted to man by Allah. They should be treated well. Man cannot kill an animal whose flesh is not eaten unnecessarily; he cannot torture animals.

What Does Man's Being a Traveler Mean?

Man is a traveler in this world. We all know that when a journey starts, preparation is made according to the length of the road. The more you intend to stay in a place, the more preparation you make. In this world, man is the traveler of an eternal journey from which he will never return. Everyone will inevitably embark on this journey. The time of departure is not certain. There is no difference between young and old, sick and healthy. Therefore, the most important duty of every person is not to forget about the requirements of the eternal life while thinking about the requirements of this worldly life.

In this journey, man is given a 24-hour capital every day by Allah to obtain the things he needs in both lives. For example, in this journey, prayer will be our spirit in the world, food for the heart and our spiritual wealth; it will be food and light in the grave, into which we will definitely enter; it will be our certificate of salvation in the Gathering Place; it will be light and our mount on the Sirat Bridge over which everybody will have to pass.

In conclusion, man will be called to account for how he spent the capital called life in the world and whether he spent it appropriately or not.

What Does Man's Being an Official in the World Mean?

Man was sent to the world as an official. Just as an official is obliged to fulfill his duty so too is man obliged to fulfill the commandments of Allah.

Thus, man, who was sent to the world as an official, is responsible for the fulfillment of the commandments he receives from Allah.

What Does Man's Being an Inspector and Vicegerent Mean?

Man is an inspector of the earth. The inspector is the one who inspects, searches and investigates something, sees the mistakes and good deeds; he examines and then informs the authorities about them; in short, he searches everything. The purpose of this inspection is to investigate and evaluate all material and spiritual feelings of man and the beings in the universe. That is also what sciences do. As a matter of fact, Nobel Laureate Pakistani physicist, Abdus

Salam describes sciences as the art of examining the works of Allah in the universe.

Thus, man does this research with the intelligence and other feelings given to him. The tongue distinguishes all tastes, the eye distinguishes all colors and the ear distinguishes all sounds.

As every work shows its owner, all beings in this universe show Allah. For example, the faces, the eyes, and the fingerprints of a person are unique and they are not the same as those of anybody. This is valid for the people living today and in the past as well as the people to live in the future. Such differences are manifested in everything from animals and plants to snowflakes. The unique creation of everything clearly reveals the oneness, infinite knowledge, will and power of Allah. Allah wants to introduce Himself to people with those works; He also shows that He loves people with His blessings. He wants people to show that they know him by believing in Him and to love Him by worshipping Him.

Man is the vicegerent of the earth; every deed of man is recorded, whether it is small or big, and he has great responsibility both toward the creatures and Allah. The responsibility of man increases as his authority increases. Accordingly, his reward and punishment will increase. A vicegerent cannot act randomly and talk carelessly in the presence of others. He has to act carefully.

Thus, man has to act temperately and carefully so as not to be ridiculed by others and embarrassed in the presence of Allah since all of his deeds are recorded.

What Does Man's Being a Fruit Mean?

If we liken the universe to a tree, man is the last and most talented, perfect fruit of the tree of the universe and a seed of that tree.

What Does the Universe's Being a Tree Mean?

The universe can be likened to a tree whose roots are elements, whose leaves are plants, whose flowers are animals and whose fruits are human beings. The roots, stem, leaves and flowers of the tree serve fruits; similarly, everything in the universe, including the heavens and the earth, plants and animals, serves man. In other words, man is like the last and most talented fruit of this wonderful tree of the universe.

The purpose and outcome of this tree of universe is man; similarly, the fruit of man is thanking, worshipping, praising and loving his Creator. The thanking, loving, praising and worshipping are also the purpose of creation of the universe along with being the fruit of man.

What Does Man's Being the Supreme Sign Mean?

If we liken the universe to the Quran written by Allah's pen of power, man is the supreme sign of that book, that is, the greatest evidence and sign for its author. The sign is clear evidence that no one can deny. The signs are evidence for the author of the book. Everything from atoms to galaxies, including living beings and non-living beings, is evidence to understand and know Allah in the book of the universe.

However, the largest and most brilliant one among them is man. He is the greatest and most comprehensive mirror that shows all of the names of Allah. He serves in the best way as a mirror to the name Khaliq (Creator) and Sani (Maker) with his creation, the name Hayy (Living) with his life, the names Razzaq (Sustainer), Rahim (Compassionate), Rahman (All Merciful), Karim (Generous) and Muhsin (Beneficent) with his sustenance, the name Musawwir (Giver of Shape) with his shape and the names Nazim (Arranger) and Muqaddir (Determiner) with his tidy and proportionate creation.

A picture of a person indicates an artist and his sculpture indicates a sculptor. Man himself, who is a miracle of power, indicates a wonderful artist, and a creator with infinite knowledge, will and power.

All sciences, especially medical science, try to read and understand man, who was created and written in the form of a book. How is it possible for man, who is written in the form of a book, to come into being without a creator, though even a single letter cannot come into being without a scribe?

In conclusion, the definition made by Western philosophers about man as a featherless biped (a creature with two legs) and a speaking animal, which regards man to be in the same level as animals, cannot be compared to the definition made by the Quran as the most honorable being, the vicegerent on earth, the most delicate and valuable guest of the Sultan of the universe, which elevates man to the level of the highest, most honorable and most valuable being.

6. 3-Being Responsible toward Allah

Man's responsibility toward Allah related to his purpose of creation can be dealt with under three headings:

- a. Knowing Allah**
- b. Belief in Allah**
- c. Worshipping Allah**

a. Knowing Allah

Once, a firefly was proceeding on a path. However, it was unaware that the light that illuminated his path was reflected from it. After a while, it met some ants. When it saw the ants were looking at it with admiration, it looked into their eyes carefully and curiously. It realized that the light that illuminated its path was reflected from it. Ants admired his light. Thus, the firefly became aware of the light that illuminated its path.

Are we aware of the Creator who created us out of nothing, who put the whole universe under our order, and who fulfilled everything necessary for the continuation of our lives?

Who makes the world rotate, sends down rain from the sky, and make plants grow?

Who takes the night away and brings the day?

Who puts all our organs in their proper places in the mother's womb, feeds us and makes us grow there?

Who brought us to the world, put the breasts on our mother's chest and made white, pure milk flow for us?

Who makes our mouths and places teeth like pearls in the mouths?

Who makes our ears and opens our eyes?

Who makes our veins and makes blood circulate in them?

Who makes our hearts and makes them work like a clock for a lifetime?

Everyone knows that a line cannot be drawn without a person who draws it, that a letter cannot be written without a scribe, and that a school cannot be managed without an administrator.

Thus, the wonderful creation and administration of all beings in the world shows that they have a creator infinite knowledge, will and power who creates and

manages them. The following statement is very important since it clarifies the issue:

*"Every village must have its headman; every needle must have its manufacturer and craftsman. And, as you know, every letter must be written by someone. How, then, can it be that so extremely well-ordered a kingdom should have no ruler?"*²⁵⁶

Everything in the universe, from an atom to the sun, from a fly to stars, indicates Allah through His meticulous and proportionate creation and perfect management. If there is a work, there will definitely be a master who makes and produces it.

Who Created?

God Almighty states the following in some verses related to knowing Allah:

*"Who is it that readies the skies and the earth as though they were two storehouses for your sustenance, and causes one to produce rain and the other, seeds? Is there anyone other than God Who could make them two subservient storekeepers? In which case, thanks should be offered to Him alone"*²⁵⁷.

Man is in need of food. We need rain from the sky and cereals from the ground for the continuation of our lives. Man cannot make rain come down from the sky and cereals grow from the ground on his own. Therefore, we need a powerful being who knows our needs, shows mercy to us and pities us, who can make the earth and heaven fulfill all our needs. That being, who has infinite knowledge, will and power, is Allah.

Who Gave Man his Eyes and Ears?

Allah states the following in the Quran by attracting attention to the valuable organs like eyes and ears given to man:

"Who is the owner of your eyes and ears, the most precious of your members? From which workbench or shop did you obtain them? It is only your Sustainer that could give you them. It is He Who creates and raises you, and gave you them. In which case, there is no Sustainer

Who is the owner of your eyes and ears, the most precious of your members? From which workbench or shop did you obtain them? It is only your Sustainer that could give you them.

Yunus, 30.

but He, and the only one fit to be worshipped is He.”²⁵⁸

The being that has the most valuable organs and feelings is man. Even the mother who carries the baby in her womb does not know the creation of those organs in the womb and their placement. The one that affixes eyes, ears and nose to man in his mother’s womb and puts the stomach in place cannot be anyone except Allah, who knows that man’s seeing in the world, makes him hear, creates odors and prepares food. That is, the one who created vision and eye is the one who created the sun. The one who created sounds and hearing is the one who puts ear into its place. The one who created the apple as sustenance is the one who affixes the stomach to man.

That is to say, all of the organs in man are the work of Allah. Therefore, man is responsible for knowing Allah, who gives them to him.

Some interesting memoirs about knowing Allah

The young man who had a tattoo done on his arm

After a lecture an academician gave in a prison’s youth ward, a teenager raised his hand and asked,

- How can we believe in someone we do not see? The lecturer pointed to the tattoo on the young man’s arm who asked the question:

- Who made that tattoo and how much did you pay for it? The young man said he had it done for a certain amount of money. Thereupon, the academician asked him,

-All right, lad. Who made the arm on which had that tattoo done? The answer that young man gave was very interesting. He raised his hand:

- "Allah... I believe in him now."

These two examples clearly show that no matter how much the mind denies Allah, the conscience cannot deny the existence of a Creator.

The young people who say, “How can we believe in Allah, whom we do not see?”

An academician narrates a memoir as follows:

“After graduating from the faculty, I worked as a teacher for several years. I taught chemistry in a high school in a lovely town in Eastern Anatolia. My relationship with the people of the town was warm. I was in good terms

with everybody, from students to teachers, from administrators to parents and ordinary people of the town.

I had a very good relationship with my students. Encouraged by my closeness to them, they could easily talk to me about their problems.

In those years, there was terror and anarchy in our country. It was worse in the East than the other regions of the country. In my high school, there were several students who were bigger and even older than me. They were big, half-grown boys. Some groups that took advantage of their state filled the minds of our simple-hearted young men with harmful ideas and converted most of them into anarchists.

They stole the belief in the heart of those young people as well as several humane characteristics of them.

* * *

One of them was called Ziya. He was in his senior year and he was older than most of the students in his class. He was a well-built man. They had stolen many of his spiritual feelings, but his respect to teachers had not been completely lost yet.

One day, he shyly asked permission to ask something:

-Sir! I want to ask you something if you allow.

It was obvious that storms broke out in his inner world and his mind was confused. He was overwhelmed with the graveness of the problem in his mind. I understood the situation very well. In order to comfort him as much as I can and to make sure that he expresses the problem in his mind in a sincere way, I said clearly,

-Yes, of course, Ziya. I am here to answer your questions. I'm listening to you.

- But sir, my question is not about chemistry.

-It doesn't matter. Ask your question sincerely and openly.

-Sir! They say 'We don't believe in what we don't see. We do not see Allah; so, how shall we believe in Him?'

I told him that such questions were quite normal, that many people have those questions in their mind and that it was a frequently asked question. Then, I said,

- Look Ziya! Not everything is visible; in other words, not everything

is viewed with eyes. Some things are viewed with the tongue, ear, nose or mind.

These statements aroused an atmosphere of confusion in the classroom. What does to view by ear or tongue mean? Their questions were visible in their eyes. I continued:

For example, if I cook a nice meal and say “Ziya! Come taste this food” and if you say, “Sir, I don’t believe in what I don’t see it with my eyes, I will taste it with my eyes ”, and if you put your eyes into the food, your eyes will be burnt and you will be blind. So, the food is tasted with the tongue. Likewise, when I say, “Look at the smell of this perfume”, you can’t look at it with your eyes. When I say, “Look at the beauty of this music”, you look at it with your ear. You can also look at certain things with your mind. If there is a work of art here, you will understand that there is a master of that work. Thus, we see Allah with our minds.

Then, I turned toward the students and continued:

“-Friends, let’s deal with the issue together through the eyes of a scientist. Can a great work of art like Selimiye Mosque be without an architect? Is our body lower than this architectural structure? There are about 100 trillion cells in human body, which looks like a tremendous city. There is a network of blood vessels about 150,000 kilometers long, covering our entire body. The slightest breakdown in an organ can be the end of our lives. In addition to our inner world’s being wonderful, all essential organs in people are common but no man resembles another man. Our faces, voices, characters are different. Can we attribute those things to coincidence/chance?

Let us clarify the issue a bit more. As you know, the realm of living beings has a different place in the universe. The art wonders seen in the non-living beings are inferior to those seen in the living beings. The simplest living beings are bacteria. Among those bacteria, the one that scientists have researched most is *Escherichia Coli* bacterium. The weight of this living being, which can be seen under the microscope only after it is magnified tens of thousands of times is 500 billionth of a gram and its diameter is one hundredth of a centimeter. 5000 substances have been paced in such a tiny place. In addition, when each bacterium finds the appropriate

environment, it uses water, ammonia and sugar as food and the number of substances increases to 10 thousand in 20 minutes by division. This event is something that a perfect chemist cannot even dream of. A chemist can perform only one reaction in one container. Besides, in an era in which science has progressed so much, it takes a very long time. However, 5,000 substances are synthesized in the same container as the *Escherichia Coli* bacterium in 20 minutes.

Since that is the case in the simplest living being, you can compare the events in other living beings to those of bacteria.

The issue can be viewed from another angle.

Do you think the human eye can see everything? Are our eyes limitless though everything is limited? Just as our ears can hear frequencies between 20 and 20,000, so too can our eyes see the rays with wavelengths between 450 and 800 nanometers. We cannot see the rays with bigger and smaller wavelengths. Although X-rays, ultraviolet rays, infrared rays, etc. exist, we cannot see them with our eyes. Should we deny their existence then?

We actually look at the universe through a keyhole. That is, the range of our vision is so narrow. After knowing that, is it not ridiculous to say, "I don't believe what I don't see."

Throughout the lesson, Ziya was absent-minded and torpid. It was understood that storms broke out in his inner world. He put his hands on his temples, thinking continuously. I let him alone to the end of the lesson.

* * *

3-4 days passed. One evening Ziya came to my house with a friend.

- Sir! can I come in?

- Yes, of course, Ziya. Our house is open to everyone. They sat down and I offered them some tea. Ziya started to talk while drinking tea:

- Sir, I came here for a purpose.

- I hope it is something good.

- Sir, I came here to become a Muslim. I was shocked and startled when I heard it:

- Are you all right, Ziya? You are already a Muslim.

- Sir. I had a lot of questions and doubts in my mind before you spoke. Some of the books I read and the people I met confused my mind

completely. I was in a big depression. I thought for days after your talk and could not sleep many nights. However, I have made up my mind; I am a Muslim from now on. The most appropriate ideas for my mind and conscience are Islamic ideas. Living without a faith is no different than living like an animal.

The September 12 coup took my gun from me; you have come and removed the unbelief in my heart. I am grateful to you. Now, I have taken my first step toward humanity. May Allah be pleased with you.

Yes, Ziya. The greatest truth in the universe is belief in Allah. Besides, the most astonishing thing is the denial of the Creator. Your decision has made me very happy. I hope you will not leave the path of the truth after that...

The Purpose of Man's Being Sent to the World

Man did not come to this world by himself; he was created and sent by Allah. The main purpose and duty of man's being sent to this world is to know Allah truly, that is, to know Him correctly by His names and attributes. In other words, to believe that He is the creator of the whole universe, that everything from atoms to the stars is governed by His power and will, that everything is His property, and that there is no partner in His property, and to believe and approve by the heart the holy statement "*La ilah illallah (there is no god but Allah)*" and its realities.

The wisdom behind and purpose of man's being sent to this world is to know, to believe in and to worship the Creator of the Universe.

adh-Dhariyat, 56.

b- Belief in Allah

Belief means to believe, to accept, approve and understand the truth. It means to accept Islam and act accordingly. Belief means to accept all of the realities about the religion and to act accordingly.

Belief is a light obtained from approving the religious obligations conveyed by the Messenger of Allah (pbuh) in detail and the principles other than obligations in brief.

Belief means sincerely believing that the things that are known to have been ordered by Allah and informed by the Prophet (pbuh) are true.

The young people who want to see a miracle

A group of young people said to an academician during a conversation:

-“Let Allah show a miracle and we will believe in Him.” The academician said that all the beings in the universe were miracles. He stated that everything that man was too weak to do was a miracle:

- Is man not a miracle? In fact, every organ of man including a strand of hair is a miracle. Is a tree, every leaf of it, blossoms, and the stone in the fruit a miracle? They said,

- “We had a lot of questions about it. However, in the face of this answer, we have given up asking questions. We will listen to you now.”

There are six pillars (principles) of belief:

- Belief in Allah,
- Belief in His angels,
- Belief in His books,
- Belief in His prophets,
- Belief in the Day of Judgment and resurrection after death,
- Belief in qadar (predestination) and that both the good and the bad come from Allah.

Those six principles of belief are a whole. A person has to believe in all those six principles without doubt in order to be a believer. If he does not accept or doubts even only one of them, he will not be a believer. Just as sunlight consists of a combination of seven colors so too does belief consist of believing in all of those six principles.

According to Sa’d Taftazani’s tafsir, *"Belief is the light that God Almighty throws into the heart of a person that He wishes after that person’s use of his free will."*

Thus, belief is related to man’s partial free will. Man needs to want and do what is necessary. Then, Allah will grant him belief.

Belief is divided into two as imitative belief and investigative belief.

It is very important to make one's belief investigative belief

“Now, the most important thing to do is to strengthen belief by turning belief into investigative belief and to save belief. It has become a strict necessity and even an obligation to be engaged in the principles of belief more than anything else...

Yes, to what extent can it be useful a try to repair and decorate a building whose foundations have been worn out in order to prevent it from collapsing? Will it be of any use to try to take precautions by applying pesticides on the branches and leaves of a tree whose roots have been rotten in order to prevent it from drying?

Man is a building like a palace. His foundations are the principles of belief. Man is a tree; his roots are the pillars of belief. One of the most important principles of belief is belief in Allah. Then comes belief in prophethood and resurrection. The science (knowledge) that a person tries to obtain in the first place to obtain it is the science of belief. The essence of sciences and the sultan of sciences is the science of belief.

Belief does not consist of a concise approval. Belief has several levels. An imitative belief, especially in this age, will quickly fade in the face of the storms of heresy. Investigative belief is an unshakable and inextinguishable force. Even if the belief of a person who has attained investigative belief is exposed to horrifying hurricanes of irreligion, those hurricanes are doomed to remain ineffective in the face of the strength of that belief. Even the most irreligious philosophers cannot cause delusions and doubts in a person who has attained investigative belief²⁵⁹.

Man's Need to Believe in the Existence of Allah

Man has many inherent emotions and feelings. Unless these feelings are taken into consideration, it is impossible for man to find the true bliss and peace in the world. It is possible to classify these feelings and thoughts under three headings:

Firstly, man has numerous hidden and open needs. He desires an apple as well as a garden, a spring, and the eternal Paradise. His heart and stomach need function; he also needs eyes that see, ears that hear and a mind that thinks. He

needs air, water, the ground, the sun, and, in short, the whole universe and its administration for the continuation of his life.

Secondly, man has numerous material and spiritual enemies. Everything that can destroy his life, from an invisible, life-threatening microbe to a comet threatening to crash into the world, is his enemy. Man is a being with gentle and sensitive feelings. He is disturbed by a glance and a slight criticism; he has a spirit that is affected from the suffering of those who are harmed by fire, flood and earthquake.

Thirdly, what distresses man all the time is the worry of separation from his beloved ones and friends through death.

Man is always faced with the eternal separation of his beloved ones. His heart breaks down all the time from the pain of their separation. In order to overcome this desperation, a person who does not believe in Allah and the hereafter will seek entertainment to make him forget them; thus, he will not feel the pain of separation in appearance for a certain time like the severely ill people who are injected morphine. This is nothing but man's deceiving himself.

Let us consider the pain caused by compassion and affection, which are among hundreds of feelings in man, due to unbelief. For example, even only the thought of how a mother will feel in her heart and conscience due to the loss of her only beautiful child horrifies man. What, other than the light of belief, can comfort her, and tell her that she will be with her child in eternal Paradise?

That is why man is struggling in despair because he does not have the strength and power to meet all these needs. Such a person needs someone who has infinite power, will and knowledge, who will meet all his needs, who possesses endless treasures, who has endless power to secure him from all enemies, who will stop all the separations that hurt him, and who can remove death and give eternal life.

All this can be achieved through belief in Allah and the hereafter.

Death is a Certificate of Discharge

Everyone is proud of the honor and authority of his master. If man attaches himself to Allah, who has infinite power, knowledge, will, wealth, mercy and compassion, with belief, and enters His service with worshipping, and if his death, which appears to be his end is converted into a certificate of discharge and if all of his wishes are fulfilled, he will be so happy, glad, and grateful. What frightens man the most is death. On the other hand, belief makes death loveable by removing it from nothingness because death is a certificate of discharge and a change of place for a believer. It is the beginning of an eternal life and its entrance door. It is a flight from the troubles of the world to the gardens of Paradise. It is a turn to enter into the presence of Allah in order to receive the wages of the good deeds that he has earned in the world. It is an invitation to go to Paradise, which is a place of bliss. It is a reunion with all his beloved friends.

Man's heart is freed from all of the endless fears, his soul is freed from all sorrows and pains and he gains eternal joy and relief by believing in Allah.

In conclusion, man's heart is freed from all of the endless fears, his soul is freed from all sorrows and pains and he gains eternal joy and relief by believing in Allah. Such a spiritual strength occurs in his heart that he can withstand every misfortune and every event with that strength. No matter how bad and troubled his world is, he sees his world as the waiting hall of Paradise; therefore, he tolerates all kinds of distress and thanks Allah in patience. Thus, both his world and the hereafter can be turned into Paradise.

If he has no belief, these worries will always give his heart and spirit pain and suffering. Even if his world seems to be like Paradise, the worries about death and eternal separation tear his heart and conscience out. They make him suffer a spiritual Hell penalty.

Is there anything other than belief that can give man this consolation? One of the reasons for the increasing suicide rates and widespread use of drugs and in

technically and materially developed societies is the lack of connection to God with belief. The feeling of loneliness and deprivation caused by not being able to recognize Him disturbs people and makes them lose sleep over it.

A memory

Rauf, the dentist, narrates:

“During the period of communism, when irreligion and unbelief were dominant in Azerbaijan, we were given lessons of denying God. Because of this education, we did not believe in Allah and the hereafter. However, the worry that our lives would end with death and that we would disappear distressed us very much. We found some remedies for ourselves. One of them was sleeping one night and staying awake one night. We thought we extended our lives by doing so. This solution originated from despair. However, we always had the feeling that there would be a real solution to this. With this feeling, we went to the Western countries such as the Netherlands, England, Germany and France after the fall of communism. We read the books of famous philosophers regarding the issue. However, we could not find the answer there either. None of them gave us a satisfactory answer about death and the hereafter.

*In the early 1990s, we met a guest who had come from Turkey. I asked them if there was eternal life. They read us and explained the issue of resurrection after death and resurrection from a book called *HaşırRisalesi* (Resurrection Booklet). I was satisfied with what was read and explained. Then, I introduced a friend of mine (an academician) to them. They read some passages about the existence of Paradise and Hell.*

When I returned home after the talk, I received a telephone call from my friend. He said,

‘Rauf! Rauf! Since there is an eternal life, I have been saved from the worry of disappearing, even if it is Hell. I will be able to sleep peacefully tonight.’”

It is the light of belief that illuminates and comforts the human conscience. Belief comforts man’s spirit by illuminating his past and future. An unbelieving man imagines the past in a way that resembles a terrible, dark graveyard. He sees the future in the form of a large, dark, horrific grave that will decay him and

everything and that will make snakes and scorpions eat his body. This state, which squeezes man between two graves, causes him to live a terrible life of Hell in his spirit and conscience hopelessly.

Man's horizon expands from the creation of the world and the sending of Hz. Adam to the world, to the Day of Judgment, to Heaven and Hell. By informing man of eternal bliss, belief develops and perpetuates the abilities and desires that are like seeds in the conscience of man.

It is the light of belief that illuminates and comforts the human conscience. Belief comforts man's spirit by illuminating his past and future.

In conclusion, man is responsible for taking what is good and nice and leaving what is evil, the ugly and bad with his will. That is the purpose of the will being given to man. That is, man has been given will so that he will obey Allah's commands and avoid His prohibitions.

c- Worshipping Allah

Worship means to fulfill the commands of Allah and to avoid His prohibitions. Allah states the following in the Quran regarding the issue:

*"O ye people! Adore your Guardian-Lord, who created you and those who came before you, that ye may have the chance to learn righteousness; Who has made the earth your couch, and the heavens your canopy; and sent down rain from the heavens; and brought forth therewith Fruits for your sustenance; then set not up rivals unto Allah when ye know (the truth)."*²⁶⁰

Thus, worshipping our Lord, who created us out of nothing, is our greatest debt of slavery because He made the world like a palace for us. He sent down water from the sky and extracted all kinds of fruits and food from the ground as sustenance. Therefore, it is one of our most important responsibilities to thank Him by worshipping Him.

Prayer, fasting, hajj and zakah are the most important deeds of worship. The reason why we do those deeds of worship is that Allah orders them. All of the benefits and interests originating from those deeds of worship can only be a reason for preference and encouragement.

The Worship of Prayer

Prayer is the pillar of the religion and it is a very comprehensive prayer and deed of worship that includes all other deeds of worship. It is an invitation to the spiritual presence of Allah, who creates people out of nothing and grants them all kinds of blessings, at certain times five times a day. There is a great comfort of the spirit, the heart and mind in prayer.

Allah does not need our worship

Allah does not need anything. He is Samad, that is, everything needs Him, but He does not need anything. It is man who needs worshipping. Worship is like medicine for our spiritual wounds. For example, if a patient says to a compassionate physician who gives him some useful drugs about his illness and insists that the patient should take them, “*Why do you insist so much? Do you need it?*”, it will be nonsense. For, it is the patient, not the doctor, who needs them. The doctor insists for the benefit of the patient.

Similarly, Allah commands us to worship for the comfort of our hearts, souls, and minds, and for being saved from spiritual diseases.

Belief consists of a mental and conscientious judgment and approval. It is also worship that strengthens belief and shows the signs of belief as deeds. The most comprehensive and general deed of worship is prayer. Therefore, the following is stated in a hadith: “*Prayer is the pillar of religion*”. What keeps a building upright is the column. Similarly, what keeps the religion of a person upright, that is, keeps him away from sins and draws him closer to Allah by making him an addressee is his prayer.

Besides, worship is a sign that shows the degree and existence of belief.

Deeds of worship are conducive to the happiness of social life

A strong belief is necessary to fulfill the commands and to avoid the prohibitions of Allah. The maintenance and continuity of such belief is possible only through the continuation and repetition of worship.

A slave’s turning toward Allah makes it necessary for him to worship Allah and obey His commands. Obeying the commands of Allah makes the servant attain a perfect order.

For the perfection and progression of the society, an unshakable fraternity and a genuine love among the members of that society are necessary. Believers renew and strengthen the fraternity and love among them seriously and regularly through five daily prayers and duas to one another. What enables it is only worship²⁶¹.

Deeds of worship are conducive to a person's perfection

Worship fills the spirit and heart of man with peace and joy, refreshing him. For example, the mind, the spirit and the heart attain great comfort in the worship of prayer. Worship causes the emergence, advancement and development of the abilities that are planted in the form of seeds in the human spirit. For example, deeds of worship such as fasting and zakah develops the feelings like patience, help, generosity, compassion and self-control, which exist in the human spirit.

Man distinguishes the good from the bad with worship, moves away from mistakes and is purified from sins thanks to it. For example, thanks to worship, man keeps away from sins like backbiting, gossiping and having bad thoughts about others. For example, five daily prayers purify man from minor sins committed between two prayers.

It is worship that makes man attain vision and perspective and puts his ideas into a certain order and system. Thanks to worship, the blessing of intellect given to man sees and evaluates the truth as the truth and the wrong as the wrong. Good judgment, which protects man from falling into heedlessness, is attained through worship.

It is worship that purifies man from the spiritual dirt and rust of all sins that he gets with his inner and outer feelings, that is, his eyes and ears from haram things and his mind from doubt and denial²⁶².

Man's duty is to improve his abilities with worshipping

The most important work of man in this world is to develop his abilities, which are his most valuable things. These abilities are like seeds in the soil. They can develop in both a useful and harmful way. Man's duty is to cultivate and develop the beneficial ones through worship. For example, the feelings such as ambition, obstinacy, concern for the future, love and curiosity exist in the human spirit. These abilities can be used to gain the life of the world, temporary posts

and wealth of the world, and fame; they can also be used in the services that enable man to gain the eternal bliss in the Hereafter through the high and eternal realities of belief and the principles of Islam. Worship increases the devotion of man to Allah.

In conclusion, deeds of worship are signs that show the degree of loyalty and respect of man to Allah. Thus, the more man obeys Allah's commandments and prohibitions, the higher his acceptance will be in the presence of Allah; and, he will be a beloved servant. The highest rank for man is to be able to attain the love of God Almighty.

The criterion of loving Allah is to act in the way that Allah loves. The way that Allah loves is the deeds of worship that He informed us through His prophet, whom He sent as a guide to humanity. The forms and shapes of those deeds of worship are shown in the Sunnah of the Prophet. The Sunnah consists of the words, deeds and acts of the Prophet.

The spirit of worship is sincerity. Sincerity means doing something just because it is a command of Allah.

EVALUATION QUESTIONS

- 1-Why was man created?
- 2-What is the description of man according to the West?
- 3-What is the description of man according to Islam?
- 4-What are the responsibilities of man toward Allah?
- 5-How do beings make Allah known?
- 6-What are the benefits of worship in terms of individuals and the society?
- 7-What is belief?

CHAPTER 7

7-KNOWING THE CREATOR

7.1-KNOWING ALLAH'S ATTRIBUTES²⁶³

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"The scientists who study the creatures of Allah understand His greatness better than anybody else." Fakhruddin ar-Razi

LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student understands Allah's essential and positive attributes. 2-He understands that the essential attributes do not exist in any being and that they are peculiar to Allah. 3-He learns that positive attributes exist in man but that those attributes of Allah are requirements of His existence. 4-He understands that Allah does not resemble any other being.	1-How would you explain Allah's attributes' being infinite? 2- In what way are positive attributes of Allah differ from those in man? 3-In what way does Allah not resemble His creatures? 4- According to the philosophical view that accepts matter as pre-eternal and post-eternal, is it possible to say that they accept

Ontology;

Ontology is the philosophy of existence. This philosophy focuses on the causes and basic principles of existence. Its topic is knowing what exists.

The greatest reality of the philosophy of existence is the existence of Allah, who is *Wajib al-Wujud* (Necessarily Existent), and knowing Him.

The recognition of a being or a thing is possible through its definition. Definitions form the basis of all sciences. Definitions are made according to some rules. In mathematics, there are some facts that are accepted as true without questioning; they are called "axioms". The trueness of axioms is not discussed and they are accepted as they are. For example, "infinity" and "zero" are accepted things in mathematics. In mathematics, all definitions and problems are based on those assumptions. If they are questioned and not accepted as they are, it is not possible to do operations in mathematics.

The power of Allah is from His own essence. When the attribute is from the essence, the opposite cannot enter into it. Since its opposite cannot enter into it, there will be no degrees and stages. Thus, many-few, great-small do not matter in creation for the power

The highest and the most subtle science is the science of belief, and the largest and most luminous science is Marifatullah (Knowledge of Allah). In other words, knowing Allah, who is the creator of all things and who has infinite attributes such as knowledge, will and power.

The recognition of a being or a thing is possible through its definition. As everything has a description, there must be a definition of Allah too.

As everything has a description, there must be a definition of Allah too. This definition should be **exact**. In other words, the definition should include all characteristics and attributes of Allah peculiar to Him in a way that should not be confused with the attributes of other beings.

Attributes of Allah

Belief in Allah means knowing Him, knowing His attributes of perfection, which are His dhati (essential) and thubuti (positive) attributes, believing in Him like that and saying that He is free and away from any incomplete attributes. Allah is qualified with all attributes of perfection that are worthy of His glory, and is free from incomplete attributes.

All attributes of Allah are pre-eternal and post-eternal attributes. His attributes have no beginning and end. The attributes of Allah do not resemble to those

All attributes of Allah are pre-eternal and post-eternal attributes. His attributes have no beginning and end. The attributes of Allah do not resemble those of His creatures. Although there is a similarity in naming, Allah's knowledge, will, life and speech do not resemble our knowledge, will, life and speech. We know Him by His names and attributes because we cannot know and comprehend the essence and nature of Allah.

It is stated in the Quran that it is impossible to realize the essence of Allah and to know His nature as follows:

*"No vision can grasp Him, but His grasp is over all vision: He is above all comprehension, yet is acquainted with all things"*²⁶⁴.

The Prophet (pbuh) states the following regarding the issue:

*"Meditate on the creatures of Allah but do not meditate on the essence of Allah. Indeed, you cannot do it"*²⁶⁵.

Man's mind is something that was created. It cannot grasp its creator. For that reason, it is forbidden to think about the essence of Allah.

Allah's attributes are divided into two groups: SifatDhatiyah (Essential Attributes) and SifatThubutiyah (Positive/Immutable Attributes).

a-His Essential Attributes (Attributes of Negation or Sifat Dhatiyah)

They are the attributes that belong to the essence of Allah only and that are impossible and impermissible to be attributed to any of His creatures. The opposites of the essential attributes cannot be thought about Allah. In other words, Allah is free and away from the attributes that express deficiency, finitude and deficiency. Those attributes are also called salbi and tanzih attributes since it is necessary to say that Allah is free from incomplete attributes. The essential attributes of Allah are as follows:

The opposites of the essential attributes cannot be thought about Allah. In other words, Allah is free and away from the attributes that

1. Wujud: (Existence)

Allah exists. His existence does not originate from any other being. It is His necessary attribute. Allah is wajib al-wujud (necessarily existent). His existence is

necessary. The opposite of existence, that is, non-existence cannot be thought about Allah.

2. Qidam: (Pre-eternity)

The non-existence of Allah is unthinkable. No matter how far you go back in history, a time when he does not exist is unthinkable; it cannot be found. For, it is He who created time too. Allah is not a being that came into being afterwards. He is a pre-eternal being. Huduth (origination in time), which is the opposite of the attribute of pre-eternity, cannot be thought about Allah.

3. Baqa: (Everlastingness)

Allah has no ending. It is compulsory for the one that is pre-eternal to be post-eternal too. The opposite of baqa, that is, fana, (having an ending) cannot be thought about Allah. No matter how far you go in the future, there will be no moment in which Allah will not exist. The following is stated in the Quran, about the pre-eternity and post-eternity of Allah: eternal and eternal:

"He is the First and the Last..."²⁶⁶; "...Everything (that exists) will perish except His own Face..."²⁶⁷.

4. Mukhalafatunlil-hawadith(Non-resemblance to the things created later)

Every being other than Allah came into being afterwards. Allah is in no way similar to any of the things that came into being afterwards. The opposite of this attribute resembling what came into being afterwards cannot be thought about Allah. The following is stated in the Quran regarding the issue:

"...There is nothing whatever like unto Him..."²⁶⁸.

5. Wahdaniyyah: (Allah's being the only one in terms of His essence, attributes and deeds, and having no similar one and no partner)

The opposite of wahdaniyyah that is, being more than one, having a partner (shirk) are attributes that cannot be thought about Allah. The chapters of al-Ikhlās and Kafirun and many verses of the Quran reveal the oneness and uniqueness of Allah and reject shirk (polytheism)²⁶⁹.

6. Qiyam bi Nafsihi: (Self-existence)

Allah is self-existent. He does not need a creature, place, time and reason to exist. Needing any other being cannot be thought about Allah. The following is stated in the Quran regarding the issue:

"Say: He is Allah, the One and Only; Allah, the Eternal, Absolute;..."²⁷⁰;

"O ye men! It is ye that have need of Allah: but Allah is the One Free of all wants, worthy of all praise"²⁷¹.

b-His Positive/Immutable Attributes (SifatThubutiyah)

They are the attributes that are obligatory to exist and that express perfection. The characteristics that are the opposites of immutable are unthinkable about Allah. These attributes are pre-eternal and post-eternal; they did not come into being afterwards like the attributes of His creatures. They are the attributes that are the requirements of His existence.

The characteristics that are the opposites of immutable are unthinkable about Allah. These attributes are pre-eternal and post-eternal; they did not come into being afterwards like the

Although there is a similarity in naming, immutable attributes are in no way similar to the attributes of creatures. For, Allah's knowledge, power and will... are infinite, absolute, pre-eternal and post-eternal. The attributes of His slaves are finite, conditioned, limited, created later, incomplete and inadequate. There are eight immutable attributes:

1. Hayah: (Life)

Allah has life. He is the one that gives life to everything. He has a pre-eternal and post-eternal life. Being dead (mamat), which is the opposite of the attribute life cannot be thought about Allah. The following is stated in the Quran about this attribute:

"And put thy trust in Him Who lives and dies not..."²⁷²; "(All) faces shall be humbled before (Him) - the Living, the Self-Subsisting, Eternal..."²⁷³.

2. Ilm: (Knowledge)

Allah is the one that knows everything. He knows what happened, what happens, what will happen, the past, the future, the secret and the open. The

knowledge of Allah does not resemble that of His creatures. It does not increase or decrease. He knows everything with His pre-eternal knowledge. Ignorance, which is the opposite of the attribute of knowledge, is an attribute that is impossible to think about Allah. The following is stated in some of the verses related to Allah's attribute of knowledge:

*"He knoweth whatever there is on the earth and in the sea. Not a leaf doth fall but with His knowledge..."*²⁷⁴.

*"Seest thou not that Allah doth know (all) that is in the heavens and on earth?..."*²⁷⁵.

3. Sami': (Hearing)

Allah is the Hearer. He hears anything that is said, whether it is secret in a whisper or open, whether in a slow voice or aloud. He hears without any means or directions. Hearing something does not prevent him from hearing something else at that moment. Not hearing and deafness are unthinkable about Allah.

4. Basar: (Sight).

Almighty Allah sees everything. Nothing is hidden from the sight of Allah. Allah sees what is hidden, open, bright and dark. Not seeing (blindness) is unthinkable about Allah. The following is stated in a verse regarding the issue:

"(Allah) knows of (the tricks) that deceive with the eyes, and all that the hearts (of men) conceal. And Allah will judge with (justice and) Truth: but those whom (men) invoke besides Him, will not (be in a position) to judge at all. Verily it is Allah (alone) Who hears and sees (all things)."276

5. Iradah: (Will)

Allah wills. Whatever Allah wills takes place; what He does not will does not take place.

The following is stated in the Quran regarding the issue:

"Say: "O Allah! Lord of Power (And Rule), Thou givest power to whom Thou pleasest, and Thou strippest off power from whom Thou pleasest: Thou enduest with honour whom Thou pleasest, and Thou bringest low whom Thou pleasest..."277.

*"To Allah belongs the dominion of the heavens and the earth. He creates what He wills (and plans).."*²⁷⁸.

6. Qudrah: (Power)

Allah has infinite power and strength. Weakness, which is the opposite of the attribute of power, is unthinkable about Allah. There is nothing that His power cannot reach. Everything happening in the universe takes place with the power and strength of Allah. Many-few, big-small are no different for the power of Allah. There is no difference between creating an atom and creating the universe. Stars, galaxies, all space, all living and non-living beings are clear evidences of Allah's power.

The following is stated in the Quran about the power of Allah:

*"... Allah creates what He wills for verily Allah has power over all things."*²⁷⁹

7. Kalam: (Speech)

Allah sent down books to His prophets and spoke to some of His prophets with this attribute. The nature of the attribute of kalam, which is eternal, cannot be known by us. The following is stated in the Quran about this attribute: *"When Moses came to the place appointed by Us, and his Lord addressed him, He said: 'O my Lord! show (Thyself) to me, that I may look upon thee."*²⁸⁰

8. Takwin: (Creation, making something that does not exist existent)

Almighty Allah is the only Creator. He created everything he knew with His pre-eternal knowledge with His infinite power and strength. To create, to provide, to resurrect, to kill, to give boons, to punish and to give shape are the results of the attribute takwin. The following is stated in a verse:

*"Allah is the Creator of all things, and He is the Guardian and Disposer of all affairs."*²⁸¹.

Allah defines Himself in the Quran

God Almighty introduces Himself to us as follows in the Quran:

God Almighty is pre-eternal, post-eternal, the first and the last. There is nothing or nobody similar to, equal to and like him; He has no partners. His

attributes come from His essence. He created everything. He was not created. He did not give birth and He was not born. He is free from space. That is, He is not limited with any place. He is everywhere. He is closer to everything than anything. Everything is infinitely far away from Him.²⁸²

Let us try to get to know the attributes of Allah a little closer.

7.1.1-Allah is pre-eternal

First of all, Allah is pre-eternal; His existence has no beginning. Something that has no firstness (beginning) is pre-eternal (qadim); something that is created in time is hadith (contingent). Allah is qadim; things that are created in time cannot be deities. Everything other than Allah is hadith; that is to say, they were created afterwards. They were created by the power of Allah. There is no doubt that creatures cannot have the attribute pre-eternal, which is peculiar to the Creator. There was nothing else with His pre-eternal existence. The realms were created later. In that case, the Creator cannot have been created. Asking who created Allah originates from not knowing Allah because whatever is thought as a creature cannot be a deity²⁸³.

God Almighty is pre-eternal, post-eternal, the first and the last. There is nothing or nobody similar to, equal to and like him; He has no partners. His attributes come from

Those who do not accept or cannot understand the pre-eternality of Allah have to accept as many deities as atoms by attributing pre-eternality to matter.

7.1.2-Allah is the everlasting one

Allah is pre-eternal and everlasting. Post-eternity is the attribute of not having an ending. The being that has an ending is called “fani” (ephemeral); the being that has no ending is called “baqi” (everlasting).

Almighty Allah has the attribute of Baqa because He is eternal, prevailing and there is no end to its existence. His non-existence is unthinkable. All beings that came into being later were created by the power of Allah. They will also disappear with the power of Allah and will be resurrected again; they may undergo thousands of changes. However, Almighty Allah is everlasting; He is far from change and non-existence. For, He is not the work of another being; therefore, he will not go to non-existence or undergo change with the power of

that being. On the contrary, all beings are works of His power. Everything is bound to go to non-existence but the existence of Allah, who is magnificent and generous, is permanent and everlasting. Thus, a being that undergoes change cannot be a deity. Unchangeability is one of the most important characteristics of the true creator.

7.1.3- Allah does not resemble any of the created things in any way

One of the attributes of Allah is that He is infinitely perfect in every aspect. He has no resemblance to anything created afterwards. He is different from anything that can come to mind.

In this universe, everything that is and that can be created changes, transforms, resembles one another is born, grows and eventually dies and disappears. They all occur due to a need. Allah is not in need of them or anything else.

He is such a being that the creation of the stars is as easy for him as that of particles; to His power, the greatest thing is subjugated as is the most minute; for Him, nothing is an obstacle to any other thing and no

Humans and other creatures have many needs. They need space, time, eating, drinking, wandering, being created, being born, giving birth and so on. Allah is not in need of any of them. When they were non-existent, He was existent. He cannot be compared to any features of the objects we call matter. He who tries to compare Him to the created beings makes a great mistake. He is "*laysa ka mithlihay'un*". In other words, there is nothing similar to Him in terms of His essence, attributes or deeds. There cannot be anything equal to Him. He has no partner.

Yes, there can be nothing equal, similar to the Holy Being, who holds and controls the whole universe with all of its deeds and states and who manages it regularly and systematically as if it is a house or a palace; it is impossible for Him to have partners.

Yes, He is such a being that the creation of the stars is as easy for him as that of particles; to His power, the greatest thing is subjugated as is the most minute; for Him, nothing is an obstacle to any other thing and no action obstructs any other action; in His view, innumerable individuals are present in the same way that a single individual is present; He hears all voices simultaneously and is able

to answer the limitless needs of all simultaneously; outside His sphere, will and volition is nothing, no state, as is testified to by the order and balance of the beings in the universe; although He is in no place, He is present everywhere through His power and knowledge; and although everything is utterly distant from Him, He is utterly close to them – that He should have any like, equal, partner, deputy, opposite or peer is not possible; it is impossible²⁸⁴.

With the example of sun, we can bring them closer to the mind. For example, the sunlight is close to all things with its heat and seven colors. All beings are millions of kilometers away from it. If the sun is assumed to be intelligent and conscious for a moment and if each of its seven colors is considered as an attribute of it, for example, seeing the green color, hearing the yellow color, speaking the blue color, it can communicate with all beings on earth at the same time. It would hear the sound of all beings at the same time. One would not prevent the other. Although it was near every being, it would be kilometers away from them.

The question *Who created Allah?* cannot be asked because such a question is contrary to the acceptance in the definition of Allah at the beginning. In the definition of Allah, it was accepted that He created

If the sun, which is a creature of Allah, is like this with the secret of luminosity, the Almighty God, who has infinite luminosity, can definitely be found everywhere, manage everything Himself, and one deed will not prevent another.²⁸⁵

7.1.4-Allah's existence is from His own essence

Allah's existence, which is pre-eternal and post-eternal, is based on His own self. His existence is a necessity of His sacred personality; it does not come from anyone/anything else. For this reason, Allah is called *Wajib al-Wujud*, that is, *Necessarily Existent*. His existence is far from needing another creator. What is thought to be created cannot be a deity. Therefore, the question *Who created Allah?* cannot be asked because such a question is contrary to the definition of Allah at the beginning. In the definition of Allah, it was accepted that He created everything but that He Himself was not created.

He exists spontaneously; He is pre-eternal. He was not born and he did not give birth, as it is stated in His divine book. He does not need anyone else to exist. If it were not like that, there would be no universe whatsoever.

When this fact is not accepted, there will be no possibility to explain the existence of the world in which we live. It is possible for anything except Allah to exist and not to exist. That is, they may exist or

The attributes of Allah are from His essence. That is, they are indispensable requirements of His essence. In other words, if those attributes do not exist or if they are limited, He cannot be a deity. It is not possible to consider those essential attributes separately from Him. Those attributes cannot be separated from Him by

not exist. Therefore, their coming into the realm of existence from the realm of non-existence depends on Allah's creation. If He wishes, they come into being; if not, they will not exist.²⁸⁶

The attributes of Allah are from His essence. That is, they are indispensable requirements of His essence. In other words, if those attributes do not exist or if they are limited, He cannot be a deity. It is not possible to consider those essential attributes separately from Him. Those attributes cannot be separated from Him by any means because that being is defined and known by those attributes.

A simple example can be given to understand the issue better: When we say "a human being", his head, body, arms and legs come to mind from the definition of human being. The indispensable part of a human being is his head. There cannot be a human being without a head except for a miracle.

When "Allah" is said, His essential and immutable attributes are indispensable.

Since the attributes of Allah are from His essence, the opposite of those attributes cannot be added to Him. However, the attributes of creatures are added to them later. For instance, Allah's attribute of power is from His essence. Therefore, weakness, which is the opposite of power, cannot enter that power. For, if it is supposed to enter, two opposites must exist at the same time, which is not logically possible. For instance, Allah has infinite power; He cannot be infinitely weak and powerless at the same time. Similarly, He cannot be an ignorant who knows nothing while He has infinite knowledge. Thus, it is

impossible for any of the opposites of all essential attributes such as sight, hearing and will to exist in Him.

Since weakness cannot approach Allah's power, weakness cannot enter into that power by any means. This clearly shows that there cannot be degrees and stages in His essential power. For, degrees occur in something when its opposites enter into it.

For instance, stages in heat occur when cold enters into it. Stages and degrees occur in beauty when ugliness enters into it.

The manifestation of Allah's will to create an atom is the same as the manifestation of His will to create the infinite universe, including Paradise

In all the creatures that have been created, the opposites are intertwined, since the attributes are incidental, that is, given to them later.

In all the created beings, the attributes enter into them afterwards; therefore, the opposites are intertwined in them.

Since there are no degrees in the pre-eternal power of Allah, all of the created beings are equal in the face of His infinite power. The biggest becomes equal to the smallest; particles become similar to stars. The creation of the spring season is as

One of the important reasons that mislead people about the attributes of Allah and cause them to deny is that they compare those attributes of Allah with those that are given to

easy as the creation of a single flower for that power. The resurrection of all human beings on the Day of Judgment is like the resurrection of one human being.

The manifestation of Allah's will to create an atom is the same as the manifestation of His will to create the infinite universe, including Paradise and Hell²⁸⁷.

One of the important reasons that mislead people about the attributes of Allah and cause them to deny is that they compare those attributes of Allah with those that are given to them.

It is possible to see the fact that many and few, and big small are not different for the attributes of Allah in some laws that are valid in the universe.

7.1.5-Divine power's relation is according to laws

Divine power's relation is according to laws. In other words, it regards many-few, great-small as the same. God Almighty has some laws that are in effect in the universe. According to them, many-few, great-small do not matter. They help us to understand Allah's management in the realms. Badiuzzaman Said Nursi groups them as follows:

“Divine power's relation is according to laws. That is to say, it regards many and few, great and small as the same. We shall make this abstruse matter easier to understand with a number of comparisons.

In the universe, Transparency, Reciprocity, Balance, Order, Disengagedness, and Obedience are all matters which render many equal to few, and great equal to small.

First Comparison: This explains the Mystery of Transparency. For example, the sun's image and reflection, which are its radiance and manifestation, display the same identity on the sea's surface and in every drop of the sea. If the globe of the earth was composed of varying fragments of glass and exposed to the sun without veil, the sun's reflection would be the same in every fragment and on the whole face of the earth, without obstruction or being divided into pieces or being diminished. If, let us suppose, the sun acted with will and through its will conferred the radiance of its light and image of its reflection, it would not be more difficult for it to confer its radiance on the whole surface of the earth than to confer it on a single particle ”.

The manifestation of power in the creation of a single tree is the same as the manifestation of power in the creation of an infinite number of trees.

Thus, with the mystery of transparency, the sun's manifestation on a small piece of glass is the same as its manifestation on the whole earth. In other words, it gives the whole earth the same light as it gives a piece of glass.

According to Allah's power, all creatures are the same. Big and small, many and few do not cause difficulty to His power, do not constitute an obstacle; one of them and a thousand of them are

It is possible to bring this to mind closer with the following example: For instance, suppose that there is only one cherry tree in your garden. Also, suppose that the whole earth is filled with cherry trees. There is no difference for the sun in

terms of ease between reflecting its light on a single tree and reflecting its light on all of the cherry trees on earth.

Acting upon this point, there is no difference for the power of Allah in terms of ease between creating a single cherry tree and creating all of the cherry trees on earth. The manifestation of power in the creation of a single tree is the same as the manifestation of power in the creation of an infinite number of trees.

“Second Comparison: This concerns the Mystery of Reciprocity. For example, let us suppose there is a vast ring composed of living beings, that is, of human beings, each holding a mirror. At its center is an individual holding a candle. The radiance and manifestation reflected in all the mirrors surrounding the central point will be the same, and its relation will be without obstacle, fragmentation or being diminished.

It is supposed that there is a ring composed of human beings, each holding a mirror and in the center of the ring an individual holding a candle. The candlelight enters into the mirrors of the surrounding individuals with the same ease without being split.

Just like this example, according to Allah’s power, all creatures are the same. Big and small, many and few do not cause difficulty to His power and do not pose an obstacle; one of them and a thousand of them are regarded to be equal.

“Third Comparison: This concerns the Mystery of Balance. For example, there are an enormous set of scales which are extremely accurate and sensitive. Whichever of two suns or two stars or two mountains or two eggs or two particles are placed in its two pans, it will require the same force to raise one pan of those huge sensitive scales to the sky and lower the other to the ground.”

All creatures, whether big or small and few or many, are on the scales of possibility. In other words, one pan of the scale is existence and the other is non-existence the scale. Allah’s infinite power is like a touch that disrupts this balance.

If there is a particle in one pan of accurate and sensitive scales and another particle in the other pan, the scales will be in balance. If one particle is added to one of the pans, the balance will be disrupted.

If two suns of the same weight are weighed on both pans, the scales will still be in balance. If one particle is added to one of the pans, the balance will be disrupted and one pan will go down while the other goes up.

Just like this example, all creatures, whether big or small and few or many, are on the scales of possibility. In other words, one pan of the scale is existence and the other is non-existence the scale. Allah's infinite power is like a touch that disrupts this balance.

When God Almighty wants to create a particle or a sun or the whole universe, the manifestation of His will is the same manifestation in each case. That is, the size of the thing to be created is not important. There is no difference between Allah's saying "Be" to a particle and its coming into being and His saying "Be" to a sun and its coming to being.

Fourth Comparison: This concerns the Mystery of Order. For example, a huge ship can be turned as easily as a tiny toy boat.

Due the secret of order in the universe, Allah turns the earth with the same force as He turns a particle. There is no difference between big and small for His power.

Fifth Comparison: This concerns the Mystery of Disengagedness. For example, a nature disengaged from individuality regards all particulars from the smallest to the greatest as the same and enters them without being diminished or fragmented. The qualities present in the aspect of external individuality do not interfere and cause confusion; they do not alter the view of a disengaged nature such as that. For example, a fish like a needle possesses such a disengaged nature the same as a whale. Or a microbe bears an animal nature the same as a rhinoceros..

Allah's deeds and operations in the universe are through His command. He makes an atom come into being from non-existence with the command "Be"; likewise, He makes the

The power of Allah is not of the same kind as the universe just like His essence. In other words, He is independent of the characteristics and limitations of the universe. Thus, the obstacles and limitations within the universe do not bind Allah's power. It is equally easy for the infinite power of Allah to create and control a small fish and to create and control a large whale.

Sixth Comparison: This demonstrates the Mystery of Obedience. For example, a commander causes a single private to advance with the command "Forward march!" the same as he causes an army to advance. The truth of the mystery of this comparison about obedience is as follows:

As is proved by experience, everything in the universe has a point of perfection, and everything has an inclination towards that point. Increased inclination becomes need. Increased need becomes desire. Increased desire becomes attraction, and attraction, desire, need, and inclination are each seeds and kernels which together with the essences of things conform to the creative commands of Almighty God. The absolute perfection of the true nature of contingent beings is absolute existence. Their particular perfections are an existence peculiar to each which makes each being's abilities emerge from the potential to the actual.

Thus, the obedience of the whole universe to the Divine command "Be!" is the same as that of a particle, which is like a single soldier. Contained all together in the obedience and conformity of contingent beings to the pre-eternal command of "Be!" proceeding from the Pre-Eternal will are inclination, need, desire, and attraction, which are also manifestations of Divine will. The fact that when subtle water receives the command to freeze, with a refined inclination it may split a piece of iron demonstrates the strength of the mystery of obedience."

Due to the secret of obedience, a commander makes a soldier, as well as a million soldiers, walk with the command "March".

Similarly, Allah's deeds and operations in the universe are through His command. He makes an atom come into being from non-existence with the command "Be"; likewise, He makes the whole universe come into being from non-existence with the same command.

The absolute perfection of things that have not come into being is to go to the field of existence first. Everything in the universe has a point of perfection. That being has an inclination towards the point of perfection, that is, to the most perfect, in its intelligence and ability. As inclination increases, need arises. As need increases, desire occurs. As desire increases, attraction occurs.

This ***inclination, need, desire*** and ***attraction*** in creatures become a basic point and core to obey the commands of Allah.

The obedience of the whole universe to the command “Be” given by Allah is like the obedience of a particle that is like an individual soldier. The inclination, need, desire and attraction in the beings, which are the manifestation of the will in the beings, have been placed in them so that they will obey the commands of Allah. The fact that when subtle water receives the command “Freeze”, it splits a piece of iron demonstrates the strength of the mystery of obedience by elements.

“If these six comparisons are observed in the potentialities and actions of contingent beings, which are both defective, and finite, and weak, and have no actual effect, without doubt it will be seen that everything is equal in relation to Pre-Eternal power, which is both pre-eternal, and post-eternal, and creates the whole universe out of pure non-existence, and being manifested through the works of its tremendousness leaves all minds in wonderment. Nothing at all can be difficult for it.

Such a power cannot be weighed on the small scales of these mysteries, neither are they proportionate. They have been mentioned to bring the subject closer to the understanding and to dispel any doubts.”

To sum up, the power of Allah is from His own essence. When the attribute is from the essence, the opposite cannot enter into it. Since its opposite cannot enter into it, there will be no degrees and stages. Thus, many-few, great-small do not matter in creation for the power of Allah.

Similarly, since Allah’s attributes like seeing, hearing, will and knowledge are from His own essence, there is no difference for Him between knowing one thing and knowing everything, hearing one voice and hearing all sounds, seeing one thing and seeing everything, He hears everything, sees everything, knows everything, does everything at the same time. No deed prevents another deed.

EVALUATION QUESTIONS

- 1-What does Allah’s attributes being from His own essence mean?
- 2- What does Allah’s power’s relation being according to laws mean?
- 3-If an attribute is from His essence, why can its opposite not enter it?
- 4-What does lack of degrees and stages indicate in something in which the opposite of an attribute does not exist?

7.2. BEINGS ARE CREATED OUT OF NOTHING²⁸⁸

Mehmet Kirkinci

LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student understands the meaning of ijad. 2- He understands that there is no difference between the creation of an atom and the whole universe. 3- He learns the meanings of Ibda, Insha, IbdaMahd and IbdaJuz'i. 4- He understands the wisdom behind the atoms to be used up to the Day of Judgment having been prepared beforehand. 5-He learns that the nature of	1-How does divine ijad take place in the universe? 2-Why does few-many, big small not matter in the creation of Allah? 3-Why is it important to know the correct definition of Allah in order to understand the creation of beings? 4-What is the reason for the difference of the understanding of Allah in the definition of deity in the Western world?

One of the frequently asked questions about the creation of beings in order to deny a creator is as follows: “Are beings created out of nothing? Such questions arise from not accepting ijad (invention).

7.2.1-They deny ijad first

We should first state that some materialists and atheists deny ijad first by saying, “*This universe was not invented out of nothing, it was formed from particles*” instead of denying Allah directly in order to raise doubts in the naïve minds. They go from denial to invention to deny Allah, the inventor of the whole universe. As a matter of fact, whether a thing is created out of nothing suddenly or from particles gradually, there is an arranger (a creator) of it. Since there is a thing, it is a created being; it was created afterwards; it is changeable; there is definitely a preferer, creator and maker who brings it into the realm of being from

non-existence, who prefers its existence to non-existence and who is Necessarily Existent and Pre-eternal.

It is known that no art can be without an artist and no letter can be without a scribe. The existence of the artist and the scribe is more apparent than their works. These works, whether they are made gradually or suddenly, are evidences for their masters. In that

God Almighty has two types of inventions (ijads). One of them is in the form of ibda and ikhtira (invention and originating); that is, the creation of the elements that make up the universe out nothing. The other is insha (construction/production);

case, the creation of beings indicates the existence, oneness, grandeur and majesty of Allah, His attributes and names – no matter how they are created. Thus, the question “*Are beings created out of nothing?*” cannot be asked in order to deny the Maker of the Realm, but to search His wisdom.

God Almighty has two types of inventions (ijads). One of them is in the form of ibda and ikhtira (invention and originating); that is, the creation of the elements that make up the universe out nothing. The other is insha (construction/production); that is, the invention of beings from particles through combination.

Allah created particles, that is, atoms, which are like the ink of the endless divine letters Allah wrote in this universe, out of nothing with absolute invention. Then, based on the wisdom of showing the manifestations of His names, imposing the laws of his knowledge the principles of his wisdom, and renewing His skills and grants, He brought some beings to the realm of existence through insha. That is, He created the particles out nothing through ibda and constructed other creatures/beings from those particles (insha).

7.2.2- There is no difference between the creation of an atom and the whole universe

First of all, let us state the fact that the creation of beings in the form of IBDA or INSHA is not different in terms of the power of God Almighty. It is equal for divine power to invent particles out of nothing and to create any being from those particles. That is, one of them is not more difficult or easier than the other.

If man, who is in need and poverty all the time and in all circumstances and who cannot meet even a very simple need on his own, assesses this fact based on his weakness and inadequate criteria, he will definitely take the wrong way and be deceived. In the end, he may disbelieve by regarding it irrational. However, according to the judgment “when thinking about the work of a person, it is necessary to consider his attributes”, it is necessary to view the issue in terms of Allah’s comprehensive attributes and absolute power. Instead of watching the greatness of Allah, who makes this huge universe serve man, in His magnificent works, a person who compares the Divine realities with his own partial mind, power and will fall into great heedlessness.

It is not possible to think that the Creator of everything, who set up the sky like a tent over us, who controls and manages innumerable celestial bodies in

the vast space with His power, and who prepared the earth for us with His wonderful works of art, to create beings with “ibda” or “insha” with His power. Besides, if a person believes that Allah has all perfect attributes and attributes weakness to Allah after this belief, he will fall into a contradiction.

The power of God Almighty is from His own essence, is infinite and absolute. There is no difference for His power between creating the sun and creating a particle. He can create, control and manage both of them equally easily. There will be no fragmentation and division in His deed.

The conditions related to the realm of creatures cannot prevent His creation. There is definitely no difference for His power between the creation of things with ibda and insha.

That Great Being, who creates everything with infinitely easily, who manages suns like particles, and who changes everything from state to state, from stage to stage and from attitude to attitude, can easily make something non-existent existent and something existent non-existent with His infinite power.

The creation of beings in the form of IBDA or INSHA is not different in terms of the power of God Almighty. It is equal for divine power to invent particles out of nothing and to create any being from those particles. That is, one of them is not more difficult or easier than the other.

Yes, it is the most obvious truth that the All-Powerful, who creates innumerable things in a moment, creates particles out of nothing and the other beings from those particles.

Since there is no difference between “ibda” and “insha” in terms of divine power, human mind accepts this fact easily. However, he might seek the wisdom behind creation out of nothing.

We will try to briefly explain the truth of this issue within the framework of the explanations made by our tafsir scholars.

7.2. 3- What does ibda and insha mean?

Ibda means creation out of nothing. It means to give existence to things out of nothing and to create everything that is necessary for things out of nothing.

Insha means the invention (creation) of things with the combination of the existing elements.

There are two kinds of ibda: The first one is absolute or universal ibda. It means to create things out of nothing. The other is partial ibda.

The first creation of the universe is with absolute and universal ibda. That is, in the first creation of the universe, everything was invented out of nothing. To put it more clearly, it means the invention (creation) of the realm of beings out of nothing without any sample, comparison, imitation and model when there was no law, substance, duration, original form and copy to be taken as a model.

The first creation of the universe is with absolute and universal ibda. That is, in the first creation of the universe, everything was invented out of

What does ibdamahd mean?

When law, substance and duration did not exist, the creation of particles without imitation, comparison samples is called "ibdamahd (universal/absolute creation)". The formation of the universe, that is, the creation of the earth, moon, sun and stars with their own unique

God Almighty uses the atoms He created and prepared through ibdamahd like thread and weaves the whole creatures like a fabric. The creation of those threads out of nothing is through ibdamahd, and the weaving of various objects by their combination is through insha.

features, shapes and characteristics as well as the creation of the first prototypes of all plants and animals and man is through ibdamahd. All species were created from those prototypes.

The universe and the atoms that formed it were created through ibdamahd. After this first creation, the door of ibdamahd was closed. Since then, every being has been created from the existing atoms because there is a balance in the world that dominates everything.

With the law of balance, God Almighty arranges every being with such a fine order and such a delicate measure that there is no futility and waste in creation, nor is there injustice and imbalance. Yes, this law of balance and order governs everything from the red blood cells and white blood cells in the blood to the birth and death of all living beings, from the balance in the atomic system to the constellations in the sky and the space systems. Since there is a general law of system and balance in the universe, the elements that are like the cornerstones of this realm cannot be excluded from this law.

The fact that the models and prototypes of everything created is ready in the divine knowledge shows that the knowledge of the Creator is infinite and encompasses everything and that the atoms which are the originals of everything were created, balanced and piled beforehand show His infinite measure.

Yes, this is proof that He planned and prepared everything with perfect balance and that He has managed and arranged everything without being confused, without forgetting and neglecting, and that he has not wasted even an atom.

It is a necessity of His wisdom that this law of balance, which is seen in the parts, is also seen in the whole. Yes, each organ of a person is arranged according to the size of his body; similarly, the universe and the orders and systems that constitute it have been arranged based on the same measure.

To sum up, God Almighty uses the atoms He created and prepared through ibdamahd like thread and He weaves the whole creatures like a fabric. The creation of those threads out of nothing is through ibdamahd, and the weaving of various objects by their combination is through insha.

What is ibdajuz'i?

The new shapes, patterns, motifs, decorations and qualities that emerge with this insha are called ibdajuz'i.

In other words, ibdajuz'i occurs with the combination of ibda and andinsha and it takes place in the universe at any moment. For instance, the plan and program of each of the beings that is created now is ibda, so to speak. According to this plan and program, the combination of atoms and the emergence of things is insha. Numerous attributes, qualities, and states attached to the beings when they come into being show the reality of ibda. Thus, there is a new insha (construction) in the universe based on the ibda at any moment.

A nightingale is not a heap of atoms. The divine power created the nightingale from the dough of atoms and produced something very different from that dough. Thus, insha assumed qualities and something very different with its color shape, sound and beauty, life, feelings and emotions emerged in a completely different nature. In this example, all those features

Let us give an example to understand the realities of ibda and insha better: Although the Selimiye Mosque, which is a masterpiece of architecture of art and esthetics famous in the world, is made of stones, no one can call this artwork "stone" or "a pile of stones" and make such a claim. Undoubtedly, the art, dexterity, care, diligence, symmetry, wonderful plan, beautiful embroidery and motifs, fine decorations and meaningful splendor that appear with those stones, in short, all characteristics in this mosque are skills of the architect that arose from his ideas apart from the stones; so to speak, they are new skills like ibda.

The gradual construction of this mosque from stones is a good example of the reality of insha; its numerous attributes, virtues and characteristics, that is, everything else other than stones, is a good example of the reality of ibda.

7.2.4- A nightingale is not a heap of atoms

The Selimiye Mosque is made of stones; a nightingale was created from atoms. However, a nightingale is no longer a heap of atoms. The divine power created the nightingale from the dough of atoms and produced something very different from that dough. Thus, insha assumed qualities and something very

different with its color shape, sound and beauty, life, feelings and emotions emerged in a completely different nature. In this example, all those features created out of nothing in the nightingale is ibda.

This great universe is like a nightingale created by the power of Allah. This nightingale declares the beauty and perfection in the ibda and insha of the Holy Creature with infinite tunes. Are we supposed to call this wonderful miracle of power of nitrogen, carbon, oxygen and so on? Are we supposed to attribute these brand new, wonderful and strange qualities to simple elements? Or are we supposed to refer these wonderful inventions to blind force and random coincidence/chance?

Everything that is created is a miracle with their constituents, matter, shape, and features. To sum up, this universe brims manifestations of ibda and insha all the time.

Everything that is created is a miracle with their constituents, matter, shape, and features. To sum up, this universe brims with manifestations of ibda and insha all the time. We will give the following example in order to explain that the Creator of the Universe predestined and arranged this realm perfectly with His infinite knowledge and wisdom and that prepared all of the substances to function in it with a precise measure and delicate criteria:

Suppose that an extraordinarily adept and artful person built a magnificent and perfect factory without imitating anyone and making use of any previous work, and that he wanted to show the vastness of his knowledge, the fineness of his art and the effectiveness of his power by weaving thousands of kinds of cloth and fabric in this factory. The person who wants to get the endless products from this factory determines his plan and program in his mind first according to his purpose and in accordance with his future goals. He takes into account even the smallest issues related to the factory. He determines how long it will work and what substances will be needed in this period by fine calculations and prepares and stacks all the necessary raw materials.

7.2.5- That everything of a factory has been planned is a necessity of knowledge and prudence

Is it not a clear evidence for the comprehensiveness of the knowledge and precaution of that person to consider all the materials and things to be used during

the production process in the factory, to have them delivered and to plan everything in detail after determining the model, plan and program of that factory? Does this determination and arrangement not show clearly his great ideas and memory, his comprehensive sight that takes everything in the factory into consideration, and his prudence? Does this state not show that this person works with a perfect system and order and that he rules and organizes with wisdom without forgetting and confusing anything? Does it not show that he has knowledge that takes everything into consideration and justice that does not throw anything into nothingness and waste?

Just as in the example above, God Almighty wanted the invention of the universe factory. He determined the principles of the universe with His Pre-eternal knowledge and created all beings, with all of their atoms and parts out of nothing in six days compared to pre-eternity and post-eternity; that is, He created them with *ibdamahd*. The Holy Creator, who has endless perfection and beauty, established a wide variety of workbenches in this factory showing the beauty of His one thousand names with the miracles of his Power, the wonders of His mercy and the subtleties of His wisdom.

7.2.6- The atoms to be used up to the Day of Judgment were prepared beforehand

Yes, Allah Almighty, who set a boundary and limit for everything, balanced everything with measure and weighing, keeps the whole universe under His divine control with all of its events and states, rules, manages and trains the whole universe with perfect balance, does not allow anything to remain out of the scope of His will, knows and sees all land, property, the universe and space, all states and deeds, prepared enough atoms for the crops He will get and the artistic things He will create from the benches of the universe up to the Day of Judgment.

That Pre-eternal Wise Being keeps the atoms that He created by *ibdamahd* and sends them from one task to another to those benches by turns. That is to say, He makes an atom or element fulfill endless tasks and

That Pre-eternal Wise Being keeps the atoms that He created by *ibdamahd* and sends them from one task to another to those benches by turns. That is to say,

He makes an atom or element fulfill endless tasks and gets endless products. The All-Powerful Wise Being, who closed the door of ibdamahd after creating all elements, makes atoms do one task after another and uses them repeatedly in order to show His infinite wisdom.

7.2.7- Just like an author plans his book and writes it...

Let us explain this issue in another way: Let us assume that a wise and knowledgeable person wants to write a very comprehensive book covering various sciences. First, he wills to write the book in his heart, which is like the Arsh; then, he determines the content of the comprehensive book in his brain, which is like the Kursiyy. Then, he fills his pen with enough ink to write the book and writes the book in accordance with the principles he has determined in his memory. Is it possible to say for that wise and knowledgeable person:

“Why does he fill the ink before the book? He should fill the pen with the ink before each page.”?

Can it be regarded as a deficiency for the writer to fill all the ink beforehand? In fact, this state does not show deficiency of the writer but the perfection of his knowledge and his prudence. In addition, it shows that the whole book is encompassed by his knowledge, that each letter is determined by calligraphic style, that each letter is written according to the plan and determination in his knowledge, that the book is present and ready in his knowledge even before it is written with its form and content. Thus, the author writes his book with his wonderful knowledge and comprehensive memory as he has determined it and arranges it neatly.

Similarly, the Pre-eternal Wise Being willed to write this book of the universe. He determined all atoms (which are like the ink in the example), namely, the elements, which were necessary to be written for the book, and created them with His infinite power. All the elements act according to the plan and determination in that pre-eternal knowledge and function like the ink of the book of the universe.

To sum up, various animals and plants in the world that were produced from the same simple substances and that were written with the same ink become exposed to the same air, the same water and the same light but each species, and even each individual, has colors and shapes, characteristics, taste and smell, life

and emotions, temperament and abilities that distinguish them from others. These innumerable virtues and characteristics that are not found in the atoms appear with “ibda”.

Yes, the spring season is an example of this reality that resembles the Day of Resurrection. What is more, every moment is like a spring for the “ijad” and “ibda” of Allah Almighty. If the atoms on earth were to be re-created at any moment and in every stage, perhaps the Earth’s current weight by would increase millions of times today, the overall balance in the universe would be disrupted and the expected results of creation would not emerge.

EVALUATION QUESTIONS

- 1- What are the meanings of ibda, insha, ibdamahd and ibdajuz’i?
- 2- What is the wisdom behind the preparation of the atoms to be used up to the Day of Judgment in advance?
- 3-Does creation out of nothing occur at any moment?
- 4-Why is there no difference between the creation of an atom and the creation of the infinite universe?

REALMS OF KNOWLEDGE AND POWER²⁸⁹

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ALLAH'S both power and knowledge are pre-eternal and post-eternal.... Then, how should we understand the "realm of knowledge and realm of power"?

The following meaning comes to mind when we say realm of knowledge:

Before this universe of existence had been created with its suns and stars, its animals and human beings, and its jinn and angels, all of their qualities were present in the pre-eternal knowledge of Allah. The realm of knowledge is this "realm of quality". When Allah wills to create them, they are brought to the realm of existence by divine power. All of these realities that appear in the realm of beings are called "the realm of power". We see that a new meaning is given to the "realm of knowledge and power" in the following statement:

*Things do not go to non-existence; they rather pass from the realm of power to the realm of knowledge; they go from the Manifest World to the World of the Unseen; they turn from the world of change and transience to the worlds of light and eternity.*²⁹⁰

Accordingly, "the realm of knowledge" is the unseen realm, and "the realm of power" is the manifest realm. The falling rain, the talking

The visible part of all beings flowing in the river of time represents the realm of power, and the invisible part in the unseen realm represents the realm of

people, the singing birds, etc. today are in the manifest realm and in the realm of power. They came into being with divine power and are fulfilling their duties. All of the beings that will be created from the moment when the first seed of the universe was sown to Doomsday and the hereafter are in the unseen realm and in the realm of knowledge. When the beings in this realm of power migrate from this world after fulfilling their duties, they will migrate to the unseen realm again. We see the following wonderful explanation in the Second Topic of the Twentieth

Letter:

*These beings flow with the divine will. This universe is moving with the divine order. These creatures flow constantly in the river of time with the divine permission... They are sent from the unseen realm; they are clothed their apparent bodies in the manifest realm; then, they regularly flow to the unseen realm. They come from the future all the time, visit the present time to relax and go to the past.*²⁹¹

The visible part of all beings flowing in the river of time represents the realm of power, and the invisible part in the unseen realm represents the realm of knowledge. In this wonderful determination, where knowledge and wisdom are combined together, it is shown in our minds and our imaginations that not only living beings but also all non-living beings flow in the river of time, that human beings move toward death, and that the universe moves toward Doomsday with great speed. The widest realm of this flow and this change is presented to our contemplation with the following sentences:

*He turns the realm of particles, which is the largest realm, to a field, sows, cultivates and reaps crops as much as the universe with His power and wisdom there all the time. He sends them from the manifest realm to the unseen realm, from the realm of power to the realm of knowledge.*²⁹²

If all the atoms present in the universe are likened to a field, their previous and subsequent states appear as separate fields. As much crop as the universe is collected from the universe any moment. As they follow one other, ears are formed and grown, people are born and grown up, hair is lengthened and grayed, seasons are changed, and centuries follow one another. All of these inform us about the activity in the field of particles, which is the largest realm. Thus, the realm of particles is sent to the realm of knowledge from the realm of power, that is, from the manifest realm to the unseen realm all the time.

7.4.WHO CHANGES THE BEINGS?²⁹³

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student understands that if there is a work somewhere, there must be a master of it.</p> <p>2-He understands the skills and attributes of the artist from the art and perfection of the work.</p> <p>3-He learns the purpose of and wisdom behind the change in creation.</p> <p>4-He learns about the mistakes of the atheists and materialists in</p>	<p>1-What aspects of the existence of a work are evidence for the existence of its creator?</p> <p>2-Is it impossible for a work to be without a master?</p> <p>3- Whose work do atheists think beings are? What could lead them to such a view?</p> <p>4-Is the view that matter is pre-eternal a new thought? When was the view that matter is pre-eternal</p>

We see that everything that is created has its own unique abilities and that these capabilities develop and improve. We observe that all created beings are made work in very valuable states and then increased to a higher level. For example, each one of the elements is elevated to the

rank of minerals/mines, minerals to the life of plants, plants to the degree of life of the animals as sustenance and animals to the level of conscious humanity, which

A sane person accepts that if there is an activity in a place, if a job is done, there must be someone doing that job. For, a deed cannot be without a doer.

is a higher level of life. Thus, a constant activity takes place in the universe. We see that everything disappears after fulfilling its task according to its ability and that something else is appointed in place of it. A sane person accepts that if there is an activity in a place, if a job is done, there must be someone doing that job.

For, a deed cannot be without a doer. Since a needle cannot be without a master, a letter without a scribe, and a village without a headman, there must surely be a great creator, owner and administrator of such wonderful beings.

The perfection in the universe, the wise, orderly and extremely astonishing beautiful creations seen in everything, from particles to globes, from flies to the stars in the sky, from an invisible creature to human beings show clearly the

Furthermore, the more the works are perfect, neat, orderly and wise, the doer's perfection, knowledge will and power will be shown to be the higher. The perfection in the universe, the wise, orderly and extremely astonishing beautiful creations seen in everything, from particles to globes, from flies to the stars in the sky, from an invisible creature to human beings show clearly the existence, unity, infinite knowledge, will and power of the creator who creates, educates and manages them. For example, since it is not possible even a picture of each being to come into being on its own or through coincidence/chance, it is obvious that such wonderful works cannot come into being on their own and cannot be attributed to coincidence/chance, and the mindless, unconscious, and ignorant nature that has no will and to causes. The existence of the day shows the existence of the sun definitely; similarly, all of big and small, visible and invisible beings in the universe show Allah, their creator, to the eye of the mind definitely.

7.4.1. The reasons for the mistakes of materialists

7.4.1.1- They seek everything in matter

Allah creates every organ for a certain task. The use of these organs in the wrong place causes misconceptions. For example, the eye was given to us in order to see, the tongue in order to taste and the mind in order to think and to understand the beings. Those who base their philosophies on

Those who base their philosophies on materialism want the eye to fulfill the task of the mind and hence

materialism want the eye to fulfill the task of the mind and hence make a mistake. What the eye sees is only matter. However, the minds of those who seek everything in matter are in their eyes. The eye is blind in spirituality. It is impossible for the eye to see spiritual things such as spirit and mind. The existence of the spirit and the mind is understood by their works; similarly, the existence of Allah can only be understood by his wonderful works that He created to introduce himself.

An infinite number is not compared with a finite number; can Allah, all of whose attributes are in infinity, be compared to beings with finite attributes?

What the eye sees is only matter. However, the minds of those who seek everything in matter are in their eyes but the eyes are

The creatures are created out of nothing by a creator and undergo change again and again any time. The following are the reasons for the change, moving from one state to another, in the beings:

Firstly, they were created later.

Secondly, they need to be renewed and move from one state to another in order to become perfect.

Thirdly, they have needs.

Fourthly, they are material beings.

Fifthly, they are beings that were created afterwards.

However, God Almighty is pre-eternal.

He is also infinitely perfect in all aspects.

He does not need anything.

He is free from matter. That is, he has a characteristic that is different from all properties of matter.

He is *Wajib al-Wujud*. That is, he is necessarily existent. He does not need anyone else to exist. It is impossible for Him to change and to transform from one state to another because He is not one of beings that were created later. He is far from all deficient attributes.

The second point about which materialists make a mistake in knowing the Creator originates from comparing the created beings with the creator. The creator cannot be of the same kind as the creature. It is a wrong comparison to compare the

He is also pre-eternal; He has no beginning and ending.

He is infinitely perfect in all aspects.

He is never in need of anything. He has a nature different from all of the properties of created beings that can come to mind.

7.4.1.2-Creation of beings very easily and quickly

One of the reasons for the error of materialists is the infinite ease seen in the creation of beings, extreme quickness and high speed in the works. Although they are evidence for the infinity of Allah's power, knowledge, and will, materialists conclude that they are created on their own, which is absolutely irrational, since they do not admit that they happen by Allah's infinite power. This makes the evidence of an infinite power proof for its absence and opens the door to infinite impossibilities. That is, it opens the door to ways of denial that the mind cannot accept. For, in that case, it becomes necessary to attribute the infinite power that is peculiar to Allah and His infinitely perfect attributes like His all-encompassing knowledge to particles so that they can come into being on their own. This means not to accept a single deity but to accept as many deities as the number of particles.

7.4.1.3-They attribute Allah's works to nature

One of the reasons why naturalists are wrong is that they base Allah's works on nature. However, nature is an art of Allah; it cannot be an artist. It is a book of Allah written by the pen of power; it cannot be a writer. Nature is an embroidery; it cannot be an embroiderer. It is a notebook; it cannot be a bookkeeper. It is a law; it cannot be a power. The nature that they accept as the creator of things is the manifestations of the power, wisdom, and will of Allah, who creates everything out of nothing.

The nature that they accept as the creator of things is the manifestations of the power, wisdom, and will of Allah, who creates everything out of nothing.

7.4.1.4-They regard matter as pre-eternal

One of the points that the materialists are mistaken about is that they attribute Allah's attribute called pre-eternity to matter and accept it as pre-eternal.

They see the manifestation of Allah's power in the beings, but they do not know where it comes from and cannot understand where it is managed from; therefore, they speculate that matter and force are pre-eternal. Thus, they attribute the works of Allah to the movements seen in matter and to particles.

Allah is free from space, but He is everywhere; He is in the invention of everything and near everything. He sees, knows and manages everything. Can it be such insanity as to attribute the beings, which are His works, to inanimate, blind, unconscious, will-less, unmeasured particles and molecules that are shaken by storms of coincidence and to their movements? It is necessary for those who are a bit sane to know what an ignorant and superstitious idea it is.

Since they do not accept Allah, they are forced to accept numerous deities. In other words, they are forced to accept the pre-eternity and divinity of the innumerable inanimate particles since they are unable to accept in their minds Allah's pre-eternity and creativity, which are the requirements of His essence. However, these particles, which are regarded as deities, are like a regular and magnificent army that is moved under Allah's infinite power and command. How can the neat shapes, the beneficial results, the orderly and wise creations that are composed of those particles be attributed to the mindless, unconscious and ignorant particles? For, if there is an order and system in something, it shows knowledge, will and power.

7.4.1.5- They think the Creator must change too

There is a continuous activity and change in the universe. That is why they say that the being that makes this activity and change must also change from one state to another state and must not remain in the same state.

The change of the mirrors on the earth does not show the change of the sun in the sky but rather the renewal of its manifestations and movements. So, the change of mirrors, pieces of glass, water particles, etc. on the earth that reflect the sun's light does not indicate that the sun will change too. On the contrary, it shows that the sun does not change, and that it is fixed and permanent, but that the mirrors showing the existence of the sun are renewed and change.

Every being in the universe is a mirror on which the names and attributes of Allah become manifest and which show the owner of the names:

- Their creation shows the name **Khaliq (Creator)**.

- Their tidiness and orderliness show the names **Nazim (Organizer), Munazzim (Arranger)**.
- Their peculiar shapes show the name **Musawwir (Giver of Shape)**.
- The living beings show the names **Hayy (Living) and Muhyi (Giver of Life)**.
- Their death shows the name **Mumit (Taker of Life)**.
- When the beings that need sustenance are given sustenance, they show the names **Razzaq (Sustainer), Rahman (All-Merciful), Karim (Generous), Rahim (All-Compassionate)**.
- Their adorned and beautiful creation show the names **Muzayyin (Adorner), Jamil (beautiful)**.

Allah states the following in a verse:

*Behold! In the creation of the heavens and the earth, and the alternation of night and day, - there are indeed Signs for men of understanding.*²⁹⁴

Thus, as it is stated in the verse, a person who thinks takes a lesson from everything. There are lessons to be learned from the constantly changing activity in the universe and the constant renewal of the beings mirroring the above-mentioned names. One of those lessons is to know the existence of a constant being with unchanging beauty and kindness, a being that is creative and artistic, that provides sustenance, that does not need anything but meets all needs of the needy, whose existence has no beginning and ending, behind this beautiful, perfectly created but constantly changing screen of beings.

7.4.1.6- They do not know the wisdom behind the change in the universe

They do not know what kind of wisdoms are behind the continuous change of the beings in the universe. However, if the wisdoms behind the change taking place in the universe are known, the existence of the changer behind them will be understood. Some of the wisdoms behind the change in the universe are as follows:

Firstly, increasing their beauties.

Secondly, renewing their flavors.

Thirdly, refreshing for the display of new works of art.

Man always wants change due to his nature. The desire and wish to change things in a room, to change his clothes are inherent in man. Thus, Allah changes

the world, which is like the home of man, at any moment in accordance with his nature and makes His existence felt, showing Himself to eyes. Since there is a change, there will be a creator that changes these pages of the earth and sky, day and night, summer and winter, youth and old age.

Thus, a person who thinks of these meanings will increase the pleasure, enthusiasm and admiration he will receive from the world by understanding the wisdom behind everything and at the same time he will know Allah's existence behind these veils of change and thank Him.

EVALUATION QUESTIONS

- 1-With what qualities does a work show that its master is necessary?
- 2-What is the wisdom behind and purpose of the constant change and differentiation of beings?
- 3-What are the sources of the mistakes of the atheists and materialists in failing to find and understand the existence and oneness of a creator in the universe?

7.5. THE PLACE OF LOGICAL REASONING METHODS in understanding creation²⁹⁵

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1- The student understands 4 ways of searching for the truth in science.</p> <p>2-He learns that it is not possible to solve the secrets of the universe by reducing searching the truth to experiment and observation.</p> <p>3- He understands that the issues explaining the existence of man, adding meaning to creation and related to the meaning of life are within the scope of science.</p> <p>4 He understands the existence of a</p>	<p>1-Why is it not sufficient to understand man by examining only his aspects subject to the laws of physics?</p> <p>2-Does the brain work unconsciously too?</p> <p>3-Is it possible to understand what man thinks with the available techniques?</p> <p>4-Is it possible to code the human brain according to a specific program?</p> <p>5 Is the universe matter based on</p>

Comparing something with its opposite to understand it is a basic facilitator. For this reason, *Logical Reasoning* has an important role in understanding existence based on Coincidence/Chance and Design, which are two opposing views. The evolutionist view presents the existence of a chain of similarities in beings, from fish to reptiles and from reptiles to human beings as the greatest evidence of

The subjects that explain the existence of man that add meaning to creation and that are related to the meaning of life

evolution. On the other hand, existence based on design presents the conclusion that the whole universe comes from a single master as proof. This presentation tries to explain by reasoning methods that it is the most plausible option that there should be an external will for the first existence of species.

In the past, the issue of creation was considered a matter of faith. It was not considered a scientific category. It was called a social science that did not enter the laboratory, had nothing to do with experiment and observation. Even when religion was mentioned, they used to say religion was a social need. In fact, it was wrong to confine religion to a certain area. Religion is not only a social sphere but also an area of existence. Religion is a need related to existence. Man exists to understand existence, the meaning of life. When man is genetically examined, we see that there are 4

There are 4 methods to search for the truth in science.

1- Experiment and observation, exact science.

2-Reasoning methods, causal relationship.

3-Intuitions.

4-Faiths.

If one cannot find the results in the first three ways, he finds it with faith.

metacognitive genes that differentiate him from other living beings. One of the characteristics of one of these genes is that it is the **meaningfulness gene**. No living being except man asks the question “Why? An animal gives the same response, the same behavior to every event. Man responds differently to each event. And why is that? Because man has free will. The search for meaning is an important metacognitive characteristic in man. Another characteristic is the existence of **novelty search** gene in man. Man does not build his house like a house 1000 years ago, but an ant, a spider, etc. build the same house even after 1000 years pass. Sincenovelty search gene exists in man, evolution is also an important characteristic in man.

It is not possible to solve the secrets of the universe by reducing searching the truth to experiment and observation. In that case, reasoning methods should be

The next gene is related to the concept of **time**. No being except man questions the future and the past. The other beings do not ask the question, “*What will happen to my children in the future?*”

The fourth one is the genetic code related to death and **death consciousness**. Research is continuing about those genes and various evidence have accumulated about their existence. In such a case, man assumes religion as a social space that makes him relax and tries to make him happy. However, the subjects that explain the existence of man that add meaning to creation and that are related to the meaning of life are within the scope of science.

There are 4 methods to search for the truth in science. The first one is **experiment and observation**, exact science. The second is **reasoning methods**, causal relationship. The third is **intuitions**. In some people, intuition is of particular importance. There are even studies called “neurobiology of intuition”. They find the truth with intuition.

The fourth one is **faiths**. If one cannot find the results in the first three ways, he finds it with faith (Table 1).

Table 1

4 ways to reach the truth;

- 1- Experiment and observation,
- 2- Reasoning,
- 3- Intuitions,
- 4- Faiths.

Why in its scope? That is how theoretical physics came out. In theoretical physics; they first said, “*It should be particle physics*”. Those interested in nuclear physics found it theoretically. The MRI device came out 30-40 years later. MRI is the concrete form of theoretical physics. Theoretically, the way in which electrons rotate is seen in MRI. It came out theoretically and proved scientifically. Therefore, reasoning methods are the most important methods of science. We use it in psychiatry too. **Logical reasoning** is a method that tests one’s decision, attention, memory, and vision, hearing and memory processes related to it. These methods can be used to understand creation (Table 2).

Table 2

- “Reasoning” What is logical reasoning?
- Rules of thinking correctly.
- Definition, postulate, theorem, reasoning and proving.
- Causality, difference, similarity, timing, classifying, planning, analysis, interpretation, abstraction, ability.

7.5.1. Brain Regions in Logical Reasoning

The anterior region of the brain is related to paying attention, maintenance, directing attention, short, medium and continuous memory, patience, planning, designing, judging, reaction control, regularity, self-control, solving problems, thinking in detail, predicting about the future, drawing lessons from mistakes, understanding emotions and expression. Empathy, common sense, morale are characteristics of the anterior region of the brain.

There is a case called Elliot in the literature. This case, which is dealt with in neuroscience, is related to a successful lawyer in the United States. He was very successful; he had a house, car, yacht, etc. He suddenly underwent a personality change around the age of 40. He missed some trials, did not go to work, etc. He lay lazily; after a while, he went to see the doctor for a problem. A tumor as big as a mandarin was observed in the anterior region of the brain in the MRI. After this tumor was removed, he recovered his personality slightly. It was found out that the damage to the front region of the brain caused the personality change.

In fact, our brain does not work silently; it works unconsciously. We call what we call the unconscious/subconscious implicit memory. If we liken it a computer, the system files work in the computer though we do not notice them; similarly, the brain works though we do not notice it. These characteristics make man

7.5.2. Abstract Thought, Conceptual Thought, Symbolic Thought

There is a causal relationship between abstract thought, conceptual thought, symbolic thought and the brain. In the 1850s, a railway worker opened tunnels with dynamite. One day, while placing the iron, dynamite exploded and the iron

entered through his eye and came out of his head, damaging his brain. He fainted and lost one of his eyes. He suffered from epilepsy; afterwards, he came round, got well and started to use his hands and feet. However, his personality changed.

He was a disciplined man before but he started to belch loudly in the presence of people and make stupid jokes. He started to go home late and go to bed late. His personality changed completely. When these cases were considered together, scientists started to research: “*Is the region*

Our brain features refute the theory of evolution’s thesis advocating random existence. There is a brain that uses logical reasoning. This logic-based reasoning does not exist in other living beings.

known as the silent region of the brain a region related to our behaviors, ethics and personality?” In fact, our brain does not work silently; it works unconsciously. We call what we call the unconscious/subconscious implicit memory. If we liken it to a computer, the system files work in the computer though we do not notice them; similarly, the brain works though we do not notice it. These characteristics make man different from other living beings.

7.5.3.Reasoning Methods, Faith Based on Evidence

Our brain features refute the theory of evolution’s thesis advocating random existence. How can conceptual thought and symbolic thought emerge by chance in man? This cannot be explained according to the laws of physics. Therefore, it is an area where a causal relationship like DNA cannot be established now. There is a brain that uses logical reasoning. This logic-based reasoning does not exist in other living beings. There are four known methods of logical reasoning now.

Deductive method can also be called **analysis**. You reach the work from the doer, the smoke from the fire. There is a fire behind the mountain, but you do not see the fire; you see the smoke and you say by reasoning, “*There is smoke coming from there; there is no smoke without fire.*” You see smoke even though you do not see fire. If someone says, “*I haven’t seen the fire*”, you say, “*There is no smoke without fire.*” This is evidence of fire. In that case, you cannot say “*There is no fire.*”

The other one is the **inductive** method. The method developed by Aristotle was only the **inductive** method. We can give understanding creation and existence by examining the fly seen in Table 3 as an example to the inductive method. The inductive method was understood after Aristotle.

Table 3
Foundations Based on Evidence



Figure. Eye of a fly²⁹⁶.

Logical Reasoning + Evidence in the Universe + Divine teachings = The Fact of Creation

Examine the characteristics of an ordinary fly. It flaps its wings 500 times per second; it has 8000 lenses in its eye. These features are recorded in its DNA; it lives only a few weeks. What is its function in the universe?

Abduction was introduced afterwards. Modal logic was introduced in the 1920s. Induction is a method of reasoning that involves discovering the doer from the work, the fire from the smoke. The other one involves discovering the effect from the cause. One of them is the method of reaching smoke from fire and the other is reaching fire from smoke. (Table 4,5)

Table 4
Reasoning Methods

- **Numerical Reasoning.** It is reasoning through numbers with the ability to analyze the relationship of sequence.

- **Logical Reasoning.** It is reasoning through the ability to think and analyze based on logic.
- **Nonverbal Reasoning.** It is reasoning through the ability to analyze based on seeing and figures/shapes. It expresses the relationship of size, color and shape.
- **Verbal Reasoning.** It is reasoning through the ability to analyze and interpret written information.

Table 5**“Logical Reasoning”**

1. Deduction, Analysis, from the doer to the work, from effect to cause, *“fire becoming evidence for smoke”*.
2. Induction, from the work to the doer, from cause to effect, *“smoke becoming evidence for fire”*
3. Comparison, Abduction, Analogy, Syllogism, from minor premise to major premise, *“the trueness of the news about traffic accident”*
4. Modern Logic, Modal Logic, Modality. It caused computer and theoretical physics. It was defined in the 1920s.

Deduction, Analysis, from the doer to the work, from effect to cause, fire becoming evidence for smoke.

The marriage of mathematics with logic took place. The age of Informatics began (Bertrand Russell).

It makes a premise by taking into account the possible or probable universe that has the value of trueness in the universe we live.

When one sees a fire, he deduces that it has smoke but the opposite is also possible. That is, he decides that there is fire when he sees smoke. So, when he sees the smoke, he judges the existence of fire. To be able to understand the

Comparison, Abduction, Analogy, Syllogism, from minor premise to major premise, the *trueness of the news about traffic accident.*

reason when one sees the results: the first is to understand the cause, and the other is to establish a causal relationship.

You look at the whole in deduction. You examine a work and try to understand the outcomes.

In deduction, you see a fire and you establish a connection between fire and smoke. However, in induction, you look at the result, that is the work. You establish a connection with it and you find the doer. One of them goes from the specific to the general and the other from the general to the specific.

The other method is called comparison, abduction or analogy method. It is based on thinking of the minor premises and understanding the major premises. For example, someone came from the city of Şanlıurfa and said, "*There was a big accident; two people died.*" You might or might not believe him. Ten minutes later, someone else came and said, "*There was an accident; two people died.*" Another person came and said the same thing. You would no longer doubt that there was an accident. When a few people independent from one another said it, you would have no doubt that there was an accident.

It becomes possible to understand the major premise by acting upon some minor premises. This is called **abduction, analogy** or **comparison** method. In this way, it becomes possible to reach the truth, that is, to reach the truth by reasoning.

We can give the dialogue between two children in the mother's womb expressed in Table 6 as an example of the analogy method.

Table 6

Dialogue between two babies (Analogy example)

Two babies in the mother's womb *are analyzing life after birth.*

The first one:

- Arms, legs, eyes, mouths, ears are not necessary here? There must be life after this place.

The second one:

- No. Everything is here. I don't believe in what I don't see.

The first:

- There's someone who feeds us; we have umbilical cords. There must be a mother.

The second:

- I don't see her. If she existed, I'd see her. I'm comfortable. I don't care.

The first:

- I hear a song when it is quiet around. I feel that there's someone who loves me.

The second:

- These are coincidence. You are dreaming.

The first:

-We'll get out of here. I don't see it but I feel the existence of a life. The existence of a life is more likely than its non-existence.

The second:

-You're right. If there is nothing after this place, life will be meaningless.

The other method is modal logic. It is also called modern logic. It was defined in 1925-26. The method of finding the truth according to the modal logic is as follows: Suppose that you live in Istanbul. There was a big earthquake in 1999. Is it likely that there will be an earthquake right now? Possible but not likely. If it were likely, you would sleep outside; you would set up a tent; close danger but possible! You would not think of setting up a tent for a very weak danger. When analyzing an issue, it is analyzed by looking at which universe it is. In existence, that is the way of acting in modal logic; can we understand existence by reasoning like this?

I should first tell you about logic-based reasoning before I can explain to you its logic. Today, there is an analysis system developed for intelligence and reasoning tests using the reasoning methods. It is used in the form of computerized modules. There are SPM and COG tests, also called attention tests, non-verbal learning test called NVLT, long-term attention test called DAUF, and tests called WISC-R and WaisInt, etc. They are all tests that measure reasoning, intelligence, attention and decision-making processes, focusing, causality, difference, similarity, putting in order in time and abstraction. CAS, Tova and Moxo tests are tests showing attention tests. They are the tests we use in daily practice. They are about measuring a person's intelligence and reasoning power.

Those tests are important because man has the ability to use it. You cannot apply an intelligence test to an animal. You cannot do a reasoning test. There is no theory of mind in animals. Only human beings have it. There is even the theory of theory. In the theory of mind, when we see someone putting his hand into his

pocket, we think that he will take out his key; and when he takes his hand into his pocket when he goes to his car, you make assumptions about what he is going to do. This is the theory of the mind. For example, autistic people do not have it. An autistic person believes only what he sees. An animal does not have it either. An animal also believes what it sees.

There is also the theory of theory, thinking what the other person is thinking about. This is called theory of theory. All of them are the features in the human brain; man uses the theory of mind because of these features, which also distinguish between the autistic and the non-autistic. Autists are individuals who have no function other than eating, drinking, and reproduction. It turns people into ill people; and people who cannot produce abstract thoughts emerge with this illness. This exists especially in man. Why does this reasoning feature exist in humans and not in other living beings? This is the feature of understanding the existence of man. This is genetically coded in humans (Table 7,8,9).

Table 7

Theory Of Mind

As reasoning, it includes

- 1- being able to make predictions about the mental states and thoughts of others,
- 2- being able to form a theory about the mind of individuals other than ourselves by establishing a relationship,
- 3-ability to think about thought²⁹⁷.

Table 8

- **Intelligence and Reasoning Tests (Vienna Test System, Computer Modul)**
- SPM, COG
- NVLT, DAUF
- WISC-R, WAIS INT.
- CAS, TOVA, MOXO
- Those tests measure Focusing, Causality, Difference-Similarity, Timing, Classifying and Abstraction.

**Advocates of
positivist philosophy
said 200 years ago,
“We do not need
God.” This period is
still going on.**

7.5.4.Hypotheses of Existence

Hypothesis of Random Existence: The hypothesis of the autonomy of the universe, which says, “*Everything happened by chance/coincidence.*”. In this theory, nature produces everything. Nature produces rain. This hypothesis attributes divinity to nature.

The other is the hypothesis of the domination of rules

In this hypothesis, power is attributed to rules. That is, the rules are written texts like law. When we attribute power to the rules, we defend this hypothesis.

Design-Based Hypothesis of Existence

Apart from the hypotheses above, there is another hypothesis of existence called design-based hypothesis.

How can we analyze those hypotheses? The advocates of the random existence hypothesis state the following: There were polytheistic religions; then, man evolved and monotheistic religions emerged. This evolution continued and finally the following was stated: “*Man does not need god anymore.*” Moreover, Nietzsche said, “*God is dead.*” When Nietzsche died, Time Magazine wrote the following: “*Nietzsche is dead, and God is dead too*”

Nietzsche’s theory is not valid since he could not find a cure for death. Dealing with God, including the 20th century, was thought as going out of the scientific field.

By organizing this congress in the scientific world, we will put forward the design-based creation as a separate hypothesis against the hypothesis of existence based on chance/coincidence, nature and rules; and we will gather evidence for the transformation of this hypothesis into theory. We will transform the arguments about how and by whom was design-based creation made into a theory.

Table 9

Hypotheses of Existence

- 1-Hypotheses of Random Existence
- 2-Hypotheses of the Autonomy of the Universe
- 3-Hypotheses of the Domination of Rules

4-Hypotheses of Design-Based Existence (God)

Table 10

Reductio Ad Absurdum Method

- In this method, which is also called **Proof by Contradiction**, when the causality connections are determined and it is proved that three of the ways are impossible, it is understood that the fourth one is certain.
- Some people have reached the mountain top before. It is stated that there are four ways to go there. If a mountaineer shows that three ways are closed and that it is impossible to reach the top from them, it is understood that it is possible to reach the top through the fourth way.

Likewise, the theories explaining the existence in the universe are refuted by reasoning methods, the fourth way, “**the existence of an external arranger**” is proved.

Random Existence is Impossible According to Calculus of Probabilities

In the random existence hypothesis, calculation of probabilities is in question; the protein in the DNA knows when it will die and how long the lifespan of DNA is. When we look at the structure of DNA, we can see that only the one that knows the whole universe can do it (Table 11).

Table 11

Difference between Concrete- Abstract Reasoning (Thought)

A concrete thinker sees the seed in the apple. An abstract thinker sees the apple in the seed. When we look at the universe like this, we will see the invisible facts through the eye of the mind.

Similarly, when you look at the light, you conclude that it comes from the sun. You look at the light and even if you do not see the sun, you conclude that it comes from the sun or a similar source.

A concrete thinker sees the seed in the apple. An abstract thinker sees the apple in the seed. When we look at the universe like this, we will see the invisible facts through the eye of the mind.



Figure. An apple and its seeds²⁹⁸.

Something is perfect, esthetic, cheap, quick and comes into being suddenly. If you go to a contractor and say, “*Construct a building with the features mentioned above, that is, in the most beautiful and perfect way in all aspects; it should be the cheapest and built at once*”, he will chase you away. However, the whole universe is perfect in all aspects and it was created at once. On the other hand, the autonomy of the universe, the entropy law, requires an external arranger.

You put some water in a glass. If you do not heat it, it gets cold. Or, if you do not mow your garden, it will be covered with grass. The more entropy rises, the more things disintegrate. It goes from perfection to disintegration. Therefore, we need constant control to keep the universe going. Control is necessary for the garden to be neat, similarly, a creator is necessary in the universe.

As the existence of the table is certain, the existence of Allah is also certain by reasoning. The presence of a prophet is related to the law of abduction. The Prophet does not do anything wrong. He says, let them show if I am wrong. He says he will fight until he is destroyed (Table 12).

Table 12

Law of Abduction Foresees Invisible Reality

- If the **Law of Abduction** and Kitab Mubin (visible reality) exist, Imam Mubin (knowledge, order), that is invisible reality also exists.
- **The Claim of the Prophet**
- Find my mistakes (in the Quran) or I will fight you until I am destroyed. However, they preferred war and misery. They could not find any mistakes about me, if they had found a mistake, they would have been saved (They preferred running away to discussing)²⁹⁹.
- According to the **Law of Abduction** selective syllogism,
- 1st Premise “The Prophet does not do wrong things.”
- 2nd Premise The claim, “Show me if I have made something wrong”.
- 3rd Premise “I am ready to fight until I am destroyed.”

Table 13**Is the universe Substance-Based or Energy-Based?**

The invention of theoretical physics. According to Quantum Dynamics, every substance has wave property. First project, then work; that is, **first, abstract information; then, concrete information**. Quantum refuted dialectic materialism.

According to Quantum Dynamics,

- 1- Man is a conscious observer.
- 2- Everything in the universe both exists and does not exist.
- 3- They exist when they are observed; they do not exist when they are not observed.
- 4- Everything can be converted to digital format.
- 5- An electrical signal starts in the brain before making a decision.

Table 14**Hypothesis of Random Existence**

There were polytheistic religions.

They evolved into Monotheistic Religions.

Now there is no need for God.

Random Existence -Struggle for Life - Natural Selection- Survival of the Fittest.

Calculus of Probabilities regard existence on its own impossible due to the probability of 10^{50} .

Table 15

- **Is Random Existence Possible?**
- According to Modal Logic and possible, probable and current calculations of the universe.
- When we look at DNA, it is obvious that only the one who knows the whole universe can do it; for instance, when we look at the light, we understand that it comes from the sun. (Determinism principle)
- A conscious arranger is obligatory because according to the calculation of probabilities, it is impossible for something to happen by chance.
- It is contrary to the law of deduction, that is, impossible, for something to be perfect, esthetic, quick and cheap as well as happening at once, like the light being evidence for the existence of the sun.

Table 16**Is the Autonomy of the Universe Possible?**

- The law of entropy shows that an external arranger is obligatory.
- There is no consciousness in inorganic substances such as carbon, oxygen, hydrogen and nitrogen. The creation of a conscious being by living beings with no consciousness is as unreasonable as stones and soil becoming a palace on their own. It is against the **law of induction**.
- Man employs about half the number of the soldiers of a battalion for the formation, gathering and management of a battalion.

The Imagination of the Real Creator Makes it Necessary for the Creator not to Have a Partner

- The existence of two captains in a team and two headmen in a village shows that will, power and knowledge are not absolute and that they have limits. This state is not sustainable.
- **Contrary to the law of Exclusion.** It proves something to be proved by showing that its opposite is wrong.

The questions asked by the audience at the end of the article above and the answers given to them**Questions and Answers about theories of mind**

Question: Is there a gene region or lobe in the brain about reasoning based on logic that is different in man from other animals? Is there anything like that in monkeys? If we are to refute it, we need to have some data.

My second question is that I could not see any difference between theory of mind and theory of theory.

Answer: Let me start with the second question. In the theory of mind, you make a guess about what someone will do. For example, when he puts his hand in his pocket while walking toward the car, you say, "*He will take the key out of his pocket.*" However, in the theory of theory, when you talk to your addressee, you think about what he thinks. When you express your own opinion, you say what the other person thinks. One of them is related to your thought about the other person's thought and the other is related to your thought about the other person's behavior. Thinking about thought here is a different concept. In one of them, you think about the behavior and in the other you think about the thought (Table 5).

Question: Are the mind and consciousness the same. Do we know where they are in the brain?

Answer: Today, mind and consciousness are not the same. Previously, people used to say the mind and the body were separate. Now it has been understood that the mind and the body speak to each other. The mind is the function of the brain. The anterior region of the brain is the region of the brain related to logic. When this zone is removed, man becomes like a zombie. He controls his hands and feet; his body functions; he has animal qualities, but he has no human qualities. This occurs in people in whom the front region of the brain is removed. There are studies about consciousness now. There are theses claiming that consciousness is a holographic structure, that there is an upper brain in the quantum dynamics, that there is a quantum brain on brain, and that what establishes the connection with the spirit in man is the brain. There should be physicists in these congresses where these electromagnetic theses are discussed; quantum should also be discussed; there should be a congress where physicists, doctors and biologists discuss (Table 13).

EVALUATION QUESTIONS

- 1-What are the four methods of searching the truth in science?
- 2-Is it possible to solve the limits of the universe by reducing searching the truth to experiment and observation?
- 3-How would you define Imam Mubin and Kitab Mubin? What kind of a connection can be set up between them and the Law of

7.6.THE WONDERFUL STRUCTURE OF MAN INDICATES A CREATOR³⁰⁰

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student learns how much blood is circulated in the human body in a day.</p> <p>2-He knows that the blood system in the human body is about 150 thousand kilometers long.</p> <p>3-He learns that man is virtually re-created as his cells change every moment.</p> <p>4-He understands the nature of the antibodies that eliminate the harms</p>	<p>1-What is the meaning of and wisdom behind the circulation of blood in the human body?</p> <p>2-Can the vascular system that is thousands of kilometers long in the human body have been laid by itself?</p> <p>3-By whose plan and knowledge does the renewal of a certain part of the cells in the human body occur every day?</p>

7.6.1-The heart that sends ten tons of blood to vessels every day

All of the systems of human body and every organ of it have been created extraordinarily. For example, the heart, which is as big as a lightly squeezed fist, throws the blood, which is like the life water of the bodies, into vessels. The heart throws about 150-160 cm³ of blood, that is about a glass of water, into vessels at a shot. It amounts to 10 liters per minute. The amount of blood thrown by the heart into the blood vessels in one day is enough to fill a 10-ton tanker.

There is an average of 5-5.5 liters of blood in the body of an adult person; it is enough to fill three large jugs. As the same blood circulates the body, that is,

as the same blood comes to the heart and is thrown, 10 tons of blood circulates every day. Let us think how much the heart, whose duty is to throw 10 tons of blood into the vessels per day, works in a year and how long it works throughout life. Is it not necessary to thank the Creator, who created our hearts in such a marvelous way, as many times as the heart beats?

7.6.2 -Blood vessel network of one hundred and fifty thousand kilometers

There is a blood vessel network of 150.000 kilometers whose duty is to take the blood that the heart pumps to the organs like water pipes. If the thin, microscopic capillaries are also included, there is a blood vessel network that can surround the earth four times from the equator in the body.³⁰¹

The vessels can be likened to a closed water pipe system. The blood, which we can call life water, is carried in the blood vessels that are in a closed system. While most of the blood is water, it also contains oils, proteins, blood sugar and many other chemical structures. However, blood is not just a chemical compound. It contains blood cells, which are shaped elements of blood. Blood cells also include **erythrocytes**, that is, red blood cells, **leukocytes**, that is, white blood cells, and **thrombocytes** (platelets), which enable blood to clot. The number of red blood cells in one cubic millimeter is about **5-5.5 million**. Yes, there are more blood cells in the blood as small as a pin point than the population of a large city; they are all organized according to the work they do and they are all created based on fine calculations.

7.6.3- Man is created again every moment

We can liken the human body virtually to a building whose bricks are constantly renewed. Something like that is definitely not possible for buildings. If we make a slight renovation in a building, if we try to change only a brick, there will be dust all around. Changes and renovations that occur in the human body take place in such an organized manner that we do not even notice them. When these changes occur in the body, all of the activities of the body continue without any interruption. You can liken it to replacing the parts of an engine while the engine is running.

The material structure of man is renewed almost every year. However, man retains the same characteristics in terms of his traits and characters. No change takes place in them. We can understand it from the following fact: **There is a meaning that is not dependent on matter and does not change with it in man. That meaning is the spirit.** If the spirit were dependent on matter, there would be changes in spiritual feelings as the human body changed.

The material changes that occur in human life occur gradually. At the moment of death, this change will occur suddenly; the destruction of cells and tissues will occur in a short time. Since the change in the body throughout life does not cause any change in the spirit, there must be no destruction or alteration in the spirit at the moment of death. The divine power, which does not allow a change in the spirit throughout life, will preserve the spirit, which is the precious essence in man, in death too.

7.6.4- Regeneration of the skin

The most visible and best example of the occurrence of the regeneration in human body is in the nails and hair. Our nails and hair grow every day at a certain rate; this daily microscopic growth becomes visible in the course of time; all of the human hair and nails are renewed every 6 or 7 months. The top layer of our skin, which is called the epidermis, is renewed once a month. The epithelial layer, which forms the inner surface of our intestines, is renewed at least once a week.

The following question can come to mind: *“How does this regeneration take place in not only humans but also animals and plants, that is, in all living beings?”* The cells are renewed based on the measures imposed by God Almighty, who created us in an extraordinary way and who enables us to live based on a system. The cells that duplicate through a division called mitosis and the cells that are created anew replace the dead cells.

It is called **apoptosis** in medicine nowadays. Apoptosis is a word that means programmed cell death. In other words, the life of man continues with the manifestation of qadar (destiny); similarly, destiny plays a role in the lives of cells, which are building blocks of man. A brain cell lives until man dies but the lifespan of a cell in the top layer of the skin is about one month. Thus, under the manifestation of destiny, the cells die based on a system and newly created cells replace the ones that die based on an extraordinary system. The spirit is virtually a

mold and a model in every human being; a fresh and new body is dressed on this model every year.

7.6.5 -Twenty-five trillion red blood cells

The estimated total **number of red blood cells** in the blood is **25 trillion**. There are about 100 trillion cells in the human body. This means that the red blood cells constitute one fourth of the total number of cells in the body. Red blood cells carry oxygen, which is vital for other body cells, to cells. They also take the carbon dioxide, which occur as a result of the activity of the body cells, from the cells to the lungs.

If we could place 25 trillion red blood cells one over the other like coins, a column of **50 000 km** high could occur. If we could place all red blood cells in a single human being next to each other like a chain, we would have a length of approximately **187 500 km**. This is a length that can go round the Earth 4.5 times from the equator.

If all of the red blood cells in a human being were to be laid on the floor like a carpet, they could cover a surface of **3800 m²**. This is equivalent to approximately four decares of land.³⁰²

How can all this fit into a human body that is 1.5 to 2 meters tall? That is the extraordinary and miraculous aspect of the issue.

7.6.6 -2.5 million red blood cells die every second

Although regeneration takes place in almost every tissue in the human body, the most typical, obvious and beautiful example of it is seen in the blood as the regeneration of the red blood cells. 2.5 million red blood cells die in the human body every second, not every hour or every minute. This means the death of 150 million red blood cells per minute and 216 billion red blood cells per day in the human body.³⁰³

Another feature of the red blood cells is that they cannot divide in the way we call mitosis and they cannot produce baby cells, unlike most of the cells in the body. Red blood cells were not created with the ability to produce new cells to replace them when they die. So, what cells are to replace the 2.5 million cells that die every second in the red blood cells? Allah has created organs that produce blood cells in the human body in order to compensate for this great destruction.

The organs in which blood cells are created in the body are bone marrows, which we would not probably guess. The primary duty of the bones is to help the body skeleton stand like the concrete columns in buildings, as we can imagine. The concrete columns that help the buildings stand are solid, not hollow. The bones that help enable the body to stand are hollow, more precisely, filled with **bone marrow**. Bone marrow is the tissue in which the most cell regeneration called mitosis takes place. Bone marrow is the place where erythrocytes, namely, red blood cells, are produced. The red blood cells that get old die constantly and this deficiency is compensated by the red blood cells that are constantly created in the bone marrow.

2.5 million red blood cells die per second in man and 2.5 million newly and freshly created red blood cells enter into blood circulation from bone marrows.³⁰⁴

This delicate balance continues throughout life. If three million red blood cells entered into blood circulation instead of 2.5 million per second, the balance would be disturbed. Or, on the contrary, if two million red blood cells entered into blood circulation from bone marrows instead of 2.5 million per second, the balance would be disturbed again. 2.5 million red blood cells die per second and 2.5 million red blood cells are re-created. And this balance is maintained throughout life. This delicate balance, which is seen in every organ, every tissue, or even in every cell in the human body, is much more obvious in red blood cells, namely erythrocytes. **This delicate balance is just one manifestation of God Almighty's name Adl, that is, the one that creates everything based on a fine measurement and maintains it in a balance.**

This change, which takes place in the body cells, is also seen in the molecular level within the cells. The cytoplasm of the cell is seen in constant motion like boiling water in the microscopic films of the living cells shot with special microscopes. The change in the cell membrane can be shown as an example to this change, which takes place in the molecular level in the cell. A fat molecule in a cell membrane was determined to have changed its place 10 million times in only one second.³⁰⁵

7.6.7- Is a bone not renewed?

It can be thought that the bone tissue will not be renewed and that it will remain fixed as concrete columns in buildings. In fact, the bone tissue is one of the most renewed tissues in the body. It has been understood that 25%, that is one-fourth, of the calcium ions in the blood are replaced by the calcium ions stored in the bones every minute.³⁰⁶

The old structure in the bone tissue forms with the addition of the new bone tissue. All of the calcium in the bones in infants and 18% of it in adults are renewed every year.³⁰⁷

All regeneration activities are clear evidences showing that God Almighty intervenes consciously and controls and manages the universe, the earth, the molecules and atoms of humans, animals and plants all the time. Otherwise, a slight lack of control would lead to an irreparable mess everywhere; everything would be in chaos.

7.6.8- White Blood Cells (Leukocytes)

Along with red blood cells, there is another group of cells called white blood cells, namely leukocytes, in the human blood. They are fewer in number compared to red blood cells. There is only one white blood cell for about a thousand red blood cells in the blood. This rate does not change throughout life and remains at this level. If this rate, which is equal to one to one thousand, increased to two to one thousand, it would be an undesirable state for the body and an indicator of a disease.

There is only one type of red blood cell; there are no other subgroups. Although the white blood cells are few in number, there are sub-groups, that is, varieties of them. Let us deal with **lymphocytes**, which are a kind of white blood cells, a bit. There are totally about **one trillion** lymphocytes in the human body. About one billion new lymphocytes are created in the human body every day. They replace the lymphocytes that die. This balance of dying and newly created lymphocytes continues throughout life.

7.6.9- The antibodies that eliminate the harmful substances in the body

One of the important functions of the cells called lymphocytes is to produce and synthesize the chemical substances called **antibodies** against the **antigens** that harm the body and all kinds of harmful substances, microbes, etc.; antibodies eliminate the harms of the harmful antigens and virtually neutralize them.

In the human body, 10^{20} , that is, the number having 20 zeros after 10, **antibodies** are synthesized by lymphocytes throughout life. If all of the other cells in the human body existed but if these cells, whose duty is to produce and synthesize the chemicals called antibodies, did not exist in the human body, a person would die in case of a slight infection, an infectious disease, and infection with a small germ because there would be no chemical substances, antibodies, to defend the body³⁰⁸

This is new information that has been obtained as a result of studies and works of many years or even centuries. Who knows the needs of man, creates him in the womb according to the conditions of the world and sends him to the world since the creation of the first man? Who equips the cells in the human body against the harmful effects of bacteria and germs, and protects all humans and animals? Can the mindless, unconscious, blind and handless nature do these things? Is it possible for nature and coincidence to do these things, which require infinite knowledge, power and strength? They can only be the work of Allah, whose knowledge and power are endless.

EVALUATION QUESTIONS

- 1-With what energy does the heart, which pumps blood in the human body, work and how is that energy supplied?
- 2-Can the delivery of the nutrients in the blood carried by the vessels that are thousands of kilometers long to the cells in the human body take place spontaneously?
- 3-Is it a coincidence that a certain part of the cells in man are renewed all the time?

CHAPTER 8

8-RELIGION-SCIENCE RELATIONSHIP

8.1-NEUROTHEOLOGY, FROM NEUROLOGY TO THEOLOGY³⁰⁹

Prof. Dr. Nevzat Tarhan

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"The light of the conscience is the religious sciences. The light of the mind is the exact sciences. The truth becomes manifest with their harmony. Through those two wings, students become successful. When they are separated, bigotry occurs in the former; cheating and doubt occur in the latter."

(Badiuzzaman)

LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student learns how a thought that comes to mind turns into a belief. 2- He understands what neurotheology is. 3-He understands what the chemistry of love is. 4-He learns the behavior of the brain in drug use. 5-He learns the brain behavior of a	1-What does the universe's being energy-based, not substance-based, mean? 2-What is the function of mirror neurons? 3-What is the relationship between stuttering and the movement of brain nerves? 4-What is a Hadron particle? 5-Is it possible to reduce crime

In the current age of positivism, religious soundness has been replaced by scientific soundness. A person prefers scientific knowledge when there is a contradiction or suspicion of belief because he started to be taught scientific soundness after the industrial revolution. This exists in the laws of psychology; when a thought comes to your mind and when you add emotions to that thought, that thought can become faith. If that thought continues after being converted to faith, it becomes a habit after a while. If it still continues, it becomes a personality. This happens over a period of 6 months. For this reason, emotion must be added to

This exists in the laws of psychology; when a thought comes to your mind and when you add emotions to that thought, that thought can become faith. If that thought continues after being converted to faith, it becomes a habit after a while. If it still continues, it becomes a personality. This happens over a period of 6 months.

knowledge for that knowledge to be converted to faith. Adding emotions occurs only when the person is convinced. When the person hesitates, he no longer accepts it automatically; he opens two files in his brain. He opens a file of doubtful information and in such cases he can turn this doubtful information into action. That is why the faith in this age has to be investigative faith.

It is quite difficult for us to tell young people about realities by convincing them. Everyone needs to do it in their own branch. Creation is very important in this respect. Among theses of coincidence are coincidental existence and design-based existence. The thesis of design-based existence is more plausible than the thesis of coincidental existence.

We are trying to gather scientific evidence of this plausible way in this Congress of Creation. As we increase the level of evidence, the question marks in people's minds will fade away. The emergence of these facts about creation is very important. It is important because not only Turkey but also humanity needs it. When you look at all developed countries, you will definitely see that all of them are trying to find the truth. The famous physicist Stephen Hawking died a few months ago and everyone regards him as an atheist. Hawking had the following thesis: They will come from space, invade the world and change the world. He had the following expectation as a physicist: "There is a superior

community that uses high computer technology; this community is searching us and they come from the future”. He could not say, ”God,“ or “There is a creator” but he said, “There is, there must be, a superior community that uses high computer technology.” For this reason, he meant a being that existed. That is, there is a power that exists. He moves in the direction of reason. We certainly need to be interested in the scientific flow in this direction. The Creation Congress should continue in this respect. This was the second step. As Üsküdar University, we are always ready for the third step. It is our greatest goal to continue these congresses.

8.1.1-Human Brain

Let us go back to our topic; as a person who deals with man and human psychology, I find neuroscience important because the organ of human behavior is the brain. The emotions, thoughts and behaviors in our brain are shaped by certain chemicals.

The information we have has increased a lot lately; there are even studies on artificial intelligence. Today, industry 4.0 is mentioned. Industry 1.0 was in the industrial revolution; the steam power first emerged in the 1850s. With

Industry 1.0, machine power generated energy from water and steam. Industry 2.0 began with the discovery of electricity. With the discovery of electricity, production increased more with industry 2.0; the discovery of electricity made a second revolution. In the third stage of the third industrial revolution, automation emerged in the computer system. Automation began to form a turning point. Now people are talking about industry 4.0. 4.0 is beyond automation. Then, the Internet of things began; after that the era of autonomous robots began. There are simulations, system integrations, internet of things, cyber security, 3D printer, etc.

We see in these studies that autonomous robots will emerge. In the future, autonomous robots will do many things that are done manually. People feed dogs at home in the western society today. Why? To cure loneliness. In the future, dogs will be replaced by autonomous robots. Autonomous robots and learning machines will be able to chat with people, meet their needs and cure their

The human brain research project is considered as one of the most important projects of the 21st century.

loneliness. Maybe everybody will have autonomous robots in their houses to cure loneliness.

Artificial intelligence was brought to agenda at the World Economic Forum held in Davos and it was discussed that mind control could be applied. It was stated that it could be used to dominate the world. Google set up a persuasion laboratory. What are they trying to do there? They try to keep people in touch. There is a video on Youtube; then, another video; it directs our time and attention to it. This is how they control the mind: by managing our time and attention. That is how they rule the world. We see that our time is captured by them and even channels, social media channels. Applications and websites like Youtube, Twitter and Facebook deprive young people of sleep.

The new generation is called the Z generation; they are even called the alpha generation. Now a new generation is emerging. We have very serious question marks in our minds: What will happen to teenagers and children? We are living in a period where information changes very quickly, information is mechanized, and various facts are discovered. What does the human brain do in such a state?

There was a revolution in psychology. Accordingly, our brain is represented in every aspect as chemical. In 1994, Damasio wrote a book called “Descartes’ Error”. This book says, “Emotions are a scientific category”; thus, the concept of emotional intelligence emerged. Emotions were analyzed. Beyond emotions, spirituality was analyzed and the concept called neurotheology emerged.

8.1.2-Neurotheology

We will talk about neurotheology a bit: The rhythm, sensitivity and functions of organs are represented just like computer configurations; and the configurations explain the basic structure theory in the brain; that is, the information in the brain can be configured. We can do this in daily building treatments now.

New World Project: Human Brain Project. President Obama’s Brain Project, 2015. Obama started it as Brain Initiative as a 10-year project. The N20/Neuroscience 20 Summit was held prior to the G20 Summit. This year, it will take place in Argentina. We, as Üsküdar University, will join it to represent

Turkey for the first time. Why is it important? The N20/Neuroscience 20 Summit discusses artificial intelligence, nanotechnology and neurotechnology. There are currently 2,000 nano/neuro technology researchers in NASA. What is NASA? It deals with space. The new space of science is the brain. The new brain project started in 2005; and rat brain was simulated in 2015. Then, human brain was simulated and it was announced in 2018. Henry Markram, who runs this project, stated in his presentation at Oxford University in England that the human brain project could be used for mental illness. About 2 billion people in the world have brain problems.

The reverse 13.3 technique is applied to the brain of mammals with the Blue Brain Project. The Blue Brain Project will play an important role in the future of humanity. Obama has a saying: "We invested one dollar in the GENOM project and earned 147 dollars." The Brain Project is like that too. An investment is made in it. For example, there is a claim that a device that will transfer information from

the computer to the brain will be produced and that more revenue will be obtained from it than the Genome Project. It is considered the new version of the brain.

The US Commission considers human brain research project as one of the most important projects of the 21st century. The European Union has allocated 1 billion Euros to this project. Our colleagues are trying to better understand the basic mechanism of the brain in this project called the new version of the brain. The aim is to find ways of treatment for several psychiatric diseases such as Alzheimer's, schizophrenia and autism in this project, which will last for 10 years. The EU Commission has allocated a large budget. The brand of this project is in Switzerland. The Blue Brain Project combines micro electric power with the features of the genetic algorithm. It uses genetic code, electronics, and neural networks together. In other words, our biological and digital existence come together. Man is a digital being.

In the past, with the emergence of materialism, the universe was considered to be substance-based. After the discovery of quantum dynamics,

After the discovery of quantum dynamics, materialism was turned upside down. It was understood that the universe was energy-based, not substance-based. To be energy-based, first knowledge is necessary; then, energy is needed,

materialism was turned upside down. It was understood that the universe was energy-based, not substance-based. To be energy-based, first knowledge is necessary; then, energy is needed, after that, matter is needed; then, mathematics, physics, chemistry and biology are necessary. When we think of it as a hierarchy of sciences, we need to classify it like that.

Mirror neurons work like the wireless and connect with the brain of the other person. Mirror neurons broke the mold.

In that case, knowledge comes first, but dialectical materialism says, “Matter comes first but as a reaction to matter, dialectically, concrete information and concrete matter caused abstract knowledge to emerge.” However, it is seen after quantum that there must be information first. DNA indicates that there must be information first.

First, knowledge is necessary; then, power is needed followed by will. That is what the quantum thesis, energy-based thesis, says; the computational neuroscience artificial intelligence says it first has calculation, then practice and then action. You see a child here; he touches a stone in such a way that he seems to think that the stone is alive, will look up and speak. For, abstract thinking has not developed in a 2-3-year-old child; he has concrete thinking. A child begins to learn abstract thinking at the age of 5 and 6. That is why he makes animals talk. The brain learns abstract concepts afterwards. The information a child learns in the 0-6 year-age range is more than the information he learns throughout his life. We learn abstract information from the environment through social ways.

The information a child learns in the 0-6 year-age range is more than the information he learns throughout his

One learns reality after birth; it is not inherent. For example, a child holds a glass of water. He pours water on the ground; we think he misbehaves but he actually strengthens his muscles against gravity. A child who grows in a non-gravity environment cannot learn to walk; his brain learns to walk afterwards.

First, knowledge is necessary; then, power is needed followed by will. That is what the quantum thesis,

Energy Consumption of the Brain

Human brain is about 2% of the body weight but it uses 15% of heart flow rate, and 25% of glucose and oxygen that come to the body. The brain was regarded as a silent organ. According to the opinion of neuroscientists today, 5% of the brain works consciously and 95% unconsciously. There are system files in a computer. There are dozens of system files and they work in the background; we use only three to five files in the foreground. Just like the computer, we have other files in our brains. The configuration in the computer is very similar to the configuration in our brain. This is called cognitive neuroscience.

Let us examine the brain of a person playing tennis here: Sick group and healthy group: They say to the group: You walk around here at home in a healthy way. Imagine that you are playing tennis inside the MRI device. They check the sick group. Red areas are fast-working areas of the brain; they are the areas that consume a lot of glucose. There are red and yellow areas in the sick group, but there is no red, stressed area in the healthy group when they are told to walk calmly around the house. A healthy person can make his brain work when he is relaxed and in peace. Mirror neurons make up 20% of the brain. We learn to socialize through mirror neurons. We think about what the other person is thinking and develop theory of mind with mirror neurons. The same neurons work while eating, dreaming of eating and watching a person eating; they are called mirror neurons. Those mirror neurons work like the wireless and connect with the brain of the other person. Mirror neurons broke the mold.

There are 5 thousand, 10 thousand connections between one nerve cell and another one. What makes human brain a brain is the great number of connections.

We cannot explain through random existence how all these events occur. There are 5 thousand, 10 thousand connections between one nerve cell and another one. In the meantime, there is chemical ignition; the axon potential forms; chemical ignition takes place there; then, it is transferred to another nerve cell, and then to another nerve cell. There is only one or two connections between a nerve cell and another nerve cell in a bird's brain. The word "birdbrain" is to the point.

What makes human brain a brain is the great number of connections

How does human brain work? The person who tries to combine the connections in a disrupted brain is the model that best shows how the brain works: the network model.

Let us look at the brain of the person with attention deficit again. There are red areas, impaired metabolism in the brain. We record the waves produced in the brain; it is possible to fly a missile with electrodes and signals in the brain, and with the power of thought without using a joystick. A smiley face can appear. One can produce autonomic robots with the waves in the brain.

We can use it in the treatment now with the neurobiofeedback system. FDA approved Neurobiofeedback. The attention deficient has not been confirmed yet but there are studies on it. The waves produced by the brain are not coincidental waves, but significant waves. It seems we will be able to measure it in many diseases by revealing their meanings.

Some people go to see the doctor for their stomachs. The internist says, “*You do not have any problems.*” The intestines of the person work fast, but the problem is not the intestines. It is a chemical transmission disorder in the areas where organs are

Each of us has an internal drugstore in the brain, each one of us is a chemist. Which chemistry is related to which emotion? Dopamine is related to delight and reward; endorphin to pleasure and painkiller; adrenaline and noradrenaline to joy and vitality; oxytocin to motherhood and devotion; prolactin, cortisone, vasopressin and stress hormones to reducing sexuality and increasing blood pressure.

Human brain produces a mixture in every emotion like a chemistry laboratory. According to those states, the heart beats, the breath accelerates, the muscles contract, the pupils enlarge, the attention increases. They occur with the chemicals that the brain produces. The fusiform region of the brain is related to facial recognition, autonomic responses, eye movements and emotions.

16 areas like that in the brain have been detected to be in relation to 15 cycle behaviors. They emerge with psychiatric illnesses, seeking rewards, for example, addiction occurs when the reward-punishment system is disrupted. Addicts experience reward deficiency syndrome. The hippocampus is related to

recording data; the organs related to autonomic nervous system have most represented regions in the brain. Some people go to see the doctor for their stomachs. The internist says you do not have any problems. The intestines of the person work fast, but the problem is not the intestines. It is a chemical transmission disorder in the areas where organs are represented in the brain.

When the brain is restored, the organ also improves. It is seen that somatic marker hypothesis is related to several psychosomatic diseases and psychophysiological diseases.

When a child is afraid of the dog, the neural circuit explodes in the brain. When it explodes, the connection of the brain region that describes the word in the brain region that produces the word is broken off. When it breaks off, the speed of thought and the speed of adding meaning to thought is not the same;

8.1.3-The discovery that astounded scientists

Let us talk about a study published in National Geographic in 2014: They dissolved the fat in the brain of a rat with various chemicals. When the fat melted, a transparent brain remained. They gave another protein to the brain, which corresponded to one percent of the brain, revealing the large area where another neuron spread. A nerve cell circulated all over the brain, which is amazing. It is a serious discovery that a nerve cell circulated for several meters in the brain of the rat in 2014; it astounded scientists.

8.1.4- The Map of the Roads in the Brain

Let us have a look at the case of a tumor in the brain. It is mentioned as 26.54 (Fortin) case, but this person was not paralyzed. There is a technique called DTI 27.05. They had a TRACTOGRAPHY of the brain with a method called Diffusion Tensor Imaging. They screened the roads in the brain. The tumor had grown, squeezed the paths in the brain, but not blocked yet. That person was not paralyzed. A researcher sad that the motor function of the patient was very high. Therefore, the surgeon preferred to be more tranquil rather than aggressive. Acting upon the images, he tried to remove the tumor without damaging the intact

tissue. The person was not paralyzed but he looked as if he could be paralyzed soon. The surgeon removed the tumor and prevented that person from being paralyzed. That is a map of the roads in the brain.

Consider Istanbul and Erzurum. Is it possible for the roads between these cities to have formed coincidentally? In thousands of years, people who went from Istanbul to Erzurum built those roads. How could the ways in the brain have been made without any external intervention?

If smart roads formed in the brain on their own, why did the roads between cities not occur on their own for centuries? It means an external will there did not choose it, but an external will preferred to have roads in the human brain. This shows how impossible the formation of roads in the brain by coincidental existence is.

Let us have a look at the way the human brain works: Almost all parts of the brain work while producing words and forming words. Even teaching words makes every part of the brain works. There are stutterers; our teachers used to say, “He was afraid of something; he was afraid of a dog and his tongue was tongue-tied.” We asked our teachers about it. They said it was not scientific. They said something like that could not happen but its scientific basis has been understood now. When a child is afraid of the dog, the neural circuit explodes in the brain. When it explodes, the connection of the brain region that describes the word in the brain region with the region that produces the word is broken off. When it breaks off, the speed of thought and the speed of adding meaning to thought is not the same; therefore, the person falters and stuttering occurs.

8.1.4.1-The Chemistry of Love

When the brain is disrupted, the person is taught to speak again. Therefore, the network structure in the brain is a source. A source of the chemical structure in the brain is the chemistry of love. The chemistry of love is an interesting topic. When you fall in love, your sleepy mood disappears. It is about the attraction feature of love. The smell particles related to sexuality are connected with this attraction. Chemicals, dopamine, serotonin, growth hormone, appetite, satiety, hunger and sleep in humans are chemicals related to it. When they are secreted very much, the person becomes very energetic and when they are secreted a little, the energy becomes less. It is about the heart and physical activities. When

testosterone and estrogen hormones are secreted excessively, they are connected with the sense of love; smell particles are also associated with the feeling of love; oxytocin and vasopressin are related to the chemistry of love chemistry love, oxytocin is secreted the most in breastfeeding mothers.

Think of the mother-child attachment; the mother is so attached to her child that she sees her child as a part of her and sacrifices herself for her child. For example, when a fire breaks out and the nest of the swallow starts to burn, the swallow immediately goes to the nest and rescues her young. In some cases, the coward chicken attacks the lion. Why? It was created and genetically coded like that. Oxytocin is secreted in such a way that it thinks it is another animal. The brain does it. Oxytocin is produced synthetically today. It is given to male monkeys in Switzerland. They become more interested in the females and in their offspring; they become more interested in furry things. Oxytocin is sold today and it is given to some married couples. They are advised to spray it into their noses before going to bed; it is defined as love hormone. However, the ideal thing is to let the brain produce it on its own.

When it cannot be taught, they attempt to activate a sense of love with synthetic applications. Since the body cannot be given oxytocin 24 hours a day, the intelligent person activates the pharmacy in his brain. He releases his own oxytocin; physical contact increases oxytocin. For instance, hugging increases oxytocin. Therefore, we tell married couples to sleep by hugging each other even if they are cross and even if there is no sexuality. When they lie by hugging each other, oxytocin is secreted and the bonds are strengthened.

Physical contact is one of the languages of love. Another language of love is speaking; speaking is a language of love; giving each other presents is a language of love; eye contact is a language of love; so is helping. Therefore, when we use the language of love, the brain secretes oxytocin. When oxytocin is secreted, attachment occurs and the feeling of love occurs in a person. Love is derived from the word ivy in Arabic. The ivy is attached to things so much that it dies when the thing it is attached to dies.

The feeling of love is such a feeling; it reached such an ultimate point in Layla and Majnun that Layla and Majnun fell in love but when they came together, their love ended. Then, Majnun said, "Why was this love given to me?" For divine love. Then, Majnun left Layla and headed toward divine love.

However, if Layla and Majnun lived now, we would hospitalize them in psychiatry ward; there would be no love left. He could reach Layla but not God. That is probably one of the risks of science. If there was such a pathological love at the moment, it could be cured; the people of letters will get angry but this is one of the cold faces of science.

8.1.4.2-The Behavior of the Brain of a Drug Addict

Let us have look at the brain of a person who takes drugs. After taking ecstasy, the serotonin tanks in the anterior region of the brain are emptied. The over-stimulated serotonin-producing cells are emptied. Ecstasy is such a substance that after receiving it, the brain feels orgasm 2-3 times more than normal orgasm and it lasts for hours. Then, the brain returns to normal in two weeks. For three weeks, the person becomes too weak to raise his arms and legs; he becomes sluggish, cheerless and depressed. It removes all of the serotonins in the brain at once. Those who take ecstasy once take it again and again to reach the first pleasure but they never get it. Then, they become addicted.

8.1.4.3- The Brain of a Schizophrenic

The anterior region of the schizophrenic person's brain is not active because there is an encapsulated area in this person's brain. This person lives in a separate world. He makes it rain, rages wars, and corrects the world. He thinks he is the Mahdi. He lives like that. We had a patient who told us that he was the Mahdi. There is definitely someone in our psychiatry department who claims to be a Mahdi. He received treatment and after three or four weeks he said, "I am not the Mahdi", but we doubted his statement. We questioned him a little; he laughed and said, "I did not give up the claim of Mahdi, but I decided to be a healthy Mahdi." I said, "It means he has not given up the claim of Mahdi; we have not been able to cure him." When I take this person out of that world and when I say to him welcome to the realities of life, schizophrenia destroys the realities of life. He is very happy in that world; that is how the schizophrenic's brain works. There is an active area in that capsule, but the executive part of the brain, which makes man real man, does not work well in those people.

8.1.4.4- The Brain of a Person in Depression

The state of a depressed person, is as follows: The function of the anterior region of his brain is impaired. After the treatment, that area of the brain becomes normal. Before the treatment of the person suffering from depression, the beta waves in the anterior region of the brain are active and

The brain is the intermediary organ in which our spirit structure connects from the realm of meaning to the realm of matter. When the brain is

magnetic stimulation treatment is performed. After this treatment, this person also recovers from ED 35, Anxiety 33; the anterior region of the brain improves. This person actually has OCD, mood disorder; what we call depression is actually a brain disease. This happens because the brain's chemistry has deteriorates.

They are not psychiatric illnesses; people make a mistake by calling them so; they are brain diseases. The spirit is a separate structure. The brain is the intermediary organ in which our spirit structure connects from the realm of meaning to the realm of matter. When the brain is disrupted, the spirit cannot express itself. It is useful to know this fact.

Quantum Physics

Let us move on to Quantum Physics. It is energy-based universe model. The journey of the radiated energy is important.

There is a book called *InançPsikolojisi*. It was published in 2010 and was later translated into English with the name "Faith in the Laboratory" since faith was connected with the neurobiology of faith. It is being sold in amazon.com now. The graphics were also translated into English in the book. Energy is in question here; energy used with medical purposes. You see frequencies higher than 10, like 20 and 18. This frequency increases. According to some views, when man dies, his body lessens 21 grams. What happens? Does the spirit leave? What happens to 21 grams? The electrons stop rotating; it is said that electron loss occurs even though the matter does not lessen. Matter, gamma rays, x rays, ultraviolet rays, naked eye, infrared, radar, microwave, television, short wave, standard radio, astronomical radio, gravity, graviton particle are in question. Air is here; photoenergy particles, electron graviton, dark matter that attracts planets is a debatable issue.

Psychon is also theoretical knowledge, a hypothesis. Currently, the quantum energy band of the holographic universe is subatomic particle.

According to the atomic model, neutrons, electrons, protons show 4%. 94% is called dark energy. The nature of this is unknown. This dark energy is also called spirit or psychon.

We are where physics ends right now. For after the speed of light, physics ends. So what? There is a controversial important area called photon telepathy to see if there are radiant beings.

While the CERN experiment was being conducted in Switzerland, the photons in a laboratory in Chicago moved simultaneously independent of time. Thereupon, a matter-independent energy particle emerges. It is called the Hadron particle. This is the new field of quantum now. Why do I say quantum? What the bleep do we know? A quantum physicist, a theologian and a psychiatrist discuss consciousness together. As a result of the discussion, they decided to do an experiment. The experiment done in Washington DC is as follows:

8.1.5-Crimes Decrease Twenty-five Percent with Prayer

They wanted to do an experiment with a thousand Buddhist monks in Washington DC. They claimed they would reduce crimes by 25%. Then, they went to the police chief. He laughed and said, "*It sounds impossible like saying it snowed in July.*"

A thousand Buddhist monks went to Washington, DC. They prayed there for a month. They looked at the statistics a month later and saw that crimes decreased 25%. The theologian, the Quantum Physicist and the psychiatrist discussed the results. They came to the following conclusion: Those prayers are directed to the energy and flow in the universe. Aggressive emotions in humans may have decreased and crime may have been reduced. We can explain it with quantum.

There is an experiment. You can object scientifically to the result obtained in this experiment. Scientific methodology was used because there was a supernatural reality; it was revealed. As well as revealing the supernatural reality, we can reveal the existence of Allah through scientific methodology. Therefore, this Congress of Creation is very important.

8.1.6-Peace in the Belief of a Muslim

There are three thoughts in quantum-based thinking. One is deep thought: consideration; one is transcendental emotion: meditation, and the other is contemplation: metacognition. That is, to think about thought, to think about what you think.

To be able do this is referred to as third wave psychotherapy (metacognitive treatment) in psychiatry. If a person believes, *“There is an external force in the universe that understands me and knows me. He can help me”*, he finds solace and understands his helplessness and weakness with this treatment technique.

A person who can surrender to a high power, a high intelligence, can correct several psychiatric problems. He can cure his traumas, otherwise, he experiences a terrible rage. He experiences a terrible hatred and

A person who can surrender to a high power, a high intelligence, can correct several psychiatric problems. He can cure his traumas, otherwise, he experiences a terrible rage. He experiences a terrible hatred and pain. The person is relieved when he believes in the control of someone who knows everything. This is actually something that expresses the peace of the Muslim in his belief. I see that Muslims are not aware of the peace provided by their belief. It is so valuable. When you feel severely weak and powerless in the face of events, diseases, and disasters, there is an external power that knows everything, controls everything, has the key to everything, and controls everything. He hears me and he understands me. *“There is an external power who knows everything, controls everything owns the keys to everything, and dominates and controls everything when I feel weak in the face of incidents, diseases and misfortunes. He hears and understands me.”* When you think like that, you feel very peaceful and relieved as if a rope comes down from the sky to save you when you are alone in a jungle.

I see that Muslims are not aware of the peace provided by their belief. It is so valuable.

That is peace that belief gives man. It is a great source of peace for the people who are hit by misfortunes. In fact, more than 50% of people are hit by misfortunes. Weak, poor and disadvantaged people amount to 50%. The 50%

strong people in the society are not aware of it, but at some point in their life they will realize it.

Therefore, Mawlana used the way of love to reach Allah. However, Badiuzzaman Said Nursi states the following: *“They seek a way that is more effective than love to reach Allah; ‘use the way of weakness, poverty and meditation’.”*

In this age, anyone who understands the weakness of love can find Allah more easily; but if he finds God in love, he may be confused in that way because there are many things that can mislead love. There are false sheikhs and so on. Many things can mislead people, but the way of weakness and poverty is more appealing to the people of this age. He can reach it with deep thought. This Quantum idea. Social entropy, lies, evil. Is evil in Pandora’s box now?

8.1.7-The Problem of Evil

As you know, the biggest claim of the people who advocate Atheism and Deism is the problem of evil. Why did Allah create evil? Freud, who could not solve the problem of evil, asked the following questions in the books related to atheism: If God is strong (David Hume thesis), why do these children die? Why does evil exist? Why did God create evil? Why is the duty of creating evil given to a creator? He could not solve the problem of evil.

Allah created a being that can do good all the time. Angels do only good deeds; it is impossible for them to do evil. He created Satan with a tendency to do evil. The creator wanted to create a being that has the freedom to do both good and evil, that can choose between good and whose freedom He wanted to test. That being is the human being. Man can do both good and evil deeds. However, he set the Prophet (pbuh),

Man can do both good and evil deeds. However, he set the Prophet (pbuh), who had the opportunity to do both good and evil deeds but who always did good deeds, as a model for us.

Evil dominates when good does not exist. Thus, if good people sit lazily, they will be held responsible. It is enough as evil for good people not to do anything. Then, good people have to be proactive.

who had the opportunity to do both good and evil deeds but who always did good deeds, as a model for us.

While there is a model of doing good and evil, The best model for doing good deeds served as a prophet for 23 years and always preferred good deeds though he had the opportunity to do both good and evil deeds. Allah advises us to be like him; He shows us the Messenger of Allah as a role model and as a test for our minds.

Some people who had the opportunity to do both good and evil deeds were created. A good example of this is Merkez Efendi. Sümbül Efendi was the teacher of Merkez Efendi. There is a cemetery called Merkez Efendi Cemetery in Istanbul. There is a mosque, a tomb near it. Once, Sümbül Efendi summoned three of his students. He asked them, "How would you create the universe if you were in God's place?" one of them said, "I would make everyone good." Another one said, "I would eliminate all evil." The third one, Merkez Efendi, said "I would leave everything as they are." After that, he was given the nickname Merkez Efendi.

For, there is a wisdom behind Allah's creating good and evil in balance. For, there is a test and death. We are not in an immortal world. Those who prefer the good 51% throughout their lives and those who prefer the bad 51% will pass or fail the test at the end of the test, at the end of life.

8.1.8-The universe is moving from order to disorder

We deal with it in terms of social entropy too. The second law of thermodynamics: **Entropy**. According to this law, the universe goes from order toward disorder. If entropy is high, there is disorder. For example, if we do not keep our room, house, garden tidy, there will be mess there. If we do not enlighten this place, it will be dark; if we do not heat this place, it will be cold. In other words, the order continues with regular support. That Entropy Law is the second law of thermodynamics: the law of energy.

Thus, when we look at the universe, we see that there has been a constant external intervention since the first explosion in the universe. Energy is given constantly; light is also given. It means there is an external force; there is a Creator independent of time and space. There is a Creator who is free from time and space. This Creator gives them.

It is enough for us to be held responsible to spread our legs and drink tea by waiting for the

This also points to tawhid (oneness). It has a place outside thermodynamics too. Man has the potential to do infinite good and to do infinite evil. Allah created our souls like that. Whichever we choose, the good or the evil, the result will be manifested accordingly. The evil spreads spontaneously.

Evil dominates when good does not exist. Thus, if good people sit lazily, they will be held responsible. It is enough as evil for good people not to do anything. Then, good people have to be proactive. It is necessary for good people to make efforts to spread good deeds. If we do not do it, the universe will go toward disorder and Doomsday will strike.

Therefore, it is enough for us to be held responsible to spread our legs and drink tea by waiting for the Mahdi to come. Thus, we need to be proactive and try to spread goodness. Evil has entropy; there is social entropy and lies; that is evil actually. The box of this evil opened with the creation of the universe and man. The test of humanity began with the opening of. Man can rise to the top of the minaret or go down to the bottom of the well.

You may be like Abu Bakr or Abu Jahl. We are left with a choice between these two extremes. These choices will be the decisions we make. The human brain has a feature; the front region of the brain does it. It says do it or not do it, yes or no, reject or accept. We immediately make a decision; for example, I have come here, or I haven't; I have denied Allah or I haven't.

Every moment we make choices; we will be held responsible for our choices. They are somehow recorded. Everybody will be rewarded for the good deeds and punished for the bad deeds. There is a Social Entropy Law.

EVALUATION QUESTIONS

- 1-How is a thought that comes to mind converted into faith?
- 2-What is the meaning of neurotheology?
- 3- What is the Chemistry of Love?
- 4-How is the brain behavior of a person who is in depression and brain behavior of a drug addict?

8.2- RELIGION-SCIENCE RELATIONSHIP IN THE COURSE OF HISTORY³¹⁰

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student understands the meaning of religion of revelation, institutionalized religion and distorted religion.</p> <p>2-He learns that Islam does not conflict with science, on the contrary, that it encourages science and protects scientists.</p> <p>3- He understands that sciences are based on the names of Allah.</p> <p>4- He understands when positivism</p>	<p>1- What is the meaning of the statement “<i>Science is a purely relative activity; it is not absolute</i>”?</p> <p>2- Who is the philosopher that transformed science into a religion, changed theology into natural science and the laws of Allah into Natural laws?</p> <p>3-How would you interpret the saying “<i>Islam is the master and guide of sciences, and the father of the real sciences</i>”?</p>

When religion science relationship in the course of history is viewed, it is seen that these discussions in the West began in the 17th Century with scientific revolutions and that they began to be dominant at the beginning of the 20th century. Therefore, the distinction between science and religion is not valid for all ages. In the ancient civilizations, scientists and

clergymen were generally the same people. The tension and conflict between religion and science emerged primarily in Western societies in modern times. This understanding, which became stronger in the course of time, has caused various discussions among philosophers, theologians, scientists and other researchers for a few centuries³¹¹.

We see that there is no discussion of religion and science in the classical Islamic culture; instead, we see religion-philosophy and revelation-mind discussions.

Ghazali (1058-1111), who represented the East of Islam, was on one side of those debates and Ibn Rushd (1126-1198) from Qurtuba, who represented the West of Islam, was on the other side. The religion-science debates that emerged in the West have influenced Islamic communities since the 19th century.

The tension and conflict between religion and science emerged primarily in Western societies in modern times. This understanding, which became stronger in the course of time, has caused various discussions among philosophers, theologians, scientists and other researchers for a few centuries

Although the point that these discussions have taken us is different opinions and suggestions, as Max Weber (1864-1920) puts it, “*there is no longer a place for religious experience in modern society*”³¹². What Weber means by ‘*the disenchantment of the world*’ is that the religion will lose its traditional power and role in modern societies, and will be replaced by science based on rationality³¹³.

The main reason behind the opposition to religion, pioneered by some atheists, Marxist and Darwinist philosophers, is the fact that Christianity, which had been distorted, and the church opposed science and scientists in the name of religion in the Western world. In this attitude toward religion, Islam, which is the true religion and which protects science and scientists and encourages scientific studies, was lumped together with Christianity, which tried to destroy them by not giving them the right to life.

This has been one of the biggest mistakes in the history of science. This chapter will try to explain the details of the issue.

8.2.1-Religion-Science Relationship: Four Models

Ian Graeme Barbour (1923-2013), who made a breakthrough with his studies related to religion-science relationship and made significant contribution to the issue, presents four "models" about the nature of the relationship between religion and science. With this classification, he aims to make the discussions of religion and science in history more meaningful. Although there are other classifications regarding the issue, Barbour's classification is generally accepted despite some criticism since it is *accurate*.

Barbour's four models on interaction between science and religion consists of "conflict, independence,

According to John B. Cobb, one of the famous process philosophy thinkers, "Barbour has no other contemporary thinker who made the original, profound and continuous contribution to the integration needed between science and religion." Therefore, this classification is often used by many scientists to explain the relationship between religion and science.

Barbour's four models on interaction between science and religion:

1-Conflict

2-Independence

3-Dialogue

4- Integration

1. Conflict

In the West, religion and science make contradictory and irreconcilable claims related to the same field. Since those contradictory claims could not be reconciled, the conflict of religion-science between the church and scientists became inevitable.

2. Independence

Religion and science have different fields. Science and religion are completely independent of each other in terms of their boundaries, methods and purposes. Science tries to explain objective, general and reproducible data. As for religion, it explores the existence of order and beauty in the realm and experiences in our inner world (on the one hand, crime, anxiety

and meaninglessness, on the other hand compassion, trust and charity). For example, when evolution and creation are in question, science seeks to answer the question “How? And religion the question “Why?”. Therefore, there can be no conflict between science and religion.

3. Dialogue

There may be both contradictions and similarities between science and religion in terms of structure. This can only be demonstrated through dialogue. The aim of the dialogue is not to reveal the contradictions between science and religion, but to reveal similarities. Barbour deals with the religion-science dialogue in two parts: limit questions and methodological parallels. He states that “*science can understand the data revealing the problems pointed out by religion*” as a result of this dialogue.

4. Integration

Religion and science can establish a partnership in a systematic metaphysical synthesis. The intense relationship between science and religion, which has continued for centuries, shows that these two fields are a whole. Einstein wanted to draw attention to this point when he said, “*Science without religion is lame, religion without science is blind*”³¹⁴.

Muhammad Abduh’s views on the relationship between religion and science are a good example of it. Muhammad Abduh states that there is no contradiction between mind-science and religion, that they both come from the same source, that science shows the means which support our material life and by which we can benefit from the forces of nature and teaches us to be happy in this world, that religion takes us to happiness in the hereafter by developing our ethical faculties and educating our spirit and that the world will not end before science and religion become brothers as the Quran and mind want³¹⁵.

Barbour, who made the classification above, emphasizes dialogue and adaptation models. Thus, he supports a systematic synthesis that transcends both natural theology and theology of nature. In other words, it aims at a metaphysical synthesis to which both science and religion contribute.

Another important point is that when the discussions about religion and science are viewed, it is seen that religion and science have different meanings in different civilizations and they are based on different understandings. When this distinction is not taken into consideration, confusion of concepts and misunderstandings become inevitable. From this point of view, it will be useful to define the concepts of religion and science though briefly.

Religion

The first point to be emphasized about religion is related to the source of religion. Although there are various views on the origin of religion, according to Muslim scholars, there is no doubt that the origin of religion is divine. The definition of religion by Sayyid Sharif al-Jurjani (1340-1413) is a good example in this regard. According to that definition, “Religion is a divine law that invites sane people to adopt the truths informed by the prophet”³¹⁶.

Muhammad Hamdi Yazır, on the other hand, takes into consideration the classical definitions related to religion and defines it as follows: “A divine, sharia and nation that lead sane people to good deeds and blessings with their own choices, a way, law and spiritual motive that enables the voluntary acts of human beings to lead to the purpose of goodness and happiness”³¹⁷.

In the following definition, Açıkgenç summarizes the views regarding the issue in an inclusive manner:

*From the Quranic perspective, the source of divine religions is Allah. He is the only authority to send religion. Religions are not a product of humanity that were fabricated by humans and that developed and reached the present day. On the contrary, they were sent through people who were chosen by Allah from the divine source and whom we call prophets but who are called messengers in the Quran*³¹⁸.

As it is understood from the definition, although religion is not based on mind, it is not contrary to mind; it is not irrational. Hence, “contrary to what philosophers like Freud, Durkheim and Marx say, religion is not an

institution developed by human beings with the intervention of social, psychological, rational and similar factors”³¹⁹.

According to Açıkgenç, who analyzes the concept of religion in the Quranic concept, it is possible to mention three kinds of religions:

Revealed religion: Religion that is pure revelation and that has not been interpreted.

Institutionalized religion: Interpretation of revealed religion through correct ijtihads and its use by the community.

Distorted religion: Interpretation of the first two types of religion wrongly and their practices that emerge with changes based on the desires, wishes and interests of human beings³²⁰.

Conflicts and problems related to the relationship between religion and science are mostly related to the interpretations in the last two types. As it can be seen from the classification above, “we cannot intervene in religion, in the first sense, that is, in the way since it came through revelation and without having been interpreted by human beings, with our minds since timeless and divine. However, *we try to understand it with our minds.*”

Religion, in the second sense, has a social context because it is developed by ijtihads and it has historical features. There is no problem in interpreting it and rejecting it when necessary.

Science

Açıkgenç says that science is a “full human activity” and makes the following definition in the light of the data obtained from the history of science:

The regular set of knowledge that is formed by denotation with the scientific awareness of the integrity of the theories obtained by a certain method about a clearly and precisely defined subject in a process in which knowledgeable people are effective is called science.³²¹

Science is a purely relative activity; it is not absolute.

The importance of this definition related to our issue is clear in three aspects:

- Religion can make significant contributions to scientific knowledge by initiating a process that results in the formation and birth of sciences,
- Science cannot be handled independently of the society it is in (sociology of knowledge),
- Science is a purely relative activity; it is not absolute.

It is important to consider those definitions in the discussions of Religion and Science. For, the healthy understanding of religion-science discussions that emerged in the Western Civilization and then affected other cultures and civilizations with the spread of this civilization to the world for imperialist purposes depends on it. It is clear that the definition of religion in the Western Civilization is not the same as the definition we have made above³²².

The contemporary Muslim thinker Naquib al-Attas (d.1931) points to the distorted “understanding of religion” of Western civilization, which considers knowledge to be the sole authority by absolutizing it and destruction it caused through secularization, and states that secularism causes people to lose their Islamic identity and social integrity. He states that knowledge, which is the product of this methodology and which is presented as absolute knowledge, brings about crisis rather than peace³²³.

8.2.2-Breaking in Religion-Science Relationship

The relationship between the positivist understanding of science and religion-science that emerged in the 16th century began to be against religion. Religion and everything related to religion were rejected as superstitions in the name of science. As a result of the positivist understanding, “reason” (rationality) was perceived as the most fundamental feature of science. The other activities of obtaining knowledge were interpreted only as comments or irrational discourses³²⁴.

8.2.3-Positivist Movements in Anatolia

The history of positivist interpretation of science in Turkey goes back to the beginning of the Tanzimat period (1839). One of the results of the

Tanzimat Edict is the emergence of the distinction between schools and madrasahs, and the state's using its influence in favor of schools. As ŞerifMardin describes concisely, this duality, which made its presence felt very much since the 1860s, continued with schools getting stronger than madrasahs.

Schools, where modern sciences and technology were taught, turned their faces to the future, believing that they would get the contemporary spirit and that they would solve all the problems of the country with positive science while madrasahs sought the solution in a long history that could not renew and that could not carry to the current time³²⁵.

When we look at those discussions, we see different segments of the community. Intellectuals like HüseyinHilmi and Said Halim Pasha, who thought the salvation of the state would be through the unification and integration of Islamic culture and Western culture and civilization, were on one side.

Those who gathered around ZiyaGökalp (1875-1924) and thought the solution was to reconcile Islamic ethics and Turkish traditions, to take the knowledge and technique of Europe for development were on the other side.

However, materialist positivists such as Baha Tefvik (1884-1914), Ahmet Nebil, SüleymanSırrı, Abdullah Cevdet (1869-1931) and TefvikFikret (1870-1915), who were in the second group, advocated the idea that "religion" was not necessary for the salvation of the country.³²⁶

According to them, what had to be done was to accept the West as a whole. According to Dr. Abdullah Cevdet and his friends, the only thing to do to save the Empire from collapsing was to be Europeans.³²⁷

Popper pointed out that those who started out to get rid of religious dogmas made science a religion and he criticized them seriously. According to him, the prophet of this new religion is F. Bacon himself. He states the following: Bacon replaced 'God' by the name 'Nature'. Theology, the science of God, was replaced by the science of Nature. The laws of God were replaced by the laws of Nature. God's power was replaced by the

Jamaluddin Afghani from the Muslim East (1838-1897) joined the works of Ali Süavi, Namık Kemal and Şinasi related to settling their ideas without losing anything from their Islamic faiths. Afghani was followed by scholars such as Muhammad Abduh (1845-1905), AbdulazizChavish (1876-1929) and Musa Jarullah (1875-1949)³²⁸.

The tension and friction between the school and the madrasah developed in favor of the school in the late Ottoman period and entered a new phase with the establishment of the Republic. The modern educated people who founded the republic liquidated the graduates of madrasahs who were with them and who worked together with them and cooperated in the liberation of the country and the establishment of the republic.

The torch held by the new era in the hands and minds in the way of progress and civilization was positive science. The issues raised by M. Kemal in his speech to the teachers at Samsun İstiklalTicaret School as early as September 22, 1924 indicated the principles of the new period:

*“The real guide for everything in the world, for civilization, for life and for success, is science. It is heedlessness, ignorance, and aberration to seek a guide except for science. However, it is essential to realize the evolution of the stages of science in every moment we live and to follow its progress over time”*³²⁹.

Those words were engraved on the façade of the Faculty of Language, History and Geography, which was established with a special mission in 1935 as a symbol of the new era, as “The real guide in life is science”.

Karl Popper (1902-1994), the philosopher of science, is one of those who make a “philosophical” criticism of this understanding, which idolizes positivism and natural sciences and makes it a new religion. He wrote in an article published in 1923 that the scientific movement initiated by Francis Bacon (1561-1626), who is considered one of the founding fathers of modern science, was basically "religious or semi-religious."

Popper pointed out that those who started out to get rid of religious dogmas made science a religion and he criticized them seriously. According to him, the prophet of this new religion is F. Bacon himself:

Bacon replaced ‘God’ by the name ‘Nature’. He left almost everything that remained the same. Theology, the science of God,

was replaced by the science of Nature. The laws of God were replaced by the laws of Nature. God's power was replaced by the forces of Nature. And at a later date, God's design and God's judgements were replaced by natural selection. Theological determinism was replaced by scientific determinism, and the book of fate by the predictability of Nature. In short, God's omnipotence and omniscience were replaced by the omnipotence and omniscience of nature and by the virtual omniscience of natural science³³⁰.

From the Islamic world, Nursi, answered this movement, which tried to spread the idea of denying a creator under the name of science, by writing a booklet called *TabiatRisalesi* (Booklet of Nature). He states the following at the beginning of the booklet:

“This treatise explains through nine ‘Impossibilities,’ themselves comprising at least ninety impossibilities, just how unreasonable, crude and superstitious is the way taken by those Naturalists who are atheists. In order to cut short the discussion here and because these impossibilities have been explained in part in other sections of the Risale-i Nur, some steps in the arguments have been skipped. It occurs to one, therefore, how is it that those famous and supposedly brilliant philosophers accepted such a blatantly obvious superstition, and continue to pursue that way.

Well, the fact is they cannot see its reality. And I am ready to explain in detail and prove through clear and decisive arguments to whoever doubts it that these crude, repugnant and unreasonable¹ impossibilities are the necessary and unavoidable result of their way; in fact, the very gist of their creed.

He explains the word “unreasonable” above as follows:

¹*What occasioned the writing of this treatise were attacks being made on the Qur'an by those who called everything that their corrupted minds could not reach a superstition, who were using Nature to justify unbelief, and were vilifying the truths of belief in a most aggressive and ugly fashion. Those attacks stirred up in my heart an intense anger which resulted in those perverted atheists and falsifiers of the truth receiving vehement and harsh slaps. Otherwise, the way generally followed by the Risale-i Nur is a mild, polite and persuasive one.*

“Their messengers said: ‘Is there a doubt about Allah, The Creator of the heavens and the earth?’” (Ibrahim, 10)

Nursi states the following in the Introduction of *TabiatRisalesi*, in which he interpreted the verse above:

O man! You should be aware that there are certain phrases which are commonly used and imply unbelief. The believers also use them, but without realizing their implications. We shall explain three of the most important of them.

The First: *“Causes create this.”*

The Second: *“It forms itself; it comes into existence and later ceases to exist.”*

The Third: *“It is natural; nature necessitates and creates it.”*

Indeed, since beings exist and this cannot be denied, and since each being comes into existence in a wise and artistic fashion, and since each is not outside time but is being continuously renewed, then, O falsifier of the truth, you are bound to say either that the causes in the world create beings, for example, this animal; that is to say, it comes into existence through the coming together of causes, or that it forms itself, or that its coming into existence is a requirement and necessary effect of nature, or that it is created through the power of One All-Powerful and All-Glorious.

Since reason can find no way apart from these four, if the first three are definitely proved to be impossible, invalid and absurd, the way of divine unity, which is the fourth way, will necessarily and self-evidently and without doubt or suspicion, be proved true.

Imagine there is a pharmacy in which are found hundreds of jars and phials filled with quite different substances. A living potion and a living remedy are required from those medicaments. So we go to the pharmacy and see that they are to be found there in abundance, yet in great variety. We examine each of the potions.

We see that the ingredients have been taken in varying but precise amounts from each of the jars and phials, one ounce from this, three from that, seven from the next, and so on. If one ounce too much or too little had been taken, the potion would not have been living and would not have displayed its special quality. Next, we study the living remedy. Again, the ingredients have been taken from the jars in a particular measure so that if even the most minute amount too

much or too little had been taken, the remedy would have lost its special property. Now, although the jars number more than fifty, the ingredients have been taken from each according to measures and amounts that are all different.

Is it in any way possible or probable that the phials and jars should have been knocked over by a strange coincidence or sudden gust of wind and that only the precise, though different, amounts that had been taken from each of them should have been spilt, and then arranged themselves and come together to form the remedy? Is there anything more superstitious, impossible and absurd than this? If an ass could speak, it would say: "I cannot accept this idea!", and would gallop off!

Similarly, each living being may be likened to the living potion in the comparison, and each plant to a living remedy. For they are composed of matter that has been taken in most precise measure from truly numerous and truly various substances. If these are attributed to causes and the elements and it is claimed, "Causes created these," it is unreasonable, impossible and absurd a hundred times over, just as it was to claim that the potion in the pharmacy came into existence through the phials being knocked over; by accident.

In short: The vital substances in this vast pharmacy of the universe, which are measured on the scales of divine determining and decree of the All-Wise and Pre-Eternal One, can only come into existence through a boundless wisdom, infinite knowledge and all-encompassing will. The unfortunate person who declares that they are the work of blind, deaf and innumerable elements and causes and natures, which stream like floods; and the foolish, delirious person who claims that that wondrous remedy poured itself out when the phials were knocked over and formed itself, are certainly unreasonable and nonsensical. Indeed, such denial and unbelief is a senseless absurdity."³³¹

8.2.3.1- Religion-Science- discussions in Anatolia at the beginning of the twentieth century

Nursi states in his book called *Muhâkemât*, which he wrote in 1911, that as a result of the conflicts between religion and science, the sun of Islam was eclipsed, that Muslims lagged behind, being deprived of "the comforts of worldly life", and that foreigners (Western people) were deprived of "the bliss in the hereafter" by keeping away from Islam. The main reason

for this halt and regression is the thought that there is a conflict between religion and science as a result of “misunderstanding”.

The question Nursi asked about the developments in the religion-science discussions is very striking. He states the following:

*“How can a slave be an enemy of his master, a maid an enemy of his chief, a child an enemy of his father? Islam is the master and guide of sciences and chief and father of real sciences.”*³³²

“How can a slave be an enemy of his master, a maid an enemy of his chief, a child an enemy of his father? Islam is the master and guide of sciences and chief and father of real sciences.”

Badiuzzaman Said Nursi

According to him, this misunderstanding and invalid apprehension was effective up to that time (1910/1911); it instilled despair in the society and closed the door of civilization and modern education to Muslim societies. One apparent reason of the religion-science discussions was the religious scholars’ “fear by imagining some religious decrees to be contrary to some scientific issues”.³³³

After drawing attention to the fact that it is wrong for some religious scholars to think that some decrees of the religion are contrary to some scientific issues, he makes the following explanation:

“We have abandoned the essence of Islam and concentrated instead on its shell; in doing so, we have deceived ourselves. Having committed mistakes and fallen short of the ethical standards we should have had, we have failed to give Islam its due and the respect it deserves. As a result, it has recoiled from us in disgust, hiding itself in the miasma of whims and suppositions that we have formed around it. ...”

“It has the absolute right to do so, for we have been unable to recognize its true worth. We have conflated its fundamentals with spurious accretions from non-Islamic sources; we have commingled its principles of belief with mere stories, confusing people into taking its figurative, metaphorical, and allegorical statements as though they were statements of literal truth. For this reason, Islam has punished us with misery and

*wretchedness in the world. It is only the mercy of Islam which will save us.*³³⁴

Thus, some scholars could not understand the essence of Islam. They were simply deceived by simply concentrating on its shell and by not being able to penetrate into its truth and meaning. Because of this misunderstanding, they could not show Islam the respect it deserves. As a result, Islam hid itself in the miasma of whims and suppositions by hating those misunderstandings.

The justified reasons for this hiding were as follows: the scholars mixed the fabricated information and stories of Sons of Israel with the principles and truths of Islam; they confused metaphors, that is, the words used differently from their literal meanings, with their real meanings. Thus, they could not appreciate the value of Islam. In return, Islam left the Muslims in contempt and misery in order to educate them in the world as a penalty. It is only the mercy of Islam that will save them. In other words, they will be saved if they practice true Islam and righteousness worthy of Islam by clinging to its unbreakable rope and truths. At that time, Islam, which hid itself by resenting, will prosper again; thus, general peace and development will be dominant among people. There will be no need for science-religion discussions.

Nursi gave great place to opposition to Islam by science and philosophy arising from misinterpreting some similes and metaphors in the verses of the Quran and hadiths. One of the most criticized and offensive one is the issue of the world's standing on ox and fish.

He answers a question about this ox and fish issue as follows:

"This time you ask in your question: "The hojas say that the earth rests on a bull and a fish, but geography sees it hanging in space and travelling like a star. There is neither bull nor fish?"

"Al ardualath-thawrwal hut " (The earth is on the ox and fish)

In one narration, he said, "On the Bull," and on another occasion he said, "On the Fish." Some Hadith scholars applied this Hadith to superstitions and stories taken from isra'iliyat, related since early times. Scholars of the Children of

Israel who became Muslims especially applied it to stories about the Bull and the Fish they had seen in the former scriptures, altering it to mean something strange.

For now I shall explain three 'principles' and three 'aspects' in connection with your question:

First Principle: *When some of the Israelite scholars became Muslims, their former knowledge became Muslim along with them and was ascribed to Islam. However, what they knew contained errors which were certainly their errors and not Islam's.*

Second Principle: *On comparisons and metaphors passing from the elite to the common people, that is, on their falling from the hands of learning to those of ignorance, with the passage of time they are imagined to be literally true. For example, when I was a child an eclipse of the moon occurred. I asked my mother:*

" Why has the moon gone like that?"

She replied: "A snake has swallowed it."

"It can still be seen," I said.

"She replied: "The snakes up there are like glass; they show the things inside them!"

For a long time I recalled this childhood memory. Pondering over it, I would say: "How could such a false superstition come to be repeated by serious people like my mother?" Then when I studied astronomy I realized that people like her who repeated it supposed a metaphor to be reality. For when the vast circle called the zodiac, which is the circle denoting the degrees of the sun, and the circle of the declination of the moon, which is the circle depicting its mansions, pass over one another, it gives each of the two circles the form of an arc. Using a subtle metaphor the astronomers called the two arcs "the two great serpents." They called the points of intersection of the two circles "the head" and "the tail." When the moon comes to the head and the sun to the tail, in the terminology of astronomy, an interposition of the earth occurs. That is, the globe of the earth passes right between the two of them and the moon is eclipsed. According to the above metaphor, "the moon has entered the serpent's mouth." Thus, when this elevated and scholarly metaphor entered the language of the common people, in the course of time it took on the shape of a huge snake swallowing the moon.

Thus, with a sacred and subtle metaphor and meaningful allusion, two great angels were called the Bull (Thawr) and the Fish (Hut), but on entering the common language from the elevated tongue of the prophethood, the metaphor was transformed and given a literal meaning, and they took on the form of a truly enormous bull and awesome fish.

Third Principle: *Just as the Qur'an contains allegories and comparisons, and with them teaches profound matters to the ordinary people; so do Hadiths contain comparisons and allegories; they express profound truths by means of familiar comparisons. For example, as we have described in two other places, one time in the presence of the Prophet (UWBP) a deep rumbling was heard. He said: "It is the sound of a rock which has been rolling downhill for seventy years and has now hit the bottom of Hell."1 A few minutes later someone arrived and reported that a famous seventy-year-old dissembler had died, thus proclaiming the true meaning of the Noble Messenger's (Upon whom be blessings and peace) highly eloquent comparison.*

For now, three 'aspects' will be explained in reply to your question.

First: *Almighty God appointed four angels – called the Eagle (Nasr – Aquila) and the Bull (Thawr – Taurus) – as bearers of the divine throne and the heavens, to supervise His dominical sovereignty. He also appointed two angels as supervisors and bearers of the earth, which is the small brother of the heavens and companion of the planets. One of them was called the Bull and the other, the Fish. The reason for His giving these names is this:*

There are two parts to the earth, one is water and the other is land. Fish inhabit the part that is water, while agriculture, the support of human life, is practised with bulls and oxen, which inhabit the part of the earth that is land; agriculture rests on the shoulders of oxen. Since the two angels appointed to the earth are both commanders and supervisors, they surely have some sort of relationship with the bovine and piscine species. Indeed, "And the knowledge is with God," the angels are represented in the Worlds of the Inner Dimensions of Things and of Similitudes in the forms of a bull and a fish. Thus, alluding to their relationship and supervision and those two important species of the earth, with his miraculous manner of expression the Prophet (PBUH) said: "The earth is on the Bull and the Fish," thus stating in one fine, concise sentence a page of profound truths.

Second Aspect: *If it is said: “What does the government and its rule rest on?,” it will be said in reply: “On the sword and the pen.” That is, it rests on the valor of the soldier’s sword and the perspicacity and justice of the official’s pen. In the same way, since the earth is the dwelling-place of animate beings and the commander of animate beings is man, and fish are the means of livelihood of the majority of men who live by the sea, and the majority of those who do not live by the sea live by means of agriculture, which rests on the shoulders of bulls and oxen, and fish are also an important means of trade, just as the state rests on the sword and the pen, so it may also be said that the earth rests on the ox and the fish. For man cannot survive if the ox does not work or fish do not produce millions of eggs; life would cease and the All-Wise Creator would destroy the earth.*

Thus, replying in a most miraculous, elevated, and wise way, God’s Noble Messenger (PBUH) said: “The earth rests on the bull and the fish.” He taught an extensive truth with two words and showed how closely linked man’s life is to the life of the animal species³³⁵.

8.2.3.2- Religion and Science in the first period of the Republic

The laic Republican regime preferred the positivist and materialist understanding of science; everything related to Islam and religion were considered as “outdated” and “superstitious”. Religious institutions were abolished, madrasahs and dervish lodges were closed down; the alphabet was changed; thus, all the ways through which religion could be learned and understood were actually closed.

In this period, Nursi narrates one of his reminiscences related to some young people who fell into the void of faith by reading books based entirely on materialism as follows:

“In Kastamonu, a

The laic Republican regime preferred the positivist and materialist understanding of science; everything related to Islam and religion were considered as “outdated” and “superstitious”. Religious institutions were abolished, madrasahs and dervish lodges were closed down; the alphabet was changed; thus, all the ways through religion could be learned

group of high-school students came to me, saying: “Tell us about our Creator, our teachers do not speak of God.” I said to them:

All the sciences you study continuously speak of God and make known the Creator, each with its own particular tongue. Do not listen to your teachers; listen to them.

For example, a well-equipped pharmacy with life-giving potions and cures in every jar weighed out in precise and wondrous measures doubtless shows an extremely skillful, practiced, and wise pharmacist.

In the same way, to the extent that it is bigger and more perfect and better stocked than the pharmacy in the market-place, the pharmacy of the globe of the earth with its living potions and medicaments in the jars which are the four hundred thousand species of plants and animals shows and makes known to eyes that are blind even – by means of the measure or scale of the science of medicine that you study – the All-Wise One of Glory, Who is the Pharmacist of the mighty pharmacy of the earth.

To take another example; a wondrous factory which weaves thousands of sorts of cloth from a simple material doubtless makes known a manufacturer and skillful mechanic. In the same way, to whatever extent it is larger and more perfect than the human factory, this travelling dominical machine known as the globe of the earth with its hundreds of thousands of heads, in each of which are hundreds of thousands of factories, shows and makes known –by means of the measure or scale of the science of engineering which you study– its Manufacturer and Owner.

And, for example, a depot, store, or shop in which has been brought together and stored up in regular and orderly fashion a thousand and one varieties of provisions undoubtedly makes known a wondrous owner, proprietor, and overseer of provisions and foodstuffs...

Thus, hundreds of other sciences like these make known the Glorious Creator of the universe together with His Names, each through its broad measure or scale, its particular mirror, its far-seeing eyes, and searching gaze; they make known His attributes and perfections.

It is in order to give instruction in this matter, which is a brilliant and magnificent proof of Divine unity, that the Qur’an of Miraculous Exposition teaches us about our Creator most often with the verses,

ar-Ra'd, 16 "Sustainer of the Heavens and the Earth"; al-An'am, 1, "He created the Heavens and Earth" *I said this to the schoolboys, and they accepted it completely, affirming it by saying: "Endless thanks be to God, for we have received an absolutely true and sacred lesson. May God be pleased with you!"*³³⁶.

Thus, Islam and the sciences are virtually intertwined and inseparable from each other.

8.2.4-The Quran encourages Muslims to think, take lessons and reason

Another element that encourages Muslims to deal with science are the clear expressions, or rather, orders "*at the beginnings and ends of verses that refer man to his intellect*".

"Refer to your mind"; "Apply to your thought and heart, consult, talk to it so that you will know this truth."

"Why do you not look? Why do you not take warnings? Look so that you may know the truth." Take note of the way "Know" is used. *"Why do men not know, why do they fall into compounded ignorance? Why do they not look? Have they become blind so that they cannot see the Truth? Why do men not call to mind and ponder over their own lives and the events in the world so that they might find the straight path?"*

Why do they not think, deliberate and reason with the mind, and so fall into misguidance? O men! Take a lesson! Take a warning from past ages and try to be saved from the moral and spiritual calamities of the future!" These verses refer man to his intellect; they enjoin him to consult with his reason.³³⁷

According to Nursi, the source of knowledge is the order and system in the structure of the universe. For this reason, he likens the universe to a book and uses this metaphor frequently. According to him, the universe is a big book and "the human intellect has extracted the

The greatest miracle of Hz. Adam is being taught the names of things. This quality, which is a miracle of Hz. Adam, was given to his descendants as "ability" and "opportunity".

library of true natural science and philosophy from it and has written the library accordingly”³³⁸.

He states in his tafsir he wrote in the years 1914-16 that even when miracles of the prophets are mentioned in the Quran, people and especially scientists are encouraged to make and produce similar ones. Sociologists who investigated the nature of the encouragement here showed different categories of it ³³⁹. Those miracles provide great encouragement and motivation to scientists as they show the ultimate goals people can achieve³⁴⁰.

“The All-Wise Quran sends the Prophets to man’s communities as leaders and vanguards of spiritual and moral progress. Similarly it gives all of them a number of wonders and makes them the masters and foremen in regard to mankind’s material progress, and commands men to follow them absolutely.

Thus, just as by speaking of the spiritual and moral perfections of the Prophets, it is encouraging people to benefit from them, so too in discussing their miracles it is inferring encouragement to achieve similar things and to imitate them. It may even be said that like spiritual and moral attainments, material attainments and wonders were first given to mankind as a gift by the hand of miracles. Thus, what first gave man the gift of the ship, which was a miracle of Noah (Peace be upon him), and the clock, a miracle of Joseph (Peace be upon him), was the hand of miracles. It is a subtle indication to this truth that most craftsmen have a Prophet as the patron of their craft. For example, seamen have Noah (PUH), watchmakers have Joseph (PUH), tailors have Idris (PUH), and so on”³⁴¹.

Is it possible to think that a religion that encourages humanity to study and work with the miracles of prophets conflicts with science? The claim that the religion of Islam clashes with science is a form of propaganda fabricated in order to spread irreligion.

Is it possible to say that Islam, which is the Master and Guide of Sciences, Chief and Father of Real Sciences is against science though it encourages humanity to do scientific studies in the verses of the Quran and hadiths by showing them ultimate limits of science?

“For example, the verse: ‘To Solomon We made the wind obedient: its early morning stride was a month’s journey, and its evening stride was a month’s

journey', which describes one of Solomon's (Peace be upon him) miracles, the subjugating of the air. This says: "Solomon traversed the distance of two months in one day by flying through the air." It is thus suggesting that the road is open for man to cover such a distance in the air. In which case, O man! since the road is open to you, reach this level.

And in meaning Almighty God is saying through the tongue of this verse: "O man! I mounted one of my servants on the air because he gave up the desires of his soul. If you too give up laziness, which comes from the soul, and benefit thoroughly from certain of my laws in the cosmos, you too may mount it."³⁴²

8.2.5- Every branch of science is based on a name of Allah

In a work written in the same period, Nursi shows in a different way that Islam is the master of science by basing each branch of science on a name of Allah. With a style that reminds of the Neo-Platonic interpretations of Plato's conception of ideals, Nursi states the following: "All attainments and perfections, all learning, all progress, and all sciences, have an elevated reality which is based on one of the Divine Names. On being based on the Name, which is concealed under numerous veils and has various manifestations and different spheres, the sciences and arts and attainments find their perfection and become reality. They are not some incomplete and deficient shadow."³⁴³

"These current advancements are based on the signs taken from religions and inspirations obtained from aphorisms".Badiuzzaman

The greatest miracle of Hz. Adam is being taught the names of things. This quality, which is a miracle of Hz. Adam, was given to his descendants as "ability" and "opportunity". Man has faculties (including reason) that can understand the universe, which was created by Allah based on a certain order and predestination. In other words, man, whom Allah created in the most beautiful way and equipped with endless faculties and abilities, can find and understand the book of the universe and its creator with those "faculties and abilities"³⁴⁴.

In the process when the Ottoman society suffered a great trauma after the Second Constitutional Monarchy and when modern science was

adopted as a new religion, Nursi stated the following clearly: “*These current advancements are based on the signs taken from religions and inspirations obtained from aphorisms.*” Thus, he criticized the basic theses of positivism; on the other hand, he tried to show that religion-science relationship is based on the Quran³⁴⁵.

There are two hypotheses here:

Firstly, “*Nor anything fresh or dry (green or withered), but is (inscribed) in a record clear (the Quran).*”³⁴⁶ It is a theological assumption that scientific achievements and technological developments in human history should also be in the Quran according to the verse of the Quran above.

Secondly, acting upon the same thought, the miracles of the prophets mentioned in the Quran can have different meanings for us. According to him, the Quran, which is a general address to humanity, does not “neglect” those important developments in the history of humanity.

After this assumption, Nursi’s interpretation is important in terms of showing the harmony between religion and science. The point to which he drew attention related to the miracles of prophets shows of the Prophet shows what a holistic and deep understanding he had related to the Quran.

According to Nursi, “*One who searches for truth should be like a diver, freed of the effects of time, able to dive into the depths of the past, weigh ideas on the scales of reason, and discover the source of everything*”³⁴⁷.

“For example, medicine is a science, and also an art; its final point and reality are based on the Absolutely Wise One’s Name of Healer, and through observing that Name’s compassionate manifestations in the vast pharmacy of the earth, medicine finds its perfection and becomes reality”

Badiuzzaman Said Nursi

The statement above reminds of Gazali’s expression “*diving into ocean like a diver and collecting pearls*” about understanding the Quran³⁴⁸. Acting upon the same understanding, Nursi makes a different interpretation related to the miracles of prophets.

Firstly, prophets were sent to human societies as pioneers and leaders “*in terms of spiritual advancement*”.

Secondly, the miracles given to prophets are examples of the material development and advancement of people. His conclusion is that since the Quran mentions the spiritual perfection of prophets, it encourages people to make use of them and since it mentions the miracles of prophets, it encourages people to make things *similar* to them and to *imitate* them.

Thus, the stories in the Quran are no longer regarded as stories; in addition, the miracles are also given a different meaning. What man needs to do is to try to make things similar to those miracles by developing and using the unlimited faculties created by Allah in his nature through learning. In this context, according to Nursi, like spiritual and moral attainments, material attainments and wonders were first given to mankind as a gift by the hand of miracles. An example of this is the ship, which was a miracle of Hz. Nuh, and the clock, which was a miracle of Hz. Yusuf³⁴⁹.

According to Nursi, all of the great Quran commentators and scholars unanimously agree that each verse of the Quran has many various and different meanings in the sense of “guidance” in terms of the purposes of the religion. Thus, the verses of the miraculous Quran related to the stories of prophets, which are the most brilliant verses, cannot be historical stories. Moreover, those verses have many meanings within the framework of the purposes of the Quran. On the other hand, the dimension related to our is that “*they determine the ultimate boundaries of the human science and art*”³⁵⁰.

Thus, the Quran becomes a living book; it encourages the scientists living today as it did in history. On the one hand, it “emphasizes the most advanced goals” of science; on the other hand, “it determines the ultimate goals”. Moreover, with this approach, “*it strikes the hand of encouragement on man’s back, urging him to that purpose*”³⁵¹.

The Muslim generations that understood and interpreted the Quran like Nursi in this way in the past turned toward science with great love, enthusiasm, effort and devotion; they built the Islamic science tradition and then the Islamic Civilization as a necessary result of this scientific heritage. Having done something in history is proof that it can be done in the future too if Muslims do not change their view of the Quran and if they see it as a living text full of wisdom.

Allah's names "*has numerous veils and various manifestations and different spheres*" in the realm of beings. Therefore, if a branch of science is based on that name, "*the sciences and arts and attainments find their perfection and become reality. They are not some incomplete and deficient shadow*". He tries to explain it through three examples:

For example, engineering is a science; its reality and final point reaches to Almighty God's Names of All-Just and Determiner, and observes with all their majesty the wise manifestation of those Names in the mirror of engineering.

And, for example, medicine is a science, and also an art; its final point and reality are based on the Absolutely Wise One's Name of Healer, and through observing that Name's compassionate manifestations in the vastpharmacy of the earth, medicine finds its perfection and becomes reality. And, for example, the natural sciences, which discuss the reality of beings; through seeing the regulating, nurturing supreme manifestations of Almighty God's (May His glory be exalted) Name of All-Wise in things, in their benefits and advantages, and through attaining to the Name, and being based on It, these sciences may contain true wisdom. Otherwise they are either transformed into superstition, or become nonsense, or open up the way to misguidance like Naturalist philosophy.³⁵²

Acting upon those three examples, Nursi tries to show that the relationship between religion and science can be established in a healthy way. In addition, he emphasizes that the Quran "*strikes the hand of encouragement on man's back, urging him to the highest peaks, the furthest limits, the final degrees, which he is far behind at the present degree of his progress. It points its fingers at those degrees, saying: 'Forward march!'*"³⁵³.

8.2.5-Religion-Science Conflict

Another question that needs to be answered here is this: What will happen if a scientifically proven issue conflicts with the Quran and

hadiths? In 1911, Nursi gave a clear answer to this question acting upon the Islamic methodology:

*“It is an established methodological principle that when any item of religious knowledge reported to be based on either the Quran or the Sunnah of the Prophet appears to be in conflict with reason, the judgment of reason—provided that it is genuine—takes priority and, consequently, the item in question is subjected to interpretation”*³⁵⁴.

What is meant by reason here is the proven scientific result achieved by human mind and experience. However, the quality of the reasoning to make the final decision on this issue is also important. This is the mind that *knows* both the essence of the religion and *its own limits* in the Kantian sense.

Açıkgenç states that this reason is “illuminated” by revelation, which is important for understanding the issue. Otherwise, it is clearly stated in another statement of Nursi that the purpose here is not pure reason. According to him, since *whatever the prophet says is reasonable, the mind commands man to obey his message*³⁵⁵.

Another thinker in the history of Islamic thought that gives priority to reason in the conflict of religion and science is Fakhruddin ar-Razi (1148-1209), the great commentator of the Quran. According to Razi, what needs to be done when the rational evidences conflict with the apparent meanings of verses and hadiths is clear:

“If rational evidences show something very clearly and if we encounter verses and hadiths that show the opposite, what we can do is one of the following four things:

- *To accept the requirements of both rational and religious evidences.*
- *To reject both of them.*
- *To accept the religious evidences and to reject the rational ones.*
- *To accept the rational evidences”*³⁵⁶.

According to Razi, when the first option is accepted, “we will have confirmed two opposite things at the same time, which is impossible”; when the second one is accepted, it will mean to deny both of the two

opposite things, which is also impossible. The third option is wrong. Thus, we will have to accept the fourth possibility, to accept what reason, which is a blessing given to us by Allah, necessitates³⁵⁷.

Application of the method

In his books, Nursi applied his above-mentioned views on religion and science, which we tried to summarize; he explained the religious information criticized and rejected by modern man due to not being rational and scientific by interpreting it.

The first and most important example is the claims of some scholars about the roundness of the world in the name of religion. According to Nursi, there is no doubt about the roundness of the world for the scholars who were researchers. He gives examples from traditional scholars and states that scholars such as Saduddin Taftazani and Sayyid Sharif Jurjani “held a globe like a ball in their hands” and examined it very carefully. Furthermore, Razi states that İbrahim Hakkı and Ghazali hold the same view. Nevertheless, he accuses those who “deny and reject” the roundness of the world “under the pretext of protecting the religion” acting upon some “apparent” and “extreme” interpretations of some religious texts not upon the results of reason and science of “*a great murder and betrayal*”³⁵⁸.

The relationship between religion and science, which Nursi based on the Quran and oneness represents a harmonious understanding. He argues that religion (Islam) is the greatest advocate for the emergence and development of science, let alone conflicting with science.

In conclusion, the relationship between religion and science, which Nursi based on the Quran and oneness, represents a harmonious understanding. He argues that religion (Islam) is the greatest advocate for the emergence and development of science, let alone conflicting with science. According to him, the issues seen as a conflict between religion and science do not originate from the essence of religion but from the understanding of the interpreters of the religion in their own age. Acting upon the example of Ibn Sina (Avicenna), every scientist is “*a child of the age he lives in*” even

if he is a genius and very intelligent. It is the fact that this understanding based on history is shaped and limited by the time and environment in which we live. Thomas Kuhn shows this dimension of science in detail with the concept of “paradigm” he developed as a historian and philosopher of science.³⁵⁹

When Nursi’s views are considered as a whole, we see an understanding that knows the limits of reason but also accepts the power of reason illuminated by revelation instead of glorifying reason and science blindly. He draws attention to the structure of the universe, which can be understood by reason and formulated by scientists, by emphasizing the order, system, hierarchy, beauty and esthetics in the universe self-confidently and persistently. Thus, all of the scientific results that are obtained occur within the framework of the wholeness of the principle of oneness; according to Nursi, this product, produced by the alliance of the mind and heart, is defined as wisdom in the Quran.

The relationship between religion and science, which Nursi based on oneness was defended by some contemporary Muslim thinkers such as I. R. al-Faruqi (1921-1986), Naquib al-Attas, and Seyyed Hossein with similar evidences too; it is emphasized in detail that there is no conflict of religion and science in Islam as the one in the Western civilization³⁶⁰.

EVALUATION QUESTIONS

- 1-When did the tension and conflict between religion and science emerge?
- 2-What is the real cause of the opposition to religion led by some atheist, Marxist and Darwinist philosophers?
- 3- What is the explanation of the expression “*Every branch of science is based on a name of Allah*”?
- 4-What is Barbour’s four models on interaction between science and religion?
- 5-When did positivism enter Anatolia?

CHAPTER 9

9-THE REALITY OF DEATH AND WISDOMS BEHIND MISFORTUNES

9.1-WHY DID ALLAH CREATE EVIL AND MISFORTUNES?³⁶¹

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1-The student understands that creating evil is not evil. 2-He understands the wisdom behind the creation of devils. 3-He knows that the body man has is a blessing by Allah. 4-He understands that man has no right to complain about what he has. 5-He understands that the misfortunes and problems are a	1-What is the meaning of qadar? 2-Does qadar bind man's deeds? 3-Is the profession of a person recorded in his qadar? 4- What does lengthening of a person's lifespan through sadaqah mean? 5-What is the decree about the belief of a person who believes in five of the six principles of belief but does not believe in qadar?

Philosophy and theology have been talking about and discussing the issue of evil and free will for thousands of years. The problem of evil was first raised by Epicurus in Ancient Greece. David Hume discussed the same issue in detail in the 18th century and claimed that the existence of Allah and the existence of evil could not be reconciled. According to him, if Allah were omnipotent and perfect, why did He allow evil? In fact, similar views were expressed by al-Maarri and Ibn ar-Rawandi centuries ago in the Islamic world. Twentieth-century thinkers, such as Paul Drapper and John Mackie, said that the problem of the existence of evils supported atheist ontology and they walked in the same path as those before. In fact, atheist and agnostic thinkers made the most important criticism against theism with the problem of evil.³⁶²

Theist thinkers gave important answers to those criticisms:

For example, according to Farabi, the evils that exist are relative; they have a necessary place in the universal system; and many good deeds cannot be abandoned for a few evil deeds. Although flood occurs due to rain and some people are harmed by it, the good part of rain is more than its evil part. Thus, the creation of rain is not evil; it is good. A lot of good cannot be abandoned for a little evil. The benefits and harms of fire are similar. If evil had not been created at all to prevent harm, more evil would arise. Ibn Sina explains the wisdom behind the creation of evil like Farabi.³⁶³

According to John Hick, people need an environment that will allow them to attain spiritual ascension and perfection. Therefore, evil and negativity need to exist. In such an environment, natural and ethical evils are necessary.³⁶⁴

Poverty can help a person to save money and turn toward work. An ill person can learn to maintain his health, to live healthily and to keep a balanced diet. He who sees the harm of telling lies can give up lying. As it is stated in a Turkish proverb, a misfortune is more useful than a lot of advice.

On the other hand, the existence of natural and ethical evils will give people the right to choose and prefer; so, ethical and spiritual ascension will take place.³⁶⁵

When Imam Ghazali mentioned the problem of evil, he used the following argument hundreds of years ago: “*laysa fil-imkanabdumimmakan = There is nothing more beautiful than what is created in the realm.*” Thus, the world was created in the best way. However, this evidence used related to the creation of evil

is generally known as the expression of Leibniz. As Ghazali says, this world was actually created in the most beautiful way, there cannot be anything more beautiful.³⁶⁶

Augustine emphasizes free will and makes explanations regarding the same issue: One can choose between good and evil with his free will. Without evil, one would not be able to choose the good. According to him, that should be seen as the main source of the creation of evil.³⁶⁷

According to Eleonore Stump, the reason why Allah permits evil is to show man the destructive effects of his free will and it is necessary. Thus, Allah helps people because one cannot correct the destructive effects of his free will in any other way.³⁶⁸

According to Richard Swinburne, people should see and know the consequences of their actions in order to ensure that the deeds done with free will comply with ethical laws. Moreover, the evils observed for great goodness should be ethically accepted.³⁶⁹

9.1.1- Is it not evil to create evil?

Abdullah b. Masud went to visit the Messenger of Allah (pbuh) when was suffering from his last illness and asked,

“O Messenger of Allah! You are suffering a lot from malaria and fever. Is it because you will have a double reward for it?”

The Prophet’s fever went up a lot before his death. Abdullah b. Masud wanted to find out its spiritual reward; that is why he asked that question. The Prophet (pbuh) made the following explanation:

“Yes, for no Muslim is afflicted with any harm but that Allah will remove his sins as the leaves of a tree fall down.”³⁷⁰

The Messenger of Allah (pbuh) mentioned a general rule for everything that harmed, distressed and gave pain to a believer. A believer can be purified from his sins through the sickness, pain, grief, sorrow, etc. that affect him. The way to be purified is to meet that misfortune and difficulty by showing patience and consent instead of complaining.

On the other hand, he should take precautions to avoid being hit by misfortunes. According to Abu Hurayra, the Prophet (pbuh) stated the following regarding the issue:

*“A believer is not bitten from the same hole twice.”*³⁷¹

That is, man should do his best so as not to be hit by a misfortune. If something happens to him due to negligence once, he should try to prevent it from happening again by taking precautions. In other words, the believer is the one who puts his trust in Allah after he ties his camel. The following hadith about consent to qadar (destiny/predestination) is also meaningful:

*“He who does not show consent to my predestination and does not show patience in the face of the misfortune I send should find another Lord.”*³⁷²

There are various wisdoms behind it in terms of the Lordship of God Almighty; besides, He can dispose affairs as He wishes in His property.

The believer might suffer some misfortunes. What he needs to do then is to take refuge in Allah by asking His help, not object or to complain. A person who is a believer and a Muslim shows consent to His Lordship. He can give us bitter medicine instead of sweet sherbet due to some of His wisdoms. In that case, a believer must show consent to it in terms of His Lordship. He must not object to qada and qadar; he must not complain by saying “aargh” and “ow”. The believer must show patience in the face of misfortunes; he must thank Allah and show consent in terms of their aspect of being blessings.

Criticizing qadar and complaining about the misfortunes that hit us means blaming His mercy.³⁷³

As a matter of fact, our Lord is more merciful to us than ourselves. He who blames His mercy becomes deprived of His mercy. This is like fighting with a broken hand, which will give man more damage. If a person who is hit by a misfortune objects to qadar and complains about it, his misfortune will increase.

9.1.2-The world is Paradise for the unbeliever

Question: *“Believers believe in Allah, try to obey His orders, but they are usually hit by misfortunes. What is more, the Messenger of Allah said, ‘The world is a dungeon for the believer and Paradise for the unbeliever’. Although the unbeliever is an enemy of Allah and the believer is His friend, why does Allah send misfortunes to believers?”*

First of all, the misfortunes that hit believers are primarily blows of compassion. A father may punish his son to make him give up his mistakes. This punishment is not because of his hostility to his son, but his love for him and his

desire to protect him from danger. He wants to educate him and lead him to goodness. Allah Almighty warns His friends with blows of compassion by sending them misfortunes. Besides, He accepts the misfortunes as atonement for their sins and protects them from penalty in Hell. He also regards the goods and wealth lost in the misfortune as sadaqah.

We know that minor crimes are punished in small courts. Major crimes are referred to large courts. Similarly, the penalty of the minor faults of believers can be given in the world in the form of misfortunes. Thus, they are purified here. That is a kind of mercy for them. Since the crimes of unbelievers and heretic people are so big, their penalties are postponed to the Great Court in the hereafter. Therefore, they are not usually punished in the world.

Since the believer is punished in the world for his sins, the world becomes a kind of *a place of punishment and dungeon*. And the world is relatively considered a “*dungeon*” for them compared to the hereafter where they will be very happy. In other words, even if they do not suffer misfortunes in the world, their worldly life is like a dungeon compared to the hereafter.³⁷⁴

The world is like Paradise for those who do not believe since their major penalties are postponed to the hereafter and since they are rewarded partly for their good deeds in the world.

Secondly, believers obey the commands of Allah, carry the burden of worship and bear the responsibility of being slaves of Allah. Even though they are free, they are “*Abdullah = servants and slaves of Allah*”. The burden and responsibility of worship are apparently distressful and hard for them. In this respect, the world is also considered their dungeon. However, those who do not believe and heretic people do not have the burden and responsibility of worship in the world. They live freely and independent of all commands and prohibitions, based on their own desires and as they wish; so, they are in a kind of false Paradise.

In addition, no matter what difficulties and misfortunes a believer encounters, he is happier than an unbeliever. His belief grants him a spiritual paradise. Unbelief is a spiritual hell that spiritually punishes it in his spirit.

9.1.3-Is it not the fault of Satan?

Another question regarding the issue is as follows: *“Allah created devils (Satan) and sent them upon us. That is why we commit sins, and some people exit the religion. For this reason, people will go to Hell. We cannot control our will because of devils. But for devils, we would be able to do more good deeds³⁷⁵.”*

How does Allah’s mercy and beauty allow this ugliness and horrific misfortune?”

1) It is a fact that most people deviate from the true path because of devils and become people of Hell. However, what is valuable is quality, not quantity. For example, if a farmer has 100 walnuts and buries them in the ground, and if 90 out of 100 walnuts decay, but ten of them become trees, there will be two results:

The first one: The farmer lost 90 walnuts; and his loss is the price of the walnuts.

The second one: Now he has ten walnut trees; his profit from 10 walnut trees will definitely eliminate the loss of his remaining walnuts.

Similarly, God Almighty created the soul, devils, evil and bad deeds; He tests people with them. Thus, even if the majority goes bad like the walnuts decaying under the ground, some people believe. The gain obtained from them is very large and ultimately covers the damage done by others. Are one hundred coins of one cent or one piece of gold coin more valuable? A person who loses 100 cents but earns a piece of gold coin is not at a loss. Allah’s mercy, wisdom and justice allows the existence of Satan and evil because of this mystery.³⁷⁶

2) Man needs action to advance and ascend spiritually, this action is possible through struggle; and struggle is possible through the existence of devils, evil and harmful things. From this point of view, devils and evil things are conducive to great good deeds. They cause some people to rise in perfection and goodness. Thus, their abilities develop.

A wrestler needs action, struggle and an opponent to gain power and skill. He is prepared well so as not to be defeated by his opponent; he looks for ways to prevent him from losing points. Satan is like an opponent that we struggle and fight. Without the soul, the devil and evil things, there will be no struggle; progress will stop, and the degrees of people will remain constant like those of

angels. That is one of the wisdom behind the creation of devils and harmful things.

Thus, Satan was created so that we would fight with him and ascend spiritually; he was not created so that we would obey his command and be controlled by him. Therefore, the following is stated in the Quran:

*“Follow not the footsteps of the evil one.”*³⁷⁷

The enemy exists so that we will fight them not obey them. The following example will clarify the issue too:

Grades are given to assess the achievement of students. Suppose that the highest point is ten and the lowest point is one and the students who get at least 5 points in a test pass and those who get lower points fail. The points from one to four are seemingly against the students. A student may even think, *“But for 1, 2, 3 and 4, I would not have failed”*. However, the existence of these grades does not aim to make students fail. They exist to make the students work, struggle against laziness and get high points. Thus, those low points are like devils; they cause the students to work and struggle.

On the other hand, if there were no low points, there would not be high points either. In that case, it is not possible to test, to try and hence to ascend. What is the point of a test and trial in which everyone will get good marks and those who are successful and unsuccessful are not discriminated. That is against the secret of testing. All of those points should be taken into consideration related to the creation of devils, evil and harmful things.

9.1.4- Is it not evil to create evil?

Question: *“It is Allah who creates both the evil and good things. Is it not evil to create evil since there is no other creator?”*

Answer: It is stated in the Quran that the Creator of everything is Allah. However, creating evil is not evil, doing evil is evil. For example, fire can be both good and bad for people.³⁷⁸

Fire led to many universal good deeds in the advance of civilization. When a person acts carelessly and causes a fire in his house, he has no right to say, *“Fire is evil; therefore, it is evil to create fire”*.³⁷⁹

Fire became evil for that person due to his own free will. That is, he caused a fire in his house and did something bad. However, fire was good for him

up to that time. He cooked his food with it for many years; he used it in the stove to get warm; fire served him in transportation by starting his car.

The sun was like a stove too; its heat warmed and enlightened the world; it caused photosynthesis to take place; it served all people including those harmed by fire by treating them fruits. However, if a person dies due to sunstroke, the sun becomes evil for him. Nevertheless, the culprit here is not the sun and the creator of the sun, but the person who does not take measures against the sun.

In fact, evil, bad and harmful things are like a kind of fire. We can take advantage of them without making them evil and without being harmed by them. In this respect, we cannot say, “*The creation of fire and the sun is evil and bad.*” We cannot say, “*The creation of Satan is evil*” either.³⁸⁰

9.1.5-Why does man blame qadar?

Question: Man wants to place the blame upon qadar, Satan and – God forbid – Allah for his mistakes and faults by saying, “I committed this sin because it was in my qadar, it was in divine knowledge. Otherwise, I would not have committed them. Satan and my soul, who deceived me, are to blame. I would not have committed them if Allah had not created evil.” How can the issue be viewed in terms of Satan’s delusions?

Answer: One of the most dangerous and important delusions and tricks of Satan is preventing man from confessing his fault. For, if man accepts and confesses his fault, he will ask forgiveness from Allah, give up his sins and mistakes and take refuge in Allah.

In addition, Satan provokes man’s egoism and makes him defend himself like a lawyer. Thus, man does not accept his mistakes and begins to see himself virtually as a being with no mistakes.³⁸¹

However, infallibility and perfection are not in question for human beings. Everybody except prophets can make mistakes and commit sins. Man can improve himself by giving up his sins and mistakes and by reducing them.

Therefore, not accepting one’s mistakes and imperfection, and placing the blame upon qadar and others is one of the delusions and tricks of Satan in a way.³⁸²

A person following this path closes the path of asking for forgiveness and taking refuge in Allah, and closes the door of repentance; his egoism gets stronger

and he eventually deifies himself. In this respect, he who obeys Satan does not see his own mistakes or he interprets them differently. In fact, he becomes a toy and puppet of Satan. However, even the Prophet Yusuf (Joseph) stated the following:

“Nor do I absolve my own self (of blame): the (human) soul is certainly prone to evil.”

Actually, if man thinks a bit, Satan’s delusion and trick will be easily understood: If man accepts and confesses his mistake, he will ask for forgiveness, repent, take refuge in Allah and take precautions. Thus, he will get rid of the evil Satan and being his puppet. So, not to accept one’s mistake and to blame others like qadar, which is a kind of divine knowledge, is a sin bigger than the other sins one commits.³⁸³

Besides, man was given will to be responsible for his mistakes. Man wants to commit sins with his free will and commits them; therefore, he needs to blame himself for his sins.

9.1.6-Why was I not created as a more handsome person?

Question: Allah creates some people handsome and beautiful and some people ugly; He gives health to some people while others suffer from illnesses throughout their lives. Some people live in comfort, wealth and prosperity while others live in poverty, distress, and hardship. Since everything is predestined with qadar, does qadar not oppress some people; hence, does Allah not commit injustice?

Let us try to solve the problem in the light of the following case study:

1) There was a very rich and very skilled tailor. He sewed beautiful, precious clothes. His style of working was as follows: When he sewed a jacket, coat, shirt and so on, he would use a live model. He would find unemployed, weak, poor men for it and give them high wages in advance daily. The live models would wear a shirt when he wanted and he would lengthen, shorten or cut the shirt with scissors if necessary. He gave different shapes to clothes on the live models. That famous artist would give orders to models likes *“bend down, sit down, extend your arm, lie down, get up”*. Thus, he wanted to reflect his art on clothes.

One day, he was cutting and shortening a shirt on one of the live models whose wages he paid in advance and fully, giving it different shapes, removing some parts and pinning some parts. Meanwhile, the model said to him,

“You give me orders like ‘bend, stand up, sit down, stand up’; thus, you put me into trouble and hardship. Besides, you cut, and shorten the shirt you put on me, making me ugly. What you do is mercilessness and cruelty.”

The tailor was surprised. How could this man talk like that? For, he was paid in full and in advance. The man who was paid in advance had no right to say, ‘*You are bothering me.*’ Besides, he was only a model; even though the shirt was on him, it did not belong to him. The owner of the shirt and the fabric was the tailor who sewed it and reflected his art on it.

As in this example, Allah, who is the Wise Creator, made people wear a body shirt that He embroidered finely with eye, ear, mind, heart, imagination, love, fear and similar emotions. He wants to show the embroidery of His beautiful names on this body shirt. Therefore, He changes people from state to state, turns them, sometimes makes them sit, sometimes get up, sometimes tire and sometimes relax. Man recognizes and understands his name “*Razzaq = Nourisher, Sustainer*” with hunger, and he becomes a reflector and mirror of the name of “*Shafi = Healer*” with illness.

What man, who is like the model in the example, needs to do here is to show patience and gratitude, not to complain because the body and organs, which are the clothes of the spirit, are not actually the property of man. The body shirt was entrusted to him and put on him temporarily like the shirt on the live model. Man did not produce his body and organs himself; he did not buy them by paying someone else. Allah is the owner of all of them. Therefore, the owner of the property can use his property as he wishes.³⁸⁴

From this point of view, man should not complain by saying, “*Why was I not created as a more handsome and beautiful person? Why has Allah made me sick while others are healthy? Why am I in trouble?*” For, he has no right to complain. However, if the body had not been entrusted to him and if he had been the real owner of his body, if he had built his own body, or if he had purchased his body from someone else, perhaps he would have a right to complain.

2) Besides, illnesses, misfortunes, difficulties, and states that appear to be negative wash away the impurities of sin and become atonement for sins in our

religion. In this respect, we should not complain but be grateful since they actually purify us. Such states should not be interpreted as cruelty and injustice, but as a mercy, blessing, boon and gift of Allah.

For God Almighty gives the biggest misfortunes to his beloved slaves. The Prophet (pbuh) explains it as follows:

“Those who are given the most severe hardships are prophets, followed by saints and then those resembling them in degrees.”

Those people regard illnesses and misfortunes as a pure gift of worship and mercy and thank Allah patiently.

9.1.7-Complaint comes from a right

Complaint stems from a right³⁸⁵ and a person who is wronged can complain to eliminate the injustice. *“Why was I created as an ugly person while others are handsome? Why am I short while others are tall?”* Those who utter the complaints above and similar ones and who regard them as injustice and cruelty of qadar think Allah owes them and speak like that. It looks as if they made a deal with God Almighty before they were born. They think Allah owes them a height of 180 cm.

When Allah created people and pre-ordained their bodies by giving a height of 150 cm to some, 160 cm to some, 170 cm to some, etc., they raised their voices and objected:

“Why am I 160 cm tall?

Why am I 170 cm tall?”

They assume the same attitude related to the issues such as ugliness-handsomeness and sickness-health. Let us ask them the following questions:

“Does Allah owe you anything? Did you give Him a height of 180 cm before and did He shorten it by 5, 10 or 20 cm when He returned them to some people? You have the right to complain if there is a loss like that.”

In fact, *Allah does not owe anything to anyone*; whatever He gives man is from His grace and mercy. In this respect, no right is violated and lost, which does not give man the right to complain. On the contrary, we owe God Almighty so many things and rights. Demanding some rights from Him instead of paying our debt to Him is like a debtor denying his debt and complaining about the creditor by saying, *“I have been wronged and oppressed.”*

In terms of blessing, man has no right to look above and the people superior to him and to complain. On the contrary, he should look at those who are in greater distress than him, be thankful and happy. The following example tells us this fact very well:

A generous man wanted to help a desperate and poor person financially. He took the poor person in front of a minaret and said,

“If you go to the top of the minaret, I will give you a gift for every step you ascend.”

Then, he added:

“I will give you the greatest gift for the top step.”

The desperate poor person reached the top step of the minaret. The minaret was really high. The generous and benevolent person who told him to ascend to the highest step gave him one piece of gold for the first step and two for the second step. He increased the number of gold coins one by one for each step. He gave the poor man a thousand gold coins at the top step of the minaret.

The man expected only two things from the poor man: to thank him and to be grateful to him. However, the poor man forgot the gold coins granted to him and the favor of the generous man and addressed him as follows:

“I wish the minaret were higher. I wish I would go up more steps and get more gold coins.”

Despite all of the grants and help, the poor man started to complain instead of thanking the generous man. He started to oppose and blame the generous and benevolent person by saying, *“Why do I not have as much gold as others? Why don't you give me more?”* instead of thanking the man who gave him so much gold.

In fact, this complaint is ingratitude and thanklessness. The benevolent person may not have given him anything because the desperate man had no right to receive anything from him. The rich man gave him the gold coins because of his mercy and as a grant.

Similarly, Allah brought man into existence from nothing; He did not create him as a stone, as soil or as one of the thousands of species of trees and animals. He raised man to the degree of the greatest blessing and bestowal, bestowed the blessings of humanity and Islam. He made him healthy in most of his life, fed him at the table of the earth every day and equipped him with the

organs like hands and feet along with spiritual organs like mind, thought and love.³⁸⁶

If we liken every given blessing to a step, man has been ascended to such a high minaret in terms of blessings; he has been granted such great blessings grants and boons. Allah has bestowed upon him so many blessings out of His generosity though he does not owe man anything; can man ignore what He has given him, show ingratitude and think as follows as if Allah has violated his rights and owes him:

“Why am I 160 cm tall, not 170 cm?

Why am I not as handsome or beautiful as such and such a person?

Why am I sick but such and such a person is not sick?

Is what has happened to me not cruelty and injustice?

In fact, the person who is 60 cm tall and who thinks he is inferior to others should think as follows:

“Allah brought me into existence out of nothing; He did not create me as a stone, soil, tree, microbe or animal. Thus, He elevated me to millions of steps of bounties though He does not owe me anything. He would have never created me if He did not want to. He could have created me as a stone or soil”.

Although He expects thanking from me for all those grants and blessings, I look at the people who have been given more blessings and complain about it. However, I have to look at those who have fewer blessing and be thankful. Instead of thinking that I am 10 cm shorter than others, I should think as follows: There are people and creatures that are shorter than me. I could have been even an ant of half a centimeter tall. I should not complain and show ingratitude instead of thanking Allah.”

9.1.8- Rebellion against Allah’s preference?

1) It is the preference and decision of God Almighty to create man in a certain place and time, as a member of a certain race, with a certain gender, character and characteristics.

“Why was I born here, not in that city and town?

Why are my parents not such and such people?

Why did Allah create me as a member of this race, not that race?

Why am I dark-skinned, not light-skinned?

Why did He create my eyes blue, not black?

Why did He create me as a man or a woman?

Why did He not make my height shorter or longer?"

The questions above and similar ones can be considered reasonable only when they are asked to understand the wisdom behind them. Otherwise, they mean to question Allah, to rebel against Him and even to challenge Him. This means not to show consent to compulsory qadar³⁸⁷ and not to surrender. What generally underlies such questions is not to show consent to Allah's preference and decision, to criticize Him and to accuse Him of oppression and injustice.

Allah's divine predestination, choice, and will exist in the creation of the universe and in everything. For example, Allah created the sun as a lamp with a certain size, a certain system and certain functions. Can we ask Him the following questions by assuming an attitude that questions, judges and dislikes Him?

"Why did Allah not create the sun as a rectangle?

Why did He not create the sun bigger or smaller?

Why is one day not sixty hours?

Why are there four seasons, not five?

Why does another sun to illuminate the world not exist?"

Such questions can be asked about any issue and any creature. However, they are useless. Those who ask those questions can be given the following answers:

"Make a rectangular sun to heat us if you do not like its shape.

Come on! Make a make a bigger or smaller sun.

If you can do it, increase the number of seasons.

Come on! Make a day 60 hours..."

Man is definitely weak, very needy and poor. It is clear that we cannot make a lamp and stove like the sun, which Allah hung above us as a miracle. We cannot afford to meet its expenses even for one second. However, man can sometimes resort to ways like challenging, opposing, criticizing and questioning God Almighty, who has infinite knowledge and will, with the cooperation and help of human devils and jinn and his soul and by transgressing his limits.

In fact, there is no difference between the question "*Why did He create the sun like this?"* and "*Why did He create me like this?"*"

2) The requirement of divinity is to do and create as He wishes. As it is stated in a verse, God Almighty is *“Fa’alun lima yurid = Doer (without let) of all that He intends”*. He does whatever he wants and does not account for anything to any creature and man.

He is wise; He creates His creatures in a wise way and properly. In fact, there is no defect, error or deficiency in His creations. For this reason, the following is stated regarding the issue: *“laysa fil-imkanabda’umimmakan”*. That is, there is nothing more beautiful than what is created in the universe.

O ignorant and weak man! Did Allah appoint you as an engineer, witness and critic for what He created? Who are you to challenge him? Nobody has the right to complain about God Almighty because there are countless wisdoms behind the creation of the world. Those wisdoms and purposes might not comply with the desires and wishes of some weak people. If those people were to be pleased, thousands of wisdoms would object to it. A thousand wisdom cannot be opposed to please a person. As a matter of fact, a verse of the Quran explains this fact as follows:

“If the Truth had been in accord with their desires, truly the heavens and the earth, and all beings therein would have been in confusion and corruption.”

Allah does not change the system and order of the universe according to the pleasures of people. Otherwise, the order in the universe will disappear.

Allah did not appoint the small desires of the objecting man as an engineer to the creation of the universe, functioning of its laws and its order. By exceeding his limits, man makes his inadequate mind a criterion and checkpoint for the affairs of Allah. He regards Allah’s help and blessings as bad deeds and misfortunes. He dares to intervene in the universe, which was created by infinite knowledge and power and which functions regularly, in order to satisfy his wishes and to calm his desires, without thinking of his weakness.

9.1.9-Why did Allah create me like this?

Question: Why did Allah create me like this? Why did He do this like that?

In our age there are such objections and criticizing questions. These questions and similar can be answered as follows:

“If you are not satisfied with your creation and the creation of the universe, if you do not like some of the things, leave your body and the property of Allah. If you can, leave the heavens and the earth, leave the universe and go to another place.”³⁸⁸

How can one rebel against and challenge the pre-eternal and post-eternal Sultan, whose power is enough for everything, who holds the stars and suns with His hand of power and makes them obey Him? To Him belong the armies of the heavens and the earth. He makes the world and the other heavenly bodies turn seventy times faster than a cannonball. If he wants, he can use it and the other heavenly bodies like bullets and make them go out of their orbits.

One has no right to demand any rights from God Almighty because whatever He has given is out of His grace and generosity. Everything is His gift. On the contrary, man always owes him thanks. To Him belongs all property; He uses His property as He wishes. Moreover, man is also in His property and is His slave. How can poor and weak man, who is His slave and servant, who works in His property, who gets everything from Him as grace and grants, all of whose needs are met by Him, demand rights from Him?

9.1.10- Showing consent to qadar and not cursing time

Showing consent to qadar and surrendering to qada is a sign of being a believer. Once, the Prophet (pbuh) reported the following from Allah Almighty in Madinah:

“Sons of Adam curse time. However, I am the creator of time. Everything is in my hands, and I change the day and night.”³⁸⁹

1) It is Allah who creates everything including time though He is free from time and space.³⁹⁰ Time began with the creation of the earth and the heavens. Everything is by his predestination and judgment. He has predestined and determined everything before the creation of the earth and the heavens.

Qurayshi polytheists pagans and those who looked like them said, *“Time is so bad”*. Thus, they attributed the difficulties and the misfortunes that hit them to time; they talked badly about time. Almighty Allah said, *“Anad-dahru = I am time”*, that is, *“I created time and I manage and control time”*.

3) God Almighty has given His slaves what they deserve; he has always been fair to them in His deeds; He has never oppressed them. It is Allah who

creates what happens in the course of time; He creates both the good and the evil. However, creation of evil is not evil; doing evil is evil. Nevertheless, people blame time for the bad deeds that they prefer and commit and for the bad results of what they do³⁹¹; thus, they actually blame Allah.

4) They sometimes express this thought by saying, “*Yakhaybatat-dahri = O loss/disappointment of time*”.³⁹²

Are you pleased with qadar?

When verse 108 of the chapter of at-Tawba was sent down³⁹³, the Prophet (pbuh) went to the village of Quba from Madinah with some muhajirs. He stopped and stood at the gate of Quba mosque and asked the people of Quba who were inside the mosque:

“*Are you believers?*”

The congregation were surprised by the question. The Messenger of Allah (pbuh) asked again.

“*Are you believers?*”

When they did not answer, Hz. Umar said,

“*O Messenger of Allah! They are definitely believers. I am together with them.*”

After that, the Messenger of Allah (pbuh) asked them the following question about qadar:

“*Do you show consent to Allah’s qada and qadar?*”

This time, those in the mosque answered:

“*Na’am = Yes.*”

The Prophet mentioned belief in qada and qadar there. This incident shows that belief in qada and qadar was an issue that was talked about from time to time. The Companions believed in qada and qadar. The questions and answers continued as follows:

“*Do you show patience when you are hit by a misfortune?*”

Belief in qada necessitated showing patience in the face of the misfortunes and hardships coming from Allah. The people of Quba answered it with one word:

“*Yes.*”

Thereupon, the Messenger of Allah (pbuh) said,

“*By the Lord of the Kaaba, you are believers.*”³⁹⁴

The answers they gave were evidences for their belief. By believing in Allah, they showed consent to qada and qadar³⁹⁵, and showed patience in the face of the misfortunes and calamities. This necessitated not complaining about Allah in the face of the misfortunes and calamities. They were pleased with Allah when they were in comfort and in hardship. Then, the Messenger of Allah (pbuh) sat among them and asked,

“O people of Ansar! Allah praised you. What do you do when you make wudu and when you go to toilet?”

The people of Quba gave the following answer:

“O Messenger of Allah! We use three stones to clean the feces. Then, we clean with water.”

Upon, their answer, the Messenger of Allah recited the following verse: *“Rijalunyuhibbuna an yattahharu = In it are men who love to be purified...”*³⁹⁶ The people of Quba had learned cleaning with water or having a bath after becoming junub from Jews. However, the verse praised them, not the Jews. The belief of oneness and fulfilling the requirements of that belief were emphasized along with the importance of cleaning in the verse. It is also stated that they washed the residues of urine with water; they never walked around when they were junub and they did not sleep when they were junub. The people of Quba continued cleaning with water after becoming Muslims. They did not even sleep when they were junub. There are two views about the dirt they were cleaned of:³⁹⁷

1) They were praised for being cleaned of material dirt. The verse particularly praises them for using water in the toilet.

2) According to the second view, the reason for the praise is not only because they were people who liked to be cleaned from material dirt. They were muttaqis (people who feared from Allah). They built a mosque on the principle of taqwa (fear of Allah). Thus, they liked to be cleansed from shirk (polytheism) and sins, which are spiritual impurities. They were also the people who were cleansed of unbelief, shirk and hypocrisy, which are the biggest sins, with belief, sincerity and honesty. So, belief is cleanliness, shirk and unbelief are spiritual impurities as the following verse indicates: *“Innamal-mushrikunanajasun = Truly the Pagans are unclean”*. It is also a requirement of strong belief and taqwa to want very much to be cleaned from dirt and impurities. Thus, the believer is clean. If he gets

dirty, he is cleaned with repentance or water. Cleaning of sins is a means of closeness to Allah and obtaining thawabs. Allah loves them because they are cleaned of unbelief and sins. The following is stated at the end of the same verse:

“Allah loveth those who make themselves pure.”

1) According to the verse above, Ansar and Muhajirs were loved by Allah very much because they liked to be cleaned and showed consent to qadar. Allah declared that he loved them.

2) The love of Allah is of high rank and it is love of the type of affection.³⁹⁸ Affection means to love fully.

3) Allah’s loving a person means His being pleased with him and promising that He will give him goodness and grant him a lot.³⁹⁹ And they are pleased with Allah no matter what happens to them and what is recorded in their destiny (qadar) because they show consent to what is in their destiny. In other words, they are in the rank of consent. Their patience in the face of misfortunes also shows it. All these explanations show the importance of the mosque built on taqwa as well as the states and virtues of the Companions regarding their belief in qadar.

9.1.11- Misfortunes that hit us unavoidably

On the other hand, some misfortunes can hit man unavoidably. There are important wisdoms behind them. Once, the Prophet (pbuh) stated the following in Madinah:

*“No fatigue, nor disease, nor sorrow, nor sadness, nor hurt, nor distress befalls a Muslim, even if it were the prick he receives from a thorn, but that Allah expiates some of his sins for that.”*⁴⁰⁰

Hz. Aisha reports the following hadith that has the same meaning:

“The Messenger of Allah said:

*‘There is no misfortune that hits a Muslim with which Allah does not expiate his sins for that.’*⁴⁰¹

These explanations show that all kinds of misfortunes, sorrow, grief, sadness, thoughts, fatigue and painful things, are atonement for some of the sins of the believer; they erase and destroy them. Thus, mercy manifests in misfortunes in a sense. The sins of the believer are not left to the Hereafter; he is saved from the penalty in the Hereafter and his degree rises. In that case, such misfortunes are

beautiful in terms of their consequences; they are like bitter medication; they free us from sins, which are spiritual illnesses that will darken our hereafter, our eternal world. In this respect, it is necessary to show consent and surrender to qadar.

The Prophet made the following explanation about showing consent to qadar in the face of misfortunes and diseases:

*“If Allah wishes for good and goodness for a person, He sends a misfortune to him (to atone for his sins and to elevate his degree).”*⁴⁰²

Abdullah b. Masud narrates the following regarding the issue:

“I went to visit the Prophet (pbuh) when he was ill. He had a severe fever. I said to him,

‘You have a high fever and you are shivering.’

Then, I added,

‘Is it because you will have a double reward for it?’

He said,

‘Yes, for no Muslim is afflicted with any harm but that Allah will remove his sins as the leaves of a tree fall down.’”

In that case, if the Muslim shows consent to qadar and thanks Allah instead of complaining, Allah will clean him of his sins with diseases and misfortunes. From this point of view, misfortunes and problems are blessings and mercy. Man should not complain about them; he should thank Allah for them; such misfortunes should be met with patience and thanking. So, diseases and misfortunes are Allah’s bestowal and gifts in a way. In this respect, Allah gave the most severe diseases and misfortunes to his beloved servants and prophets. Muslims should show consent in the face of diseases, troubles and misfortunes and remember the following verse:

*“When afflicted with calamity, they say, ‘Inna lillahi wainnailayhiraji’un = To Allah We belong, and to Him is our return’”*⁴⁰³

The Prophet (pbuh) also stated the following regarding unavoidable misfortunes:

*“If Allah sends punishment upon a nation, it befalls upon the whole population indiscriminately and then they will be resurrected (and judged) according to their deeds.”*⁴⁰⁴

It seems that when penalties (difficulties and hardships) such as famine, disease, earthquake, difficulties, costliness and collective deaths are sent to a community, it can hit all kinds of people in the community. Such penalties affect both good and bad people. If the penalty affects only the wicked people, it will be contrary to the secret of testing. In that case, everyone will inevitably be good. However, when Allah resurrects people on the Day of Resurrection, He will reward the good and treat everyone according to their deeds.

9.1.12- A misfortune comes if Allah preordained it

A believer knows that what is not recorded in qadar will not happen. The same thing is valid for misfortunes. The following is stated in verses 22 and 23 of the chapter of al-Hadid:

*“No misfortune can happen on earth or in your souls but is recorded in a decree before We bring it into existence: That is truly easy for Allah: In order that ye may not despair over matters that pass you by, nor exult over favors bestowed upon you. For Allah loveth not any vainglorious boaster.”*⁴⁰⁵

It is explained in the verse above that everything is included in qadar, and that misfortunes are also determined in advance. This is very easy for Allah. Furthermore, a believer who has suffered something should say, *“since it has happened, it exists in qadar”*; he should not be sad about what he has lost; if he has been given a blessing, he should not be spoiled.

Verse 51 of the chapter of at-Tawba also clarifies the issue. When the Messenger of Allah (pbuh) was granted a victory and booty, the hypocrites would not rejoice but when the believers were hit by a misfortune (defeat, harm and death) in a war, they would boast by saying, *“We secured ourselves by not taking part in the war.”* The Messenger of Allah (pbuh) was given the following order related to that attitude of the hypocrites:

*“Say: ‘Nothing will happen to us except what Allah has decreed for us: He is our protector’: and on Allah let the Believers put their trust.”*⁴⁰⁶

Thus, everything, whether good or bad, that happens to man is based on Allah’s qada and qadar. When a believer is hit by a misfortune, he should say, *“Since it has happened, it exists in qadar. Allah is my helper; I trust in Him. I show consent to His qadar and qada; there are definitely wisdoms behind it.”* He should show patience and consent to misfortunes. The following principle

necessitates it: “*Man amanabil-qadaraminamin al-kadar = He who believes in qadar becomes free of distress.*”

However, a Muslim cannot commit a sin by deciding to commit it and saying, “*That is divine predestination.*” Similarly, he cannot say, “*That was divine predestination*” by blaming qadar; he cannot acquit himself like that.⁴⁰⁷ Showing consent to unbelief is regarded as unbelief; a person who shows consent to unbelief becomes an unbeliever; similarly, showing consent to sins makes a person a sinner.

It is not appropriate to understand showing consent to qadar like that. In the example above, the person shows consent to a sin. However, Allah is not pleased with that sin since He prohibited that sin. Allah is the Creator of everything, whether good or evil. It is necessary to accept it and show consent. However, one should not commit a crime with which Allah is not pleased and should not blame qadar by saying, “*That existed in qadar*”. There is no decree in the verses of the Quran and hadiths stating that one should *show consent to unbelief and sins and commit them*. Besides, man was given will for responsibility; qadar exists in the principles of belief so as to save man from pride and conceit.

EVALUATION QUESTIONS

- 1-Why is creation of evil not evil?
- 2-What is the secret of and wisdom behind the creation of devils?
- 3-Does qadar prevent man’s freedom?
- 4-Does Allah know everything of man in the past and the future?
- 5- Does the fact that Allah knows everything save man from the responsibility of committing evil?

9.2-WHAT IS THE REALITY OF DEATH?⁴⁰⁸

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1- The student learns the types of death. 2- He understands that every living being is programmed to die. 3- He understands the purposes for which programmed cell death is used. 4- He understands that healthy life is possible with programmed cell death.	1-What is the real nature of death? 2-What does programmed death mean? 3-Is death non-existence? 4-Is there a way to escape death? 5-What do you understand from the statement “ <i>Healthy life is possible with programmed cell death</i> ”?

Although death is an avoidable phenomenon that happens to every living being, its real nature has remained hidden throughout human history. Materialist evolutionists regarded death as a coincidental, harmful and passive incident that ended the life of living beings and saw it as a trap set by nature. They thought that death was decay, decomposition and elimination. Some philosophers interpreted aging and death as a bad fate.

Is death really bad? Is it a work of nature?

Death is not a purposeless event that occurs coincidentally. Death occurs intentionally within the framework of a program placed in the living being, that is, death is created. Therefore, death is not actually a means of elimination, but a necessary mechanism to live and maintain a healthy life.

Robert Browning says, '*You cannot know the meaning of life until you die; it is death that makes life livable and gives importance to it.*' der. Dr. Mak states that life will not exist without cell death.⁴⁰⁹

John Owen says, '*We, mortal beings, die in thousands of ways but we are born in one way. There are thousands of human diseases but there is only one health.*'

Death is not actually a means of elimination, but a necessary mechanism for to live and maintain a healthy life.

In addition to human beings and multicellular organisms' dying in thousands of different ways, it has been understood today that cells also die in thousands of different ways. That is, there are thousands of causes and different forms of programmed cell death in living beings.⁴¹⁰

In this world, life, in fact, exist with death; death is more apparent than life.

The following is stated in a verse about death in the Holy Quran:

"It is Allah Who causeth the seed-grain and the date-stone to split and sprout. He causeth the living to issue from the dead, and He is the one to cause the dead to issue from the living. That is Allah: then how are ye deluded away from the truth?" (al-Anam, 95).

Tafsir scholars who interpret the relevant verses and hadiths state that death occurs by the predestination of Almighty Allah, that it is created just like life and that it is the beginning of a new life.⁴¹¹

9.2.1-TYPES OF DEATH

In biology, cell death can basically be divided into two as programmed death (apoptosis and autophagy) and unprogrammed death (necrosis). However, in recent studies, it has been reported that there are other types of death that differ from apoptosis, autophagy and necrosis.^{412,413,414}

9.2.2-Programmed Death (Apoptosis and Autophagy)

Apoptosis

In programmed cell death (apoptosis), the cytoplasm condenses, the cell shrinks and contracts; its connection with neighboring cells breaks. Nuclear DNA breaks at nucleosomal regions. Cytochrome c is released from the mitochondrial membrane to the cytoplasm. The activity of proteolytic enzymes called caspases increases. The cell skeleton elements are broken down and rearranged on the cell surface. Ribosomes are in small groups and most of the endocytic vesicles are joined to the cell membrane. The mitochondrial task disappears in programmed cell death. Membrane vesicles are formed as a result of cell membrane changes. Inflammation does not occur since cytoplasmic vesicles (apoptotic bodies) containing nuclei and organelles are removed by phagocytic cells.^{415,416,417}

The programmed death of the cell takes place in three stages:

- 1- Receiving the death signal (stimulation),
- 2- Caspase activation (Process)
- 3- Removal of the residues.

In programmed cell death,

- a- First, death signal is received from inside or outside the cell.
- b- Next, proteases (Caspases) are activated.
- c- Activated caspases are assigned the task of destroying target proteins.
- d- In the final stage of programmed death, apoptotic objects are formed and the resulting apoptotic objects are phagocytosed.

Autophagy

One type of death that is programmed but differs from apoptosis is autophagy. It is a physiologically programmed type of cell death that is responsible for the destruction of impaired organelles, damaged macromolecules and pathogens; it is independent of caspases and has no caspase activity. Autophagy is a miraculous incident that works as a quality control system in living beings.

Autophagy is a word that means “*eating oneself*”. It is the breakup of the structures inside itself to obtain energy when the cell is hungry.^{418,419}

Autophagy is activated and the cell is killed when apoptosis is insufficient depending on the cell content. It is also known as a tumor suppressor mechanism.

Autophagic cell death protects homeostasis, especially by recycling intracellular molecules against hunger and all other stress factors. Thus, it is understood that autophagy has an important role in staying healthy and surviving.

If nutrients cannot be supplied to the cell, autophagy is activated, causing self-eating. Autophagy can also be triggered by cellular stress factors such as pathogen infection, toxin substances and hypoxia. Autophagy is actually a necessary mechanism to protect the cell in difficult conditions. However, if the pressure of the conditions causing stress increases, it consumes the cell and causes death. Disruption of autophagy mechanism causes cancer, early dementia, Alzheimer and various infections.

Autophagy is also an effective mechanism for the development of living beings (such as metamorphosis, wings in birds and palate formation in mammals).⁴²⁰ ATGs (Autophagy-related genes) are the genes assigned in autophagic cell death⁴²¹.

It has been found that there are different types of cell deaths that are similar to apoptosis and autophagy (programmed cell death) in some aspects but different in terms of other aspects. For example, although the form of necroptosis is programmed death, it is similar to necrosis in some aspects.

9.2.3-Every living being is programmed to die

It is seen even with a superficial look that every living being is programmed to die. Although the life spans of living beings are different, no living being can escape aging and death. Every living being that has life will definitely die one day. Although innumerable living beings lived in the world, none of them remained outside the reality of death; they lived as long as the supreme Creator predestined and they died after that. Every living being has a predestined life span; species also have life spans predestined for them. For example, individuals of some species live only a few days while individuals of some species can live a few years or a few hundred years. Man is not out of the scope of this reality either. Despite the dizzying speed of progress in science and technology, human death has not been prevented even though it has been delayed a bit.

In the face of these facts, man had already known and believed that living beings were programmed to die. However, it was understood with scientific

methods that living beings and cells were programmed to die after the 1970s. In 2002, the Nobel Prize was awarded to scientists working on the issue of “*programmed cell death and genetic regulation of organ development*” due to the importance of the issue in medicine and biology.⁴²²

9.2.4-The Role of genes in programmed death

RNA or DNA fragments that constitute a particular part of chromosomes is called a gene. If the genetic structure of every living being is likened to a library, the chromosome is a book in the library and the gene is a page or a chapter in the book. Genes are software or programs necessary for the vital tasks and biological development of all organisms. Chromosomes are made up of DNA as if they are packed. Therefore, there are many genes, i.e. programs in a chromosome.

More than 25 genes have been identified for programmed cell death. One of the most important of these genes in humans is the p53 gene, which is a 393

How are all the proteins that make up the structure of living beings synthesized?

These genes are synthesized in cells according to the special codes, i.e. the software, on the genes.

Can the mindless and unconscious substances come together by chance on their own and make very wise software or programs?

Definitely not. If there is a program, there must be a programmer too. Materialist evolutionists accept the program and that the program is wonderful. However, they do not accept the programmer. They claim that the perfect software and programs in all living beings are formed by chance and that they occur as a result of mindless and unconscious atoms, elements and molecules’ coming together and organizing.

This perfect system in which we live, the living beings, which are wonders of art, in it and the sophisticated software and programs in living beings can occur only with the existence of a Creator with infinite knowledge, will and power.

More than 25 genes have been identified for programmed cell death. One of the most important of these genes in humans is the p53 gene, which is a 393 amino acid protein.

P53 Gene and its tasks in programmed death

One of the most important tasks of the p53 gene is to control the cell cycle according to environmental conditions and the state of the cell. P53 gene is also involved in DNA repair and synthesis, cell differentiation, genome formation and programmed cell death.^{423,424}

P53 is a transcription regulatory gene. If the death program in the p53 gene undergoes mutation or if p53 is not assigned any task in cell death, it is not activated. Therefore, as a sign of mercy, the cell does not enter into the death process. Thus, the life span of the cell is lengthened. The p53 gene in cells is usually activated by cell damage. The protein synthesized under the control of the software in the p53 gene binds to DNA and recognizes the damage. Once the damage has been detected, there are two different ways for the p53 gene.

The first way: If DNA damage is minimal, the cell cycle is stopped at the G1 stage and the damaged DNA is repaired. DNA repair should be performed while the cell is in the G1 stage before proceeding to the S phase because cell DNA is replicated in the S phase. If the cycle was not stopped in the G1 phase during the cell division and if the damaged DNA continued to be produced, the damaged DNAs generated by mutations would change the genome, that is, the gene structure of the living being.

It means mercy and grace do not allow such negativity.

Thus, with the p53 gene, the cell is prevented from entering the S phase until it is cleared of mutations that have a genome-altering effect. Therefore, the p53 gene is also known as a '*the guardian of the genome*'.

The second way: If the DNA damage is too much, the death program in the p53 gene is activated and the cell is killed.⁴²⁵

The program recorded in the p53 gene shows the existence of a programmer. The features of the program that require the will, such as sometimes working sometimes not working according to circumstances, and deciding what to do under which conditions, can be possible only if

As it is seen, the program in the p53 gene is not like a conventional computer software. The p53 gene is activated according to the circumstances.

Secondly, timing is managed perfectly.

Thirdly, it is well known what to do and under what circumstances. Most importantly, what p53 does is vital for the living being. However, the p53 gene is a mindless and unconscious protein; it is not possible for it to know them.

Thus, the program recorded in the p53 gene shows the existence of a programmer. The features of the program that require will, such as sometimes working sometimes not working according to circumstances, and deciding what to do under which conditions, can be possible only if the programmer is active any time.

Detection of DNA damage by the p53 gene is not a simple task. Let us think about it a bit. For example, let us think about the devices that detect malfunctions in automobiles.

Firstly, the diagnostic devices are the result of technology and accumulation of knowledge; they are the design of an inventor who knows the equipment in automobiles very well.

Secondly, the diagnostic device does not operate on its own. Someone who is smart and knows the job is necessary for it to operate.

Thirdly, deciding what to do according to the malfunction and doing the repair work, or to scrap the car and send it for recycling if the damage is irreparable are tasks that a being with knowledge and will can do.

However, the p53 gene's recognizing DNA (very small and very complex) damage, deciding what to do, and taking action (repairing or killing the cell) cannot be explained by chance-based evolutionary mechanisms.

Only sane people with healthy mind can understand the existence of the Creator from these wonderful works. Otherwise, it cannot be explained by reason and understanding for a person who wants copyright or even a patent for his own small works to attribute those wonderful works to chance and coincidence.

Bcl-2 gene family and their tasks in programmed death

The Bcl-2 gene family, which consists of intracellular antiapoptotic and proapoptotic membrane proteins, also plays an important role in regulating the programmed mechanism of death. In addition, the Bcl-2 gene family is capable of

suppressing the progression of cell cycle from G0 to G1 and enhancing the ability of some neurons to regenerate.

Proteins related to Bcl-2 gene family can be examined under 3 groups according to their structures and tasks.

1. The Bcl-2 subgroup (Bcl-2, Bel-XL and Bcl-w):

They have antiapoptotic activity. They are placed on the outer membrane of the mitochondria.

2. Bax subgroup (Bax and Bak):

They are proapoptotic; they serve as perceivers of cell damage and stress sensors and are usually found in the cytoplasm.

3. Bik subgroup (Proapoptotic Bik and Bim).

The distribution of Bcl-2 in the cell varies according to the cell type. The tendency of the cell toward programmed death depends on the type of Bcl-2 it contains. The more proapoptotic proteins in the cell, the more the cell is prone to programmed death, and the more antiapoptotic proteins in the cell, the less the cell is prone to programmed death. Bcl-2 is most commonly placed in the mitochondria, flat endoplasmic reticulum and the membranes around the nucleus. Bcl-2 does not prevent all kinds of cell death.^{426,427,428}

9.2.5-Mindless and unconscious matter cannot make a program on its own

In programmed cell death, it is ensured that the nucleus DNA is regularly and irreversibly broken in the nucleosomal regions. The breakdown of DNA in the cell is based on the activity of nuclear endonucleases (enzymes used to cleave a nucleic acid chain at certain places), whereas the activity of nuclear endonucleases is based on the increase of Mg and Ca elements in the cell. These elements are mindless and unconscious. They can only be officials in the creation and operation of the death program. Letters and numbers cannot write a book or make a computer program on their own; likewise, mindless and unconscious elements cannot produce a living being, which is like a book, and the wonderful programs in the living being.

All these incidents in the cell are made consciously. The cell acts as if it knows what is going to happen beforehand. The programmed death mechanisms are operated flawlessly and the cell is taken to death. The existence of great

programs in tiny cells and the timely operation of them and the wise work of all elements cannot be attributed to coincidence by any means, as materialist evolutionists claim. These wonderful works show that there is a creator who uses all elements like the letters of our alphabet, and that He disposes the affairs every moment.

This fact fits the definition of the Creator by Islam. For, in the Islamic religion, the Creator is infinite with His names and attributes (knowledge, power, etc.). He does not need anything. Everything is in need of Him; He is pre-eternal and post-eternal; He is unlike any created being; There is no other being like Him. The creation of the magnificent and orderly universe, the numerous strange creatures in it, the wonderful systems and programs in each living being, and their operation can only be possible by a Creator with the characteristics that the Quran describes. This is not a hypothetical assumption. It is a fact that is confirmed by reason and conscience based on the works that are done. Otherwise, a sane and conscious person cannot attribute the wonders and perfection in the works to mindless and unconscious substances, and to blind coincidences.

9.2.6-Who gives the death order and how?

Every living being and cell has a death program in its genetic structure. However, the death program is not activated before its due time. The death program is activated in due course under normal physiological conditions and death occurs according to this schedule. The time of death varies according to each living being and cell. How is the death program activated in living beings? In other words, for what reasons is the death order given and how is the death mechanism operated?

Lack of growth factors, cytokines (monocytes, macrophages and intercellular communication secreted by lymphocytes), increased intracellular calcium content, tumor necrosis factor (TNF), TGF-B (Transforming Growth Factor), activation of p53 gene due to DNA damage, activation of the Fas/FasL system, viral and bacterial infections, and glucocorticoids are used as a means of giving the death order and operating the death mechanism.⁴²⁹

The most prominent feature of programmed cell death is the increased cytoplasm density. However, the mechanisms by which cytoplasmic density is increased is not known. The amount of calcium in the cytoplasm increases before

programmed death. Calcium is involved in many activities in the cell, especially in signal transduction. Increased calcium in the cell cytoplasm activates some silent enzymes such as endonuclease and transglutaminase. Activation of these enzymes also causes changes in the structure of the cell.^{430,431,432}

As it is seen, those who give the death order are elements or molecules that are mindless and unconscious. For example, increased intracellular calcium content has been shown to be a reason for operating the programmed mechanism of death. Then, the following question comes to mind: What are the causes of the increase of the amount of calcium in the cell? In terms of causes, these chained relationships will go longer and longer. That is why, as science progresses, the amount of the unknown increases.

The point that misleads materialist evolutionists here is that the Creator does things by using causes. Those who ignore the meaning and look at only matter will definitely see only matter and causes; they cannot see the truth.

Imagine a person who was shot to death with a gun. The person who killed, planned to kill, and pulled the trigger is a sane person who has will. The weapon, trigger, gunpowder and bullet are causes for the killing. Materialist evolutionists look at only causes, i.e., mindless and unconscious matter, and they attribute the act of killing to matter. However, a being that does wise things cannot be unwise; a being that does conscious things cannot be unconscious and a being that makes right decisions cannot be will-less. We see in programmed cell death that mindless, unconscious and will-less substances do wise, conscious and willed deeds. Then, it is Divine Science, Power and Will that makes the death program and decides when and how the death program should be operated. The mindless and unconscious matter is only a cause or an official.

9.2.7-The most well-known death receptors

Death receptors, adapter proteins, and proteolytic enzymes (Caspases) are the groups that work actively in programmed cell death. The receptors of the death signal in the cell (death receptors) are usually molecules that have important roles in the cell cycle.

The most well-known death receptors are as follows:

CD95 (APO-1/Fas), TRAIL (TNF Related Apoptosis-Inducing Ligand)-R1, TRAILR2, TNF-R1, DR3 and DR6.

The task of death receptors is to bind to the adapter proteins and transmit the death signal. The adapter proteins that receive a death signal bind to caspases and cause them to be activated. Caspases cleave proteins only in regions having aspartic acid. Caspases are not active in the cell until the death signal reaches the cell. Inactive caspases in the cell are called procaspases.

There are 3 groups of caspases in terms of structure and functions.

1. Caspases involved in the production of lymphokines (activating substances that are secreted by lymphocytes and that act as signals among immune system cells).

2. Executioner caspases

3. Activating caspases (They are in charge of transmitting signals and activating executioner caspases).

The caspases are activated by the release of cytochrome c into the cytoplasm. The caspase that receives the death signal is operated irreversibly and activates other caspases. The initiating caspases that receive and transmit the death signal bind to the adapter, causing the cell to go to death but they do not carry out the execution. However, they are responsible for activating caspases that will carry out the execution. Those who carry out the execution are the executive caspases. The activated caspase sequence also causes DNA degradation through the DNase (CAD) enzyme. Caspase inhibitors are in charge of inhibiting effector caspases and preventing programmed cell death (Apoptosis).⁴³³

The operation of the programmed death mechanism in the cell is like an action film. There are those who give the death order, intermediaries, assassins, executioners, the

As it is seen, the operation of the programmed death mechanism in the cell is like an action film. There are those who give the death order, intermediaries, assassins, executioners, the dead and the removal of the dead from the medium.

All elements and molecules involved in programmed cell death are actors. They only do the assigned task. It is Divine Power that plans and writes the wise and orderly death scenario in the cell, assigns special tasks to different actors and draws the boundaries of the given tasks, sometimes stops the film and restarts it according to circumstances.

9.2.8-Some questions for materialist evolutionists

Programmed cell death (Apoptosis) occurs in both physiological and pathological conditions. Programmed cell death under physiological conditions is in question in embryo development, tissue modeling, immune cell selection and so on. Programmed death is already planned in the genetic software of the cell. The cells die according to the program when the physiological conditions are appropriate. The following questions come to the mind of everybody who has reason and conscience regarding the issue:

- Is it possible for the programs, especially extremely complex programs, in the living beings to occur without a programmer?

This fact is better understood today, which is the age of software. There are software engineers and labor behind all software.

-Which one of the numerous software programs used today may have occurred by chance?

The answer is very clear. None.

- So, if even the simplest man-made programs cannot happen by chance, is it possible for the complex programs in living beings to be made by mindless and unconscious substances that come together coincidentally?

Is it not a clear evidence for the existence of the Creator who created the program that living beings are programmed to die?

Materialist evolutionists say that in programmed cell death under physiological conditions, cells sacrifice their own lives, that is to say, commit suicide for the health and benefit of the living being. They do not explain how the cells make this decision and why they sacrifice themselves for others. Why should a cell develop and harbor an executioner (death mechanism) that would eliminate it?

- With what natural selection can the programmed mechanism of death in the cell be explained?

- If life is a struggle, why does a cell sacrifice itself for others?

A logical answer to these questions is totally contrary to the philosophies of materialist evolutionists because they are not engaged in meaning but in causes and mechanisms. According to the Darwinist view, life is a struggle and the

strong ones survive. However, in programmed cell death, the cell sacrifices itself for the benefit of other cells. This physiological incident is not something that blind coincidence and unconscious substances can do. It is not something that can be done by cells, and tissues, organs or living beings, which are made up of cells, either. For, mindless and unconscious matter cannot do such clever and conscious deeds. Thus, the death program in cells and living beings is a deliberate and wise work of the Supreme Creator. It is a reflection of the program of qadar based on His predestination.

9.2.9-For what purpose is programmed cell death used?

Programmed cell death exists at every stage of life and is an important mechanism of creation (Figure 1).

Let us now consider a few more important purposes of the programmed death mechanism in detail.

The balance in the structure of the living being (homeostasis) is maintained through programmed cell death

Programmed cell death is used in the developmental stages of the living being. Both cell proliferation and death are under control in healthy multicellular organisms. Cells are created by taking into consideration the shape, size and tasks of organs and tissues in living beings; and their numbers are controlled precisely. precise control mechanisms in cell proliferation should also be performed in cell death so that homeostasis would be maintained and life would continue (Figure 2).

Programmed death normally ensures that the content, size and shape of all body parts maintain the desired properties. Homeostasis is not only about keeping the cell number but also water, temperature, pH, sugar, iodine, Na, Cl and so on under control. In this respect, the life of the living being is possible by maintaining all these balances. Death can occur when even only one cell breaks the rules and even only one of the internal balances breaks down.

It is reported in some resources that human body contains approximately 10^{14} (100 trillion) cells. However, it has been found in a recent study that this number is approximately $3-4 \times 10^{13}$ (30-40 trillions). Previously, the number of bacteria in the human body was estimated to be about 10 times the number of

cells. This information has also been reported to be inaccurate; it has been determined that the number of cells and the number of bacteria in the human body are approximately the same.⁴³⁴



Figure 1. Programmed cell death is used in all stages of life.



Figure 2. Life continues with homeostasis. Homeostasis in living beings is possible with programmed death. Programmed killing of cells is just as important as their creation for the maintenance of life.

Billions of cells are killed every day to maintain normal physiological functions and to sustain human life. However, body size is maintained. The integrity and the size of tissues and organs are maintained by establishing the balance between cells that are created and cells that die. The rate of programmed cell death (Apoptosis) in living beings is 20 times faster than mitosis, i.e., cell division.^{435,436}

Thus, the maintenance of balance is ensured by killing cells when it is necessary, not arbitrarily. The number of cells that die with programmed cell death in one day is approximately 20-30 billion in a child aged between 8 and 14 years, and 50-70 billion in an adult. If development (Mitosis) continued without programmed cell death (Apoptosis), an 80-year-old man would have about 2 tons of bone marrow and lymph nodes as well as 16 km of intestines.⁴³⁷

On the other hand, erythrocytes are the most common type of cells in humans. The life span of erythrocytes is approximately 100-120 days. Blood erythrocyte regeneration rate is approximately 200-250 billion/day (200-250X10⁹/day). Erythrocytes are cells without nuclei and mitochondria. Therefore, programmed deaths of erythrocytes (suicides) are similar to apoptosis in some aspects, but different in other aspects. The word "Eryptosis" is used for programmed deaths of erythrocytes.^{438,439}

Each living being is like a wonderful palace. Each stone (cell) of these palaces is adorned with inimitable arts. Thus, the existence of the master (Creator) is as clear and definite as the existence of the palace. The fact that millions of stones that are uniquely valuable are changed and replaced with new ones in those magnificent palaces every moment and that the balance (homeostasis) is not disrupted during this rapid change show that the master is always at work. It is understood from the planned and programmed destruction (death) of such countless magnificent palaces after they are built and managed wonderfully for a certain period of time that things do not happen by chance. The Master seems to have important purposes in the careful construction and programmed destruction of those numerous palaces.

Programmed cell death is a mechanism that eliminates unwanted, damaged or abnormal cells and maintains normal tissue and organ development and function.

Materialist evolutionists look at the construction and destruction of palaces. They do not think about the Master and why the Master does so. As they do not have answers to give to those who ask, they get angry, shout, accuse them of being reactionists and despise them. They do not recognize the heavenly religions that explain the purpose of the Master. If you want to show, they will close their eyes; if you want to tell them, they will close their ears.

9.2.10-Healthy life is possible only through programmed cell death

The programmed cell death mechanism is also in charge of eliminating harmful cells and preventing diseases. The safe destruction of aging, lost, over-produced, irregularly developed or genetically damaged cells for the organism takes place with programmed cell death.

Fatal diseases occur if the programmed cell death mechanism in the living being is disrupted.

The programmed cell death signaling mechanism is integrated into the cell signaling network that regulates responses to all cell factors, from cell death to growth, and from development to stress responses. Programmed cell death is a mechanism that eliminates unwanted, damaged or abnormal cells and maintains normal tissue and organ development and function. Thus, programmed cell death is a necessary mechanism for normal organism function and survival. Acting upon this fact, it can be said, '*The way of life is through death*'. For, balanced cell growth and cell death are features of healthy organisms. Fatal diseases occur if the programmed cell death mechanism in the living being is disrupted.⁴⁴⁰

The mechanism of programmed death that is balanced in healthy individuals is impaired only in diseases⁹.

Being healthy or maintaining health depends only on the balanced operation of the programmed death mechanism in the living being (Figure 3).

⁹For instance, neurodegenerative diseases (Alzheimer, Huntington, Parkinson, etc.), hematologic diseases (aplastic anemia, Fanconi anemia, Hodgkin's disease, etc.), autoimmune diseases (fulminant hepatitis, insulin-dependent diabetes, multiple sclerosis, rheumatoid arthritis, etc.), toxin-related diseases (alcohol-induced hepatitis, sepsis, pulmonary fibrosis, etc.), ischemic diseases (kidney infarction, myocardial infarction, stroke, etc.), bacterial and viral infections (AIDS, Ebola virus, etc.), etc. occur due to the excessive increase of programmed death. Cancer, leukemia, lymphoma, sarcoma, premalignant diseases, autoimmune diseases, atherosclerosis, osteoporosis, Wilson's disease and various viral infections, Down syndrome, early aging, etc. occur due to the inadequacy of programmed death mechanism in living beings.

Aging cells in tissues where cell production and destruction are rapid, such as skin, intestinal epithelium and blood, are also killed by programmed cell death; they are cleared from the body without causing inflammation by accumulating in the body and place is made available for new cells. Elimination of harmful cells in the organism occurs as follows: Virus-infected cells are eliminated by cytotoxic T cells; immune system cells are eliminated by cellular immune systems; cells with DNA damage are eliminated by p53; cancer cells are eliminated by chemotherapy agents.

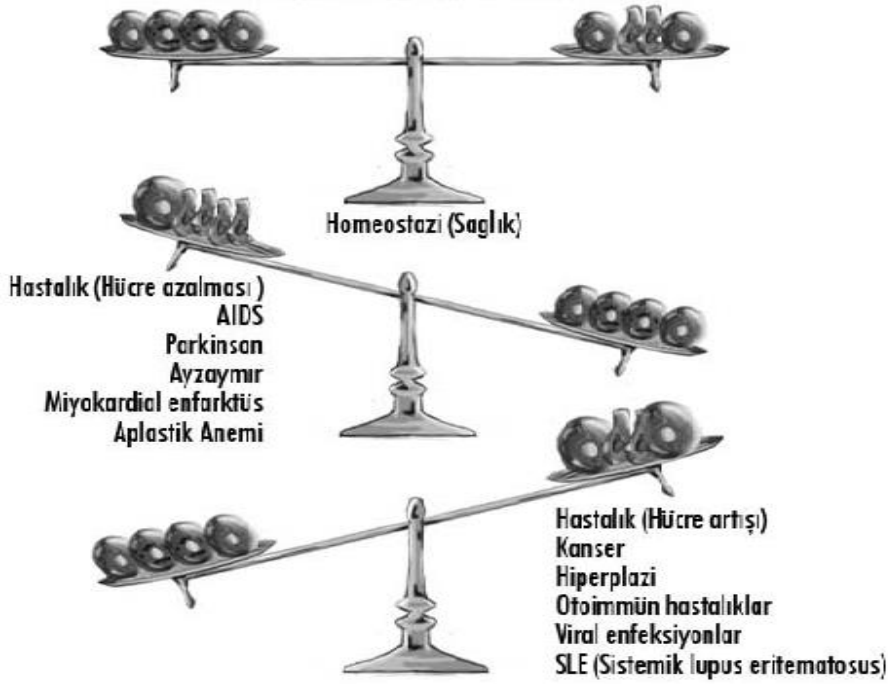


Figure 3. Both unbalanced increase and decrease in the number of cells cause diseases.

The destruction of harmful cells whose structures are disrupted in the living beings is carried out by programmed cell death actively at every stage of life. The continuation of life is ensured in this way. For example, cancer cells always occur in the human body. Therefore, it is always possible to get cancer. However, under normal conditions, the programmed cell death mechanism destroys cancer cells whose structures are disrupted and prevents cancer. If

programmed cell death mechanism is not operated regularly and if disrupted cells are not destroyed, we will get cancer.

Healthy nutrition and environmental factors are effective in the operation of the death program. However, no matter how favorable the conditions are, no living being can escape death. It is based on the will of the Creator, who decides when the death program is to be operated and when the living being is to be killed.

The destruction of harmful cells whose structures are disrupted in the living beings is carried out by programmed cell death actively at every stage of life. The continuation of life is

9.2.11-Programmed death is used in the production of reproduction cells too

Programmed cell death a regulatory mechanism in sperm production (Spermatogenesis) and continues throughout life. Programmed cell death in sperm production is used for the following purposes:

- a) To limit the number of sperm with the number that Sertoli cells can support,
- b) To act selectively in case of abnormally low sperm count,
- c) To ensure the repair of sperm with disrupted DNA structure, to prevent faulty genetic information from passing to the embryo by killing them if they cannot be repaired.

Programmed cell death is also used to eliminate more than 99% of germ cells in the mammal ovaries (the initial state of the egg cell before maturation). Thus, less than 1% of germ cells undergo meiosis to become mature egg cells suitable for fertilization and embryonal development. A five-month-old female fetus ovarium contains approximately 7-8 million immature eggs (oogonium in the primordial follicle); it falls to around 400-500 thousand until puberty. From puberty to menopause, only 400-500 eggs can be thrown. Such a decrease in the number of eggs in ovaries occurs due to atresia, fever, necrosis and usually programmed cell death. Sperm and egg cells are necessary for the existence of man in terms of causes. Programmed cell death mechanism is actively used for the healthy production of these cells.⁴⁴¹

9.2.12-Fingers and toes are made by programmed cell death

Atoms, elements, molecules, organelles, cells, tissues, organs and systems are organized to create living beings. In this wonderful organization, life and death are intertwined and balanced. For example, consider the creation of the fingers and toes in the womb: the web between the fingers and between the toes is removed through programmed cell death. At the same time, new cells are created to enable the fingers to take their current shape and become functional.

No organization can be without an organizer. In particular, ignorant, mindless and unconscious matter and cells cannot do purposeful deeds and wonderful organizations on their own. However, we see in front of our eyes that mindless and unconscious substances come together or disperse for important purposes, and arrange wonderful organizations in our own bodies and in all living beings. In that case, these wonderful works are not done by mindless and unconscious matter, but the Creator, who has infinite knowledge and power. Otherwise, it will be necessary to attribute mind to the mindless, consciousness to the unconscious, knowledge to the ignorant and will to the will-less. Something like that is impossible.

9.2.13-Programmed cell death is used in the development of plants too

Like the animal embryo, programmed cell death is used in the creation of the plant embryo. Programmed cell death is also a necessary mechanism for the normal development of plant organs. Have you ever thought about how the tiny plant roots progress through hard soil and rock? The root is a vegetative organ that connects the plant with the soil. Root cap cells protect the root tips from mechanical damage that could be caused by hard soil. Programmed cell death is also used to create the root cap.

Damaged or aging stem cap cells are quickly replaced by programmed cell death. Trachea-tracheitis, which are among the xylem elements, in plants are also created by programmed cell death. The change of mesophyll cells to trachea elements is done by programmed vacuolar cell death peculiar to plants. The cell content is rapidly digested and converted into tubular cells. Programmed cell death is used in the formation of aeration parenchyma and sclerenchyma in plants, trichome (feather) development, maturation and shedding of leaves, flowers and fruits, and development of reproductive organs.^{442,443}

In autumn, the Creator also collects and removes the magnificent paintings He makes every spring and the unique art exhibitions He opens with programmed cell death so that people can see the artist by looking at the

Programmed cell death seen during plant development is genetically controlled. However, environmental factors such as climate, etc. are also effective in the genetic control mechanism in charge of the aging of the leaves and other plant organs.^{444,445}

Programmed cell death in plants and animals has common morphological features. Molecular events and transcription factors that occur during the initiation, maintenance and termination of programmed cell death in plants as well as in animals have not been elucidated yet. It has not been fully understood yet whether programmed cell deaths associated with plant growth and stress factors are controlled by the same or different mechanisms.⁴⁴⁶

In conclusion, the programmed cell death mechanism is necessary for the existence and continuation of plant life. For instance, it is so useful and meaningful for the plants to shed their leaves in the autumn season with programmed death. When the plant sheds its leaves in autumn with programmed death, it actually prepares for birth again in the next spring. In addition, the Creator creates every plant as a magnificent work of art and every spring as a unique painting.

In autumn, He also collects and removes the magnificent paintings He makes every spring and the unique art exhibitions He opens with programmed cell death so that people can see the artist by looking at the art. One of the many goals

of the Creator in doing so every year is to prevent man from taking things for granted and from heedlessness.

9.2.14- Programmed cell death is important for unicellular living beings too

In multicellular organisms, cells are killed for the benefit of the whole. For example, programmed cell deaths that are created with the aim of developing tissues and protecting the organism from diseases are completely for the benefit of the organism. However, programmed cell death occurs in unicellular organisms too. The benefit of the whole is unimaginable in a single-celled organism because the creature is created from a single cell. So why does a single-celled organism have a programmed mechanism of death? This question has occupied scientists for a long time. It has been determined that programmed cell death mechanism is not operated in states like aging and exposure to toxins in single-celled organisms (for example yeast cells). The following conclusions can be drawn from it first:

1. The Supreme Creator, who created life, also created death and placed the death program in all living beings. Under normal circumstances, all living beings live in the predetermined times, perform tasks loaded on them in ecosystems and are killed by the program. Let us try to explain the physiological benefits of programmed cell death in single-celled organisms by considering yeast cells.⁴⁴⁷

2. The yeast cells that cannot reproduce are killed by programmed cell death. If mating is successful in yeast cells, programmed cell death does not occur. This event is thought to be caused by low-dose secreted pheromones (chemical substances that regulate social relations between members of the same species) if mating fails or is inefficient. Infertile cells are removed with programmed cell death. About 20% of the yeast cells die programmatically at the time of reproduction because of not having the ability to reproduce, and the remaining 80% continue normal reproduction (producing spores). The fact that yeast cells that are not fertile are killed at the time of reproduction is in fact a mechanism that guarantees the survival of the species.^{448,449}

It is definitely not possible for a mindless and unconscious single-celled creature to think of scarifying itself, which is a fact that has been discovered only recently, for the continuation of the species. Today, even sane and conscious

human beings have difficulty in achieving a sustainable population growth. The existence of such a useful mechanism of death for the continuation of the species in a mindless and unconscious yeast cell cannot be explained by blind coincidence and unconscious causes. The wise deeds of a yeast cell is possible only through the mercy of the owner of infinite knowledge, will and power.

3. Yeast cells are eliminated not only at the time of reproduction but also at other times by programmed cell death. Reduction of the amount of the nutrients in the medium triggers programmed cell death mechanism in older yeast cells. Older individuals sacrifice themselves for the survival of young individuals.

Most microorganisms tend to form collective life and biofilms. In this kind of collective life, the benefit of society, not the individual, is considered. When nutrients decrease in the medium, old individuals are killed by programmed death. Thus, more food is provided to young individuals. Young individuals are provided with the opportunity to live longer and to reproduce. In addition, virus-infected, aged, genetically damaged (mutated) yeast cells are also killed by programmed death. Thus, a healthier generation and community are obtained.

Giving high-reproductive power to single-celled organisms is as wise as establishing a programmed mechanism of death.

Yeast cells that settle on a rotting fruit reproduce rapidly until the nutrient is reduced and they form a large colony. When the fruit is completely covered with the colony and it is understood that there is no more food (fruit), the old and damaged cells are killed first based on a program.^{450,451}

This is in fact an example of sacrifice and solidarity at the expense of death for the survival and continuation of the colony. What is interesting in such a situation is how it is determined which aged or damaged cells will commit suicide. It has been reported in some studies that some particular chemical compounds (alcohols) are used in such surprising social interactions among yeast cells.⁴⁵²

That is such a perfect mechanism that yeast cells recognize the special chemical that expresses the death order among thousands of chemicals, takes the death order and dies. Hundreds of chemicals (special proteins such as enzymes) are used for the programmed death of a single-celled organism, and the

mechanism functions flawlessly. The fact that tiny creatures know and apply such complex mechanisms and patterns of behavior that even scientists do not know cannot have been gained by chance-based evolutionary mechanisms.

The existence and oneness of the Creator is understood from such wonderful works and deeds. Programmed cell death is an essential mechanism for removing older individuals from the medium.

The same thing applies to multicellular animals and human beings. If the old individuals of animals and humans were not killed with programmed cell death, it would not be possible to mention ecological balance and the healthy existence of living beings. Place is provided for new and intact cells with the death of old, sick and defective cells.

It has been found that calorie restriction in yeast cells increases life expectancy. It is estimated that this applies to all living beings, from single-celled organisms to mammals and humans. In addition, the mechanism of glucose-dependent signaling in living beings is estimated to be associated with the mechanism of programmed cell death. Calorie restriction, especially during the aging process, delays programmed cell death and lengthens life.^{453,454}

Since man, who is the most intelligent and conscious being among living beings on earth, has no role in the death of the cells in his body and the creation of new ones, plants and animals will definitely have no role in programmed death.

All these programmed deaths are the work of eternal mercy and grace.

4. Yeast cells die programmatically during wartime. If the toxins secreted by the rival yeast cells are low, programmed death is triggered in the yeast cells and necrotic death occurs when the secreted toxin is high.⁴⁵⁵

As it is seen, the programmed cell death mechanism is operated at every stage of life in single-celled organisms. Although death is against the individual, it is in favor of the species and is beautiful. Giving high-reproductive power to single-celled organisms is as wise as establishing a programmed mechanism of death. All these wise works show the existence of the Creator too.

9.2.15-Unprogrammed death (Necrosis)

Until the 1970s, the only known type of death was Necrosis. Necrosis is the death caused by physical or chemical factors (hypoxia, hypothermia, low or high salinity, radiation, toxic substances, etc.) that are not in the genetic program

of the living organism. The cause of death is usually external factors. External physical or chemical factors cause cell membrane damage. Intracellular and extracellular ions cannot be controlled due to cell membrane damage, that is, homeostasis in the cell is impaired. With the disruption of water and ion balance in the cell, changes occur in the intracellular organelles; the cell swells and the cell membrane disintegrates; the cytoplasm content and lysosomal enzymes are released out of the cell in the cell membrane disintegration.

In cell death with necrosis, nuclear chromatin is dispersed, random DNA fractures form, tissue damage occurs and inflammation takes place.^{456,457,458,459}

Death caused by necrosis is usually caused by external factors and has nothing to do with the genetic program of the organism. Therefore, materialist evolutionists do not attribute death caused by necrosis to the Creator; they attribute it to causes, and see it as a random event. They may be excused to some extent because they do not believe in a Deity as described by the Quran.

The Quran describes the Creator as a supernatural, lofty being under whose command is the whole universe and causes, whose knowledge and power are capable of doing anything, who does not resemble any created being and whose existence is understood from his works.

It is quite normal for materialists, who do not have such a Creator concept, to perceive death caused by necrosis as a natural event based on chance. However, a Muslim who believes in the Creator as described by the Quran, attributes death caused by necrosis to Allah and believes that it is Allah who creates and kills living beings. According to a Muslim both atoms and planets, both cells and living beings consisting of cells, both causes and deeds that occur as a result of causes act with the knowledge and power of Allah. The system remains in balance and continues in this way.

9.2.16-Evaluation of death according to Islamic view

According to the Quran, death is programmed and beautiful. Death is the end of the world life and the beginning of an eternal life. There are many verses in the Quran stating that death occurs based on the predetermination by Allah, that death is not the end and that it is the beginning of a new life. (al-Anbiya/35, an-Najm/44, ar-Rum/50, ar-Rum/19, al-Ankabut/57)

For instance, the following is stated in verse 2 of the chapter of al-Mulk about life and death:

“He Who created Death and Life, that He may try which of you is best in deed.”

Tafsir scholars of the Quran are view death with the view of the Quran. In the interpretation of the above verse about death, it is explained that death was created as a blessing as follows:

"It is understood that death is created like life; it too is a bounty. But on the face of it, death is dissolution, non-existence, decay, the extinction of life, the annihilator of pleasures; so how can it be created and a bounty?"

The answer: As was stated at the end of the answer to the first question, death is a discharge from the duties of life; it is a rest, a change of residence, a transformation of existence; it is an invitation to eternal life, a beginning, the introduction to an immortal life. Just as life comes into the world through an act of creation and is appointed and determined, so departure from the world is created and determined, and is planned wisely and purposively. The ways plants die, plant life being the simplest level of life, show their death to be a more orderly work of art than life. For although the death of fruits, seeds, and grains appears to occur through their decay and dissolution, it is in fact a sort of kneading that comprises exceedingly well-ordered chemical reactions and a balanced combining of elements and wise formation of particles; their unseen, orderly and wise deaths appear through the life of the new shoots. That is to say, the death of the seed is the onset of the shoot's life. Indeed, since its death is like life itself, it is created and regular the same as life is.

Moreover, the death of living fruits or animals in the human stomach is the beginning of their rising to the level of human life; it may therefore be said that being thus, their death is more orderly and created than is their life.

If the death of plant life, the lowest level of life, is created, wise, and ordered in that way, the death that befalls human life, the highest level of life, must be the same. Similarly, as a seed sown in the ground becomes a tree in the world of the air, so a man who is laid in the earth will surely produce the shoots of an everlasting life in the Intermediate Realm.

Now for the aspects of death that are bounties; we shall point out four of them.

The First: *Death is a great bounty because it means one is freed from the duties and obligations of life, which become burdensome. It is also a door through which one passes in order to join and be united with one's friends, ninety-nine out of a hundred of whom are already in the Intermediate Realm.*

The Second: *It is to be released from the narrow, irksome, turbulent prison of this world, and to receive an expansive, joyful, troublefree immortal life, and to enter the sphere of the Eternally Beloved One's mercy.*

The Third: *There are numerous factors like old age which make life arduous and show death to be a far superior bounty. For example, if together with your very elderly parents who cause you much distress you beheld before you your grandfather's grandfathers in all their pitiful state, you would understand what a calamity life is, and what a bounty, death. Another example: one can imagine how difficult life is in the harsh conditions of winter for the beautiful flying insects, the lovers of the beautiful flowers, and what a mercy death is for them*

The Fourth: *Just as sleep is a comfort, a mercy, a rest, particularly for those afflicted by disaster and the wounded and the sick, so too is death, the elder brother of sleep, a pure bounty and mercy for the disaster-struck and those who suffer tribulations that drive them to suicide. However, as is proved decisively in many of the Words, for the people of misguidance, death is pure torment the same as life, and pure affliction, but that is outside the discussion here⁴⁶⁰.*

It is very meaningful and remarkable that the purposes, aims and wisdoms of the programmed death described above and the verses of the Quran, which were sent down 14 centuries ago, are parallel to each other.

The fact that death was created was understood after the discovery of programmed cell death about 50 years ago. However, the Holy Quran stated it clearly about 1450 years ago that death occurred by being created, and thousands of interpreters of the Quran wrote works explaining this meaning.

According to Islamic belief, when the worldly life ends with death, an eternal life begins in another world just like a dead and decaying seed being the beginning of a new life.

The Islamic view of the reality of death is compatible with the current scientific view in terms of the following points:

1. Every living being is programmed to die.
2. Death is not a passive incident; it requires a synthesis of energy and matter (creation).
3. Death is beautiful, that is, life is actually possible with death.

Islamic and scientific views are similar related to those three points. However, materialist evolutionists interpret scientific facts differently. According to them, every cell has a death program, but no programmer. It has been decided that every living being will be sent away from this world (death) but no one decides. Programmed death is useful for the living being and it is beautiful, but it is bad to age and die with programmed death. It is possible to increase such meaningless sentences that reflect the philosophy of materialist evolutionists.

According to the Islamic view, if there is a death program in every cell, there is a programmer. If every living being's death has been decided, there must be a being that decides. If programmed death is good for living beings, aging and dying with programmed death are also good for them.

CONCLUSION

The creation and survival of multicellular organisms is possible through programmed cell death. Many genes, especially p53, are responsible for recording and operating the death program in living beings. Genes and programs written in genes cannot have been formed by random mutations and natural selection, as materialist evolutionists claim because genes in living beings and the death program in genes are extremely sophisticated software with mechanisms that cannot be understood even today. Moreover, it was made for specific purposes, taking into account important benefits. Then, there must be a creator who places the death program into the living being and operates it.

Making and operating the death program is not a passive phenomenon because hundreds of very special compounds are synthesized. Energy is required for this. In other words, killing a living being under normal physiological conditions is actually an active phenomenon. The equivalent of it in Islamic literature is creating. Since there is a deed, there must be a doer. Similarly, if there are created beings, there must be a creator.

It is in the hands of the Creator to keep a living being alive and to kill it. The interesting thing is that the death program in living beings has been prepared in such a way that environmental factors have also been taken into account. However, this effect is not an infinite effect; it is in the forms of lengthening and or shortening a bit. Otherwise, no matter how suitable the environmental factors are, the death program is operated and the cell or the living being is lead to death. The living being is programmed to die and there is no escape from death. Then, there must be important wisdoms and purposes in the killing of living beings.

Programmed cell death is widely used at every stage of life. In other words, the continuity of life is ensured by the balanced operation of the death program. For example, the production of reproductive cells (eggs and sperm), the preparation of the uterus (womb) every month, the creation of tissues and organs in the womb in accordance with this world life, the protection of the living being from diseases in the world and homeostasis (internal balance) are all related to programmed cell death. The aging and death of the living being under normal conditions also occurs with physiologically programmed cell death. Therefore, the aging and death of the living being is in favor of the living being and can be said to be beautiful (Figure 4).

All celestial religions, especially Islam, and all prophets, especially, the Prophet Muhammad (pbuh), say that death occurs by creation and the result is beautiful. Materialist evolutionists, accept that programmed cell death is beneficial to living beings with one exception. That exception is the aging of the living being and the death that occurs as a result of aging.

It originates from not accepting the Creator who programs the living beings to die and not knowing His purposes of creation. That is, it is the result of not being able to see the existence of a divine power that plans the world and the conditions in the world for life, that organizes mindless and unconscious substances and creates living beings and that uses the programmed death mechanism at every stage of life. However, the beginning of life in the womb, its development and end are based on programmed death. The result of the separation of the living being from the mother's womb is a transition to another world. That is, it is the beginning of a completely different life.



Figure 4. Life is an irreversible journey and every stage of it is controlled by the death program. According to Islamic belief, death ends the worldly life and starts an eternal life in another world.

Similarly, the survival of the living being in the world life, the continuation of life, aging and finally death are based on programmed cell death. So, the end of world life with programmed death will be the beginning of a new and different life. Only the life of the world will end with death and an eternal life will begin. That is necessary according to conscience and reason.

EVALUATION QUESTIONS

- 1-Is death a spontaneous event, or is it a product of predestination and administration?
- 2-Is death is a blessing, or is it a phenomenon that leads man to nothing?
- 3-Is a date of death predestined for every being?
- 4-What does sadaqah's lengthening life mean?
- 5- 5- How does the religion of Islam evaluate death?

CHAPTER 10

10. EVALUATION OF EVOLUTION IN THE LIGHT OF SCIENCE

10.1-EVOLUTION TERMINOLOGY (CONCEPT-TERM)⁴⁶¹

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student learns that evolution is used instead of various words and terms in different meanings.</p> <p>2-He understands that the concepts such as takamul, tahawwul and tabaddul are laws that are effective in the universe.</p> <p>3-He understands that evolution in the sense of evolvment is not based on any evidence and is completely a philosophical way of thinking.</p>	<p>1-What is the reason for the use of the word evolution instead of many words and terms?</p> <p>2-Is there no change and differentiation in the universe?</p> <p>3-Why does the theory of evolution concern everyone?</p> <p>3-What is the reason for the insistence of some groups in the existence of evolution and its being taught in schools?</p>

Every branch of science has its own terms and expressions; similarly, evolution has its own terminology. Evolution, evolvment, takamul (perfection), istihala (differentiation), tatawwur (moving from one state to another), tahawwul(changing from one state to another), tabdil (changing the shape of

something), tabaddul (exchange), taghyir (transformation), taghayyur (metamorphosis), taraqqi (improvement), sudur (occurrence), zuhur (appearing), tajdid (renewal), ontogeny and phylogeny are some of the terms used instead of evolution. Although those words are close to one another in meaning, they express separate concepts. However, instead of the words above and similar words that we have not included here, the word “evolution” is used. Therefore, the expression of different meanings with the same term causes misunderstandings among those who work in this field and causes a confusion about the issue. In this respect, it is necessary to know how similar or different concepts were expressed in the past, that is, the terminology of evolution.

10.1.1- Evolution

People try to express a change, metamorphosis or differentiation with the word evolution. In other words, evolution refers to gradual development and change. Although that is the lexical meaning of the word, it is used, in biology, to explain the emergence of another species from one species or another being from one being gradually in the course of time and by chance. Since there is no limit or restriction in this use, everything is meant to be expressed with the word “evolution” from the slightest difference to any change and metamorphosis and a new structure. The term evolution is preferred even in the sense of “progress or improvement in science”. In fact, it is necessary to limit the use of evolution in the field of biology. The meaning that is usually attributed to this word nowadays seems to be in the sense of evolvment.

10.1. 2- Evolvment (Evolution)

The term “evolvment (evolution)” refers to the occurrence of animals and plants of higher and more complex structures from the primitive ancestors that had previously existed during geological times by change and differentiation. Note that evolvment (evolution) is based on two basic assumptions. The first one is that a being come from its previous ancestor, the next being in the lineage, in the form of a chain in the pedigree beginning from single-celled beings to the higher structures. The second one is that the emergence of a being and its change in the course of time depends entirely on chance/coincidences.

10.1. 3- Takamul (Perfection)

We see that the word takamul were used with two completely different meanings in the past. One refers to any being reaching a certain maturity over time and becoming perfect. The other is its use in the sense evolution that is, instead of the theory of evolution, which states that one species came into being from another by chance. We see that the term **the Theory of Perfection (Takamul)** was used instead of the Theory of Evolution in the past. However, the use of takamul in place of the theory of evolution is not very common. It is mostly used in the first sense, that is, in the sense of “perfection (maturation) of a being in its own structure without changing its nature, in other words, without losing its characteristic”. In this respect, the meaning expressed by takamul is closer to ontogeny. The use of takamul in the sense of ontogeny, that is, the phases a living being undergoes from the state of embryo to its maturation, is seen in the realm of both non-living and living beings. For example, it is stated that the first form of the earth was not like this, that it was initially together with the sun, that it moved away from the sun and settled in its current place, and that it cooled and formed a crust; those changes in the direction of perfection were expressed with the word takamul; it is pointed out that the earth evolved beginning from the time it was first created to its current structure in which human beings and other living beings can live. However, it is pointed out that, this gradual change continues any moment. It is emphasized that this gradual change, i.e., gradual perfection, takes place in the realm of living beings too. For example, the transformation of an apple seed into a tree, or the development of an embryo to form a perfect creature, has always been expressed with the word “takamul”. We can summarize it as follows:

Formation of a tree from a seed:

Seed → sprout → sapling → tree → becoming a tree that yields fruit.

Development of a living being from an egg:

Egg → chick → young chicken → becoming a hen.

Formation of a human being from a single-celled zygote:

Zygote → multicellular embryo → baby → child → young person → adult.

All of those were expressed with the term “takamul” in the past. As it can be seen from the explanations above, all living and non-living beings in the universe are subject to a gradual law of change within themselves, in a sense, until they become mature beginning from the embryo phase. Therefore, the use of the word takamul in this sense is not a theory, but a law.

10.1. 4 Tahawwul (Changing from one state to another)

One of the words that cause misvaluations about evolution is “tahawwul“. Tahawwul means change of state. It was used in the sense of “changing the structure of a molecule or compound” in the past.

Today, we know that the elements are taken from air, water and soil in the form of ions or compounds and they cause the formation of beings. This incident takes place in the form of a law. For example, an iron atom in the body of man reaches man after being transported in different compounds and in many different ways. The iron atom is initially in the structure of a rock. It will pass into it when it decomposes into soil. It will then be delivered to the plant in the form of ions or small compounds. If an animal eats that plant, it will form compounds in the body of the animal, and when that animal is eaten by a man, that iron atom will be passed on to the man.

In the thirteenth century, the compounds formed by atoms and molecules and the way they enter the structure of living or non-living beings were tried to be explained in a manner similar to the one above, but with tahawwul. In his book called “*Marifetname*”, which was written in an encyclopedic style at the end of the 1200s, İbrahim Hakkı expresses this issue as “atoms’ changing states“ and states the following:

*“The planets and stars move with Allah’s command and the four elements (fire, air, water and earth) mix together. Mines occur before this mixture and composition. Plants occur from it; animals are formed from the combination of mines and plants; when animals reach perfection, human beings occur.”*⁴⁶²

İbrahim Hakkı points out that atoms pass from one state to another; he states in what phases of living beings these elements take place step by step. As a matter of fact, he makes the following evaluation in another statement:

“When that fluent body enters the plant kingdom, some disasters and diseases attack it; therefore, it cannot be a plant. Or, while becoming a plant, it breaks down before it becomes mature,. It loses its plant quality and is no longer food for animals. Sometimes an animal that becomes appropriate to be eaten breaks down before being eaten by man; therefore, the animal is prevented from being elevated to the degree of man. Sometimes it is transported to the degree of man without breaking down.”⁴⁶³

According to İbrahim Hakkı, a sodium atom taken from the soil through a plant, for example, gains vitality in the flower, becomes more active in the sheep and reaches the highest level when it enters human body. The event that is meant to be expressed here is the movement of elements in the realm of beings. This change in the structure and movement of atoms should not be expressed with the Theory of Evolution. For, the change of the state of atoms in this way, is expressed as **transformations of particles**. As it is seen, this change of state is not a theory, but a law that is effective in the realm of all living beings.

10.1. 5 Istihala (Differentiation)

We understand that the words “istihala” and “takamul” were used in the sense of “evolution” in the past. As a matter of fact, Hamdi Yazır, objects to the opinions of those who advocated takamul and istihala and states the following:

“When all animals are classified perfectly, it is seen that there is a gradual gradation from deficiency to perfection, that is, from simple to compound. Nevertheless, we do not find any experience or any witness that one species came into existence from another species. A human gives birth to a human, a lion gives birth to a lion, a horse gives birth to a horse, a monkey gives birth to a monkey, and so on. However, despite this experience, some people use some kind of logic acting upon the fact they come from the same origin, that is, soil. They attribute the fact that animal species resemble one another to istihala or takamul, that organisms with higher forms come from the ones with simple forms. According to this claim, one day an animal, say a monkey or a few monkeys, gave birth to a human and humans came into being from them. We always follow the scientific way and proudly say that coming into being from the same origin is a fact. First of all, the origin of animals is the same: matter and simple elements. In other words, it is soil. It is only possible for a life to come into existence with an

external cause that has wisdom, willpower, might and power so that a living being can derive from that simple element. For, perfection cannot come into existence from a deficient being on its own. For instance, a weight of one kg cannot drag a weight of two kg. If it is assumed that it is true, it becomes necessary to accept that something could come into existence without a cause. Then there is no intelligence, knowledge and science. It is neither natural nor necessary for a species to give birth to another species, which are close to each other, contrarily to experience. For a claim like 'frogs are delivered by fishes' one must show an actual example. Otherwise, it is neither a scientific decree nor a philosophical one since there is no observed experience or a logical necessity."

10.1. 6- Tatawwur (Moving from one state to another)

In fact, since evolution is a new concept, it does not have a well-established equivalent in Arabic. Some authorities in this field suggest that the word "tatawwur" can be used to mean moving from one state for the word evolution. In the item Darwin, this theory is called "Tatawwur Theory". However, the word "tatawwur" does not exist in the translation of "Qamus" or in the Arabic dictionary called "*Lisanul-Arab*".

10.1. 7- Tabdil (Changing the shape of something)

Changing the shape, appearance of something, being a replacement. Changing clothes.

10.1. 8- Tabaddul (Exchange)

Mutual replacement, exchange, change. Something replacing something else. In social life, it means one custom being replaced by another. In biology, it is used to mean "one living being to be replaced by another". For example, the flowers of a tree are changed to fruit. Green leaves are changed to yellow in autumn. The green cover of the earth in spring is changed to yellow in autumn. The flowers in the tree are changed and the fruit is created. So, flowers are replaced by fruit.

10.1. 9- Taghyir (Transformation)

Change from one state into another. Transforming into another state.
Change by adding water to milk.

10.1. Taghayyur (Metamorphosis)

Changing state. Change of color, mutual metamorphosis.

In a writing on the wisdom and purpose of creation, Badiuzzaman Said Nursi uses the terms **Tabaddul** and **Taghayyur** as follows:

“God Almighty gave every species and all the members of each, a particular being which is the source of its particular works and the perfections of which it is worthy. For since all species and realms of beings are contingent, as are the never ending chains of causes, none can go back in unbroken succession to pre-eternity. Also, since there is constant change in the world, it proves the world’s createdness, sometimes through observation and sometimes through rational necessity.

It has also been demonstrated by biology and botany that there are more than two hundred thousand sorts of species and that each has a progenitor and forefather. Contingency and createdness prove therefore that necessarily these progenitors and forefathers emerged without intermediary from the hand of divine power. Moreover, causes cannot be imagined at the first creation as they are imagined in the chains of causes. Furthermore, the delusion of the splitting off of some species from others is invalid, for since either the offspring are barren or the line becomes extinct, an intervening species mostly does not become the start of new chains through reproduction. It is most likely therefore that since the origins and beginnings are thus, the successive members will also be thus.

How can it be imagined that simple, lifeless natural causes, which are devoid of intelligence and will, should be capable of bringing into existence these chains of beings which astound the mind, and of creating the individual beings, each of which is a marvel of art and miracle of divine power? Hence, all beings and the chains of which they are parts testify decisively through the tongues of their createdness and contingency to the necessary existence of their Creator, may His glory be exalted.”⁴⁶⁴

10.1.11- Taraqqi (Improvement)

Ascension, elevation, stage, stage. Ascension step by step in the material or spiritual field, improvement step by step, development.

10.1. 12- Sudur (Occurrence)

Appearance, occurrence, being created. This term, which is also expressed with the word “tajalli”, is used in the sense of “being taken out of non-existence into the realm of existence, creating out of non-existence”.

10.1. 13- Zuhur (Appearing)

Lexically, it means to appear, to specify, to seem, to occur. It expresses the cosmological evolution of living species.

10.1. 14- Tajdid (Renewal)

Regeneration, innovation. It was used by Nazzam in the sense of “a species passing from one state into another”.

10.1. 15- Ontogeny

It covers all of the stages a living being undergoes from the embryo to becoming mature. A plant is developed from zygote to produce multicellular structures and tissues. The stages observed in the plant are “sprout, sapling, tree and tree with fruit”, in animals “from a multicellular embryo to a young animal and an adult animal” and in man, “baby, child, teenager, adult and old person”. This development seen in the realm of plants, animals and human beings appears as a law. In this sense, ontogeny coincides, to a great extent, with takamul in a sense in terms of terminology.

10.1. 16- Phylogeny

It covers all of the stages that a living being is assumed to have undergone from its first creation to its present form and that are tried to be explained through scientific studies. According to the thought of evolution, a single-celled being formed first; as a result of the changes and metamorphoses it underwent in the course of time, other creatures of high structure emerged in the form of a chain

and completely based on chance. The first living beings constituted the root of the family tree and the ones that came later formed the trunk. They were gradually divided into two, like branches of a tree; one branch formed the plant kingdom and the other branch the animal kingdom. This family tree is called the **Phylogenetic Family Tree**. Phylogeny is used in place of evolution.

Conclusion

As it can be understood from the explanations above, the word “evolution” is used in place of many words, terms and expressions such as change, metamorphosis, differentiation and progress.

In addition, the view of “evolution”, which claims the emergence of one species from another species and hence the emergence of all living beings by chance, is also expressed with that word.

All of those meanings are tried to be expressed under the name “the Theory of Evolution”. However, if “evolution” is used in the sense of “takamul (perfection)”, that is to say, if you want to mean “takamul” with the term “evolution”, evolution is not a theory, but a law.

Likewise, if you want to mean the transformation of particles, that is, the change of state of atoms, with the term “evolution, it is not a theory but a general law that is effective in the whole universe.

Thus, evolution, which is used in place of the concepts such as takamul, tahawwul, tabaddul, is actually Sunnatullah (the laws that Allah has imposed in the universe). Bringing the elements together in the living being, putting them in some chemical reactions there, and the gradual growth and development of living beings with the nutrients taken from outside occur within the framework of this Sunnatullah.

As it can be understood from those explanations, creation should not be used as the opposite of evolution because Allah can create

The genetic structure of living beings does not allow the idea of creation in such a chain because the genetic potential of every living being is limited to the gene pool of its species. There is no scientific evidence suggesting that one gene pool belonging to any living group changed to form the gene pool of another group.

whatever He wishes in any way He wishes. In other words, He can create beings suddenly as well as gradually by changing, differentiating and transforming them from one state into another over time from simple to perfect.

The main reason for the discussion here is the view that all living beings came into existence from a single source from each other in a chain. There is no scientific evidence for this idea expressed as evolution because the genetic structure of living beings does not allow the idea of creation in such a chain. Furthermore, the genetic potential of every living being is limited to the gene pool of its species. There is no scientific evidence suggesting that one gene pool belonging to any living group changed to form the gene pool of another group.

Those who advocate evolution in the sense of evolvment can be divided into three groups:

The first group is advocates of an ideological view and positivist philosophy and thought that completely supports atheism.

The second group is the people who accept the first man-like fossils put forward in relation to the creation of the first human being, all of which are fabricated and are examples of hoax, and archaeological and geological age determinations as unchangeable truths and make interpretations and evaluations accordingly.

The third group is the people who accept some baseless and unscientific fabricated evidences put forward by evolutionists about the past of human beings as true and interpret verses and hadiths according to this philosophical view.

EVALUATION QUESTIONS

- 1-What do you understand from the statement “The law of gradual perfection is dominant in the universe”?
- 2-What is the meaning of tabaddul? Can it be used instead of evolution?
- 3-Is there any evidence on which evolution is based?
- 4- What does transformation of particles mean?
- 5-Is there a connection between ontogeny and phylogeny?

10.2-GEOLOGICAL AND ARCHEOLOGICAL AGE DETERMINATION METHODS⁴⁶⁵

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student learns the geological and archeological age determination methods.</p> <p>2-He understands age determination methods with radioactive elements and their degree of soundness.</p> <p>3-He understands age determination with uranium and radiocarbon-14 method and their disadvantageous aspects.</p> <p>4-He understands the methods based on the indirect effects of radioactivity.</p>	<p>1-How many age determination methods are available?</p> <p>2-What are the disadvantageous aspects of the uranium method, which is among age determination methods based on radioactivity?</p> <p>3- What are the disadvantageous aspects of the radiocarbon-14 method, which is among age determination methods based on radioactivity?</p> <p>4-What is the criterion on which age determination with Varve method is based?</p>

In geology, "age" (date) has a relative meaning. One of the two rock masses that are side by side or one over the other is younger or older than the other. If there was not a transformation, the rock under is older than the one over it. It was first expressed by Nicolas Steno in 1669.

Various methods are used in order to determine the age of the geological and archeological materials. They are as follows:

10.2.1 Geological Dating

In this method, comparison is essential. For instance, if the carboniferous land in a region resembles the land in another region in terms of rocks, fossils and morphological structure, it is decided that the land in the second region has the same carboniferous age.

10.2.2- Paleontological Dating

In this method, the age of the rock is determined based on the types of fossils the rock includes. During the excavations made by William Smith in England in 1770, he determined that the fossils he observed in the layers had not been placed randomly but based on a certain order and that the same types of fossil organisms existed in the same group of layers and different types of fossil organisms existed in different layers; thus, he concluded that layers of rock containing the same fossils had the same age. The studies he did afterwards confirmed this thought of his.⁴⁶⁶

In geological eras, there are fossils which existed for short spans of time and vanished. They are called **Characteristic** or **Key Fossils** or **Layer-Determining Fossils**. Layer-determining fossils are like calendars and they are of significance importance in determining the geological age of the sediment they are located in. For instance, *Trilobites*, which emerged suddenly at the beginning of the Paleozoic Era, spread to a large area in a very short time and suddenly disappeared at the end of the Paleozoic Era. Therefore, the age of sediment in which *Trilobites* exist is Paleozoic. Similarly, *Ammonites* indicate the Mesozoic, *Nummulites* the Tertiary and mammals the Quaternary age.

Judging by characteristic fossils that lived in different ages and eras, “Geological Columns”, which display the age of each era and layer-determining fossils it includes, have been formed. With the help of a characteristic fossil which might be found in an area, the age of that area is determined from this geological column.

10.2.2.1- Critique of the Method of Paleontological Dating

The age of rocks is determined by the index fossils they contain. However, how can it be determined which index fossil shows which age? The answer is “evolution”. That is, since it is claimed that evolution exists in the same direction on the earth, phases of evolution of an organism that lived in a certain era must provide an infallible criterion in order to define sediments stored in this era. This is the basic principle of the thought of “evolution”.

Morris states that the only way to classify rocks in chronological order is fossils. The criterion that is necessary to move fossils to the very special place in this chronology is the claim that “life evolves from the simple to the complex”. Evolution of living organisms, though, is based upon fossil records. Evidence for the existence of evolution is fossils. Fossils are ranged in chronological order according to the evolution theory. Thus, this matter has become a strong reasoning system as a vicious circle.⁴⁶⁷

Dunbar states the following regarding the issue:

*Fossils provide the only evidence based on historical data that life evolves from the simple to the complex.*⁴⁶⁸

All those explanations show that age determination through fossils is far from being scientific and convincing evidence. Therefore, it is clear that it is not an appropriate way to try to prove an issue related to creation by accepting that age determination through fossils is correct.

10.2.3- Age Dating with Varve Method

Water deposits the materials it carries in low areas. The age of a sedimentary sequence can be determined through this speed of sedimentation. The waters that form especially from melting glaciers deposit in lakes or low areas. The rate of melting is slow in winter and these waters cause the formation of a thin layer since they carry materials with fine grains. In summer, the rate of melting is fast and they form a thick layer by carrying materials with large grains. Thus, one thin layer and one thick layer form every year. It is possible to determine the age by counting these rings like the rings of a tree. The first dating by making use of the varves of the layered rocks was made by the Swedish scientist De Geer in 1905 for the first time. In Swedish, "varve" means "periodic repetition".

Acting upon the rate of depositing, it was shown that the River Nile deposited sediment of 30 cm thick every 400-500 years for 3000 years.

It is claimed that geological dating is possible through determining the amount of salt in the oceans. It is taken into account that the salts there are carried out at certain times from the rocks around. Calculating the rate between the amount of sodium ions in the ocean waters and the amount of sodium reaching the sea from the land through rivers, Joly found that the amount of Na^+ contained in the ocean to be to 15.627×10^{12} tons and the amount of Na^+ entering the oceans to be 15.727×10^4 tons. Acting upon this, he calculated the age of the oceans as 99.4 million years. This method is criticized in that this number is very small and that the rate of Na^+ constantly changes.

10.2.3.1- Critique of Varve Method

The precipitation regime and the structure of the soil play an important part in Varve method. The climate changes to be seen among seasons and years will affect the texture and structure of the material to be carried by the same amount of water. Floods seem to be a disadvantage in the formation of the varve. For, more sediment will be carried and deposited by flood water compared to the material carried by normal water. This will substantially affect the result of the Varve method, which bases its calculation for determining the age on the sediment that is deposited.

10. 2.4- Age Determination with Radioactive Elements

Becquerel determined for the first time in 1896 that some invisible rays emanated from uranium salts. Madam Curie determined in 1897 that thorium also emitted rays and called this event "radioactivity". Radioactive elements emit alpha, beta and gamma rays. These rays are identified through devices like Geiger counter and centilometer thanks to the radiation effect they exert on the photograph film.

It is possible to divide age determination by means of radioactive elements into two based on the direct and indirect effects of radioactive elements.

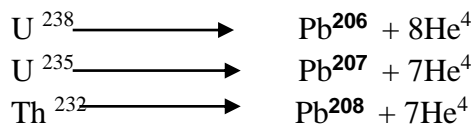
10.2.5- Methods Based on the Direct Effects of Radioactivity

10.2.5.1- Uranium Method

Uranium Method is a group of age determination methods. All of these methods depend on the principle of production of lead and helium from uranium and its fellow element, thorium, in their long chains of decay. This event is called **alpha degradation**. In this event, alpha particles separate from the nuclei of main atoms at a constant speed. They are positively charged atoms of helium gas.

The most important radioactive elements are uranium and thorium. Uranium has two isotopes. The first one is U^{238} , whose half-life is 4,5 billion of years. The other one is U^{235} , whose half-life of is 0,7 billion of years.

The half-life of Thorium (Th^{232}) is 14,1 billion of years. By giving off definite proportions of Helium atom, they generate lead isotopes as shown below:



Three isotopes of lead exist in galenite (PbS), which is a normal lead mineral. It is possible to find Pb^{204} , which is another isotope of lead, in any layer that contains these elements. That is why, it is called "common lead". Although the amount of the other isotopes always increased throughout geologic eras, the amount of Pb^{204} always remained the same. Therefore, the importance of Pb^{204} in finding radiometric age is great. In a mineral that contains lead, when the amount of Pb^{204} is subtracted from the general amount of lead, the Pb isotopes that are the outcome of radioactive degradation remain. When their amounts are determined, the age of the mineral they are located in is found.

In radioactive elements, the number of atoms occurring through degradation (n) is directly proportional to the atom number of the radioactive elements (N).

This law is represented as follows in mathematics:

$$n = N \cdot e^{-\lambda t}$$

n = the number of atoms remaining after a certain time "t"

N = the number of atoms that were present at the beginning of time; that is, when $t=0$

λ = Radioactive degradation constant (it is characteristic for each element).

If the amount of the radioactive elements present at the beginning and the amount of the element that formed up to now as a result of radioactivity are known, the time necessary for the formation of the last amount can be calculated.

Degradation speed is not dependent on time and the age of radioactive isotopes. It is not possible to determine this speed statistically. For instance, out of 10 million radium atoms (N), 4273 (n) of them undergo degradation every year. The rate of n/N is called "**degradation constant**". This value for radium per year is:

$$\lambda = n / N = 4273 / 10^7$$

$$\lambda = 0.0004273$$

The half-life is:

$$T = 0.693 / \lambda$$

$$T = 0.693 / 0.0004273 = 1622 \text{ years.}$$

10.2.5.2-Critique of Uranium Method

There are some objectionable parts in the methods of age determination depending on radioactive decay of uranium. They might be summarized as follows:

1. Uranium minerals are always found in open systems.

Since the layer consisting uranium is not in a closed system, it is exposed to external effects. For instance, uranium can easily resolve in ground water. Radon gas, an intermediate element, may easily pass inside or outside the uranium system. Henry Fauld, an expert on radioactive age determination, points out to the following regarding the issue:

*"In geological time, both uranium and lead translocated in shale. Detailed analysis showed appropriate ages have not been determined with these elements. Similar drawbacks are encountered in attempts of age determination of mineral ores which consist uranium and radium. It is known that different ages are found on samples taken from the same points and plenty of chemical activities took place."*⁴⁶⁹

2. The disintegration rate of uranium might be changeable.

Since radioactive degradation is controlled by atomic structure, it is not easily affected by other events. Nevertheless, factors that are able to affect atomic

structures might also affect radioactive disintegration rate. The most outstanding example to this is cosmic radiation and neutrinos. Another example is free neutrinos that come out of reactors or that are generated out of various reasons. If anything that might increase the amount of these particles on the earth is to come into existence, it is sure to accelerate radioactive disintegration rates.

3. Daughter elements might have been present therein where the layer began to form. It is possible that radiogenic daughter elements generated by the disintegration of uranium and thorium might have been already present when these minerals began to form. It has been found today that rocks produced by lava flowing through the internal layers of the earth consist of both radiogenic and combined lead.

4. All of the daughter elements might not be peculiar to that layer. All of the daughter elements produced by radioactive disintegration may not remain in the same layer; other daughter elements produced in a different layer might have moved there.

10.2.5.3- Potassium-Argon Method

Potassium minerals exist in most of the volcanic rocks and some sediments. They have a wide range of usage. Potassium 40 transforms into Argon 40 by catching electrons with a speed of 1,3 billion years half-life.

10.2.5.4- Rubidium-Strontium Method

This method is based on the transformation of Rubidium 87 into Strontium 87 with 47 billion years half-life. The half-life of Rubidium is regarded as 60 billion years by some authorities and 120 years by others. This method needs to be arranged based on uranium method. Therefore, it is not more reliable than uranium age determination method. In terms of application and the drawbacks in application, Potassium-Argon Method and Rubidium-Strontium Method, and the other radioactive methods are similar to uranium method.

10.2.5.5- Radiocarbon (C^{14}) Method

Radiocarbon is the name given to the unstable isotope Carbon fourteen (C^{14}). Carbon twelve (C^{12}) is called "natural carbon" and it is not radioactive. Radiocarbon is produced from the reactions among nitrogen-fourteen (N^{14}) in the atmosphere, due to cosmic radiation in superior layer of atmosphere. Carbon-12

consists of six protons, six neutrons and six orbital electrons. Carbon-14, though, includes eight neutrons in the nucleus. These two extra neutrons make the atom unstable. One of these neutrons gives off a beta particle, producing a new nucleus consisting of seven protons. This new structure is the Nitrogen-14. Thus, the unstable Carbon-14 turns into the stable Nitrogen-14. Its half-life is 5730 years.

Carbon-14, which is generated in the atmosphere, is immediately oxidized as CO_2 and spreads to the air, water and to living organisms. Normally the ratio of radioactive carbon dioxide and non-radioactive carbon dioxide ($\text{C}^{14}/\text{C}^{12}$) in the air is fixed and it is accepted that 100 years should pass so that this fixed rate can be reached.

The ratio of $\text{C}^{14}/\text{C}^{12}$ in living organisms should be fixed as well. The equality of this ratio does not change as long as the organism is alive. However, when the organism dies, the ratio of C^{14} to C^{12} decreases gradually since the organism cannot take CO_2 in from the air any longer. When this decreasing ratio reaches $\frac{1}{2}$, the length of time from the death of that organism must be 5730 years because the half-life of C^{14} is 5730 years. In five half-lives, in other words, in around 29 thousand years, only $\frac{1}{32}$ of the original amount of radiocarbon is to be emitted. Radiocarbon method can only be used to determine the ages around 80 thousand years at most. For older materials, uranium method is applied.

10.2.5.6 -Critique of Radiocarbon method

Radiocarbon method is criticized because it is based on some assumptions. Here are the opposed points:

1. A number of living systems do not have the standard ratio of $\text{C}^{14}/\text{C}^{12}$. Carbon-14 method is based on an assumption claiming that when all living organisms die, they include a standard ratio of $\text{C}^{14}/\text{C}^{12}$. Nevertheless, many samples did not display this ratio. For example, with this method, the age of living mollusks was determined to be 2300 years old. Such ratio shows that the environment the organism is in includes higher amount of C^{14} than expected and therefore, there is an exchange of carbon between the organism and the environment.⁴⁷⁰

2. Radiocarbon might not decrease at a stable rate in each organism.

Radiocarbon disintegration is influenced by environmental radioactivity, especially free neutrons and cosmic radiation, and their disintegration rates change as a result.

3. The rate of natural carbon might have been different in the past.

In the past, the vegetation was either more or less than it is now on earth. The ratio of C^{14}/C^{12} , therefore, is to be higher or lower. For this reason, the radiocarbon age of the materials of these periods is to be measured older or younger than the true age. This matter is the same for the amount of carbon dioxide in the atmosphere. If volcanoes had emitted carbon dioxide in the past, the amount of carbon dioxide at that time should be different than it is now.

4. The rate of radiocarbon might not have reached a stable condition. It is assumed that the ratio of C^{14}/C^{12} reaches a stable condition in a certain length of time. In other words, the amount of C^{14} in the atmosphere is equal to the amount of C^{14} disintegrated on the earth. For this reason, the incoming and outgoing amount of C^{14} needs to be equal. However, there are some things which prove that this is not always in this way. In the same way, it is stated that the measurable amount of radiocarbon generated in a year on the earth is 25% more than the amount of disintegrated radiocarbon.⁴⁷¹

10.2.6 -Methods Based on the Indirect Effects of Radioactivity

The indirect effects of radioactivity occur with the rays of radioactive breakdowns. These rays affect the rock as if they bombard the rock. The source of the rays might be the natural radioactive minerals especially in the rock or the alpha or cosmic rays of the heavy metals around and their fission.

10.2.6.1- Pleochroic Halos Method

Pleochroic halos occur around small inclusions of radioactive minerals, such as zircon, and monazite, especially in biotites. If inclusions are tiny, pleochroic halos are in the shape of full spheres and they resemble a circle in thin section. The diameters of concentric spheres have constant values; the diameter of each sphere is equal to the distance covered by alpha ray. The relation between the light transmittance of pleochroic halos and the alpha ray it gets with its effect is determined by experiments; therefore, it can be used in age determination.

This method is criticized in various ways. The experiments that are carried out show that the light transmittance in pleochroic halos obtained artificially change periodically and that it is affected especially by increase in heat.

10.2.6.2- Trace Method

This method is based on the count of the traces of rays emitted when a mineral breaks down due to radioactivity.

10.2.6.3- Metamictization Method

This method is based on the irregularity that can be determined by measuring through X rays of crystal networks in a mineral.

10.2.6.4- Thermoluminescence Method

Some electrons connected to the crystal inner structure affected by rays are released and then entrapped in the faulty places of the crystal network. All of the electrons in that state form a dynamic system with a higher level of energy than that of their normal place. Electrons return to their normal places with the effect of heat when energy comes out in the form of light; thus, the energy level of the mineral affected by radioactivity can be found.

These methods, which are based on the indirect effect of radioactivity, are still in the phase of development and their range of usage is narrower than the previous ones.

10. 2.7- A general assessment on geological and archaeological dating methods

Both radioactive method and other methods applied in geological and archeological dating are not at the expected sensitivity since they are based on several assumptions and predictions. For this reason, some doubts arise on the correctness of ages determined. However, as there are similar errors in age-determination of every material, findings are important in terms of being approximate ages rather than exact ages. For example, material A, which is found to be 150 million years old, is three times older than material B, which is found to be 50 million years old. That is to say, if material B is 15 thousand years old indeed, the material A should be 45 thousand years old.

There are no other alternatives for the methods mentioned above.

Considering these possible age determinations, which are put forward about creation, as real ages leads to misinterpretations and wrong assessments. Therefore, it should be kept in mind that the value put forward about the age of any being is a relative assessment and that it does not reflect the real age.

EVALUATION QUESTIONS

- 1- How many age determination methods are available?
- 2- What are the disadvantageous aspects of the uranium method, which is among age determination methods based on radioactivity?
- 3- What are the disadvantageous aspects of the radiocarbon-14 method, which is among age determination methods based on radioactivity?
- 4- What is the criterion on which age determination with Varve method is based?
- 5- What are the degrees of reliability of geological and archaeological age determination methods?

10.3. INTERMEDIATE (TRANSITIONAL) FORMS⁴⁷²

Put Forward as Evidence of Evolution

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
<p>1-The student understands the terminology of evolution.</p> <p>2- He learns whether there is an intermediate form in transition from invertebrates to vertebrates.</p> <p>3- He knows the fossils proposed in the transition from fish to frogs are not true.</p> <p>4- He learns that there are no intermediate forms between reptiles and birds.</p> <p>5- He learns that the fossils put forward about the past of man are</p>	<p>1-Did fossils prove that living beings came into being in the form of a chain from one another as evolutionists claim?</p> <p>2- Why does the issue of evolution concern everyone?</p> <p>3- Is there a fossil that is put forward as ancestor of human beings and that is accepted by everybody?</p> <p>4-Why do evolutionists want to base the past of man on a monkey or a monkey-like creature?</p>

It is claimed by the view of evolution that all living beings evolved over time with the differentiation of a single cell. As evidence for this claim, it was suggested that transitional forms between species would be found. However, for almost 150 years, no example has been put forward to confirm that claim.

Organisms that are assumed to have completed the missing links of the evolutionary chain and that resemble the organism preceding it in terms of some characteristics and the organism succeeding it in terms of some characteristics are called “intermediate form” or “transitional form”.

It used to be claimed that those intermediate forms came into being gradually over time. If all living beings had come from one another in the form of a chain originally from a single cell, there should have been a lot of organisms with the characteristics of intermediate forms in the form of fossils. For example, it is claimed that frogs came into being from fish gradually. There should have been a being with the intermediate form characteristic in this transition; it should have started as 90% fish, 10% frog, continued as 80% fish, 20% frog, and finally ended as 10% fish 90% frog. Such a being that should have occurred at each phase should have had a similar spouse to reproduce and they should have undergone the same phases, reproducing a gene pool.

There should be tens of intermediate forms for the emergence of a different species from a living group by changing as it is claimed. When you think of this for the whole realm of living beings, this number increases to hundreds of thousands. However, there is not even a single fossil that everybody can agree on.

In this regard, in order to mislead the public and to condition them to a certain ideology, the press periodically reports that a fossil has been found and that it is the ancestor of man that lived in the past. Of course, no one has the opportunity to investigate the accuracy of that claim.

Another way of misleading the society on this issue is to show a freak of any kind, that is, a strange creature, and to suggest that the intermediate forms are like that. They have no scientific value. This type of behavior is similar to pulling a rabbit out of the hat by an illusionist.

All scientific studies show that every living being species was created directly with their own genetic potentials, abilities and characteristics.

Let us review living beings in terms of transitional fossil form.

10.3.1- Transition from Protozoa to Invertebrate Metazoa

The first living beings on earth were seen in the Precambrian era about 1.5 billion years ago. They were unicellular algae from *Protozoa*. This group of living beings is still present in the form and structure in which it first appeared on earth. In the Cambrian era, which came after the Precambrian era, living beings did not display a gradual transition from unicellular to multicellular, as evolutionists claim. The multicellular organisms seen in this period had no similarity to one another and did not show any similarity to their predecessors.

The sudden emergence of multicellular organisms is called “*the Cambrian explosion*”. Among those living beings are invertebrate with highly complex structure like sponges, corals, *Trilobites*, *Brachiopods*, Mollusks, *Echinoids* and *Arthropods*⁴⁷³.

Guttman states in his biology book he published in 1999 that there was no relation or connection between unicellular microorganisms in the Precambrian era and these highly complex invertebrates in the Cambrian era⁴⁷⁴.

On the other hand, researchers such as Axelrod, George and Kay indicate that Cambrian invertebrates suddenly appeared on Earth at the end of the Precambrian period without a transition form^{475,476}.

Richard Monestarsky states that complex life suddenly appeared on earth as follows:

*“The remarkably complex forms of animals we see today suddenly appeared. These arrivals coincided with the beginning of the Cambrian era. The seas and the earth filled with the first complex creatures began in this period”*⁴⁷⁷.

On the earth, unicellular algae were first seen about 1.5 billion years ago in the Precambrian Era. After that, multicellular *Brachiopods*, *Mollusks*, *Echinoids* and *Arthropods* came into being suddenly in the Cambrian Era. There is no fossil form that shows transition between those groups of living beings.

Richard Dawkins, an evolutionist British zoologist, points out that complex creatures suddenly appeared:

*“The invertebrate groups in the Cambrian strata seem to have occurred there without any history of evolution. This sudden appearance definitely pleases creationists”*⁴⁷⁸.

10.3.2- Transition from Invertebrates to Vertebrates⁴⁷⁹

In general, invertebrates have soft parts inside and hard shells outside. It is different in vertebrates. They have a skeleton inside.

There were vertebrates such as jawless vertebrates (*Cyclostomata*), cartilaginous fish (*Elasmobranchii*) and bony fishes (*Teleostomi*) at the end of the Ordovician period, which was observed 430 million years ago and after the Cambrian period and at the beginning of the Devonian age 330 million years ago.

Ommaney states in his book called "*The Fishes*" and Romer in his book called "*Vertebrata Paleontology*" that there is no fossil to provide a connection between those fish and the invertebrates that are regarded as their ancestors⁴⁸⁰.

Evolutionist paleontologist Gerald Todd points out that there is no transition form between fish groups and states the following:

*"All three classes of bony fish appear in fossil strata simultaneously and all of a sudden; they do not show any connection with any groups that can be their ancestors"*⁴⁸¹.

Gordon Taylor states that there is no transition form between finned and limbed creatures:

*"There are no intermediate forms between finned and limbed creatures in the fossil collection of the world"*⁴⁸².

10.3.3-Transition from Fish to Frogs

The lobe-finned fish (Rhipidistian crossopterygian) and the tailed frog (Ichthyostega) are introduced as a transitional form between fish and frogs (Figures 1a and 1b).

It was assumed that the *Rhipidistian crossopterygian*, called the **Lobe-finned Fish** or **Coelacanth**, lived for a certain period and produced frogs as the environmental conditions changed, and that it had disappeared at the end of the Cretaceous period, approximately 70 million years ago. In his book "*The Hamlyn Encyclopedia of Prehistoric Animals*", Hublin states that the fish *Latemariachalumnea*, which is in the same group as this fossil form, was caught in several places included in Mozambique in 1935, in Madagascar in 1939, in the

Comoros in 1953, and in Africa in 1955, which eliminates its feature of being a transitional form⁴⁸³ (Figure 2).

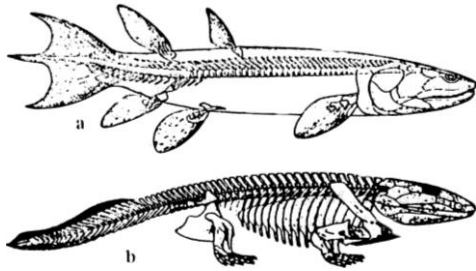


Figure 1. a) The picture of the lobe-finned fish (Rhipidistian crossopterygian) regarded as the ancestor of the tailed toad b) The picture the tailed toad (*Ichthyostega*) drawn based on the data.

Robert Carroll, points out in his book called "*Vertebrate Paleontology and Evolution*" that there is no transitional form between fish and frogs as follows:

*"We do not have fossils that have the property of transitional form between the first frogs and fish"*⁴⁸⁴.

Edwin Colbert and Morales point out that the frogs of the past and the present are of the same structure:

*"There is not a single piece of evidence to show that the Paleozoic (First Time) frogs have a common ancestor. The oldest known frogs are similar to those of today"*⁴⁸⁵.



Figure 2. *Latimaria* from the lobe-finned fish (**Coelacanth**) group.

10.3.4- Transition from Frogs to Reptiles

Seymouria and *Didactes*, which lived at the beginning of the Permian Period, are suggested as the transitional forms between frogs and reptiles. However, in the light of today's knowledge, we see that frogs and reptiles lived together in the Carboniferous Period. Therefore, it is not possible to explain both the emergence of reptiles from frogs and the existence of frogs with the deterioration of environmental conditions during the same period. As a matter of fact, *Seymouria* is considered by some as a "very developed real frog", not the "ancestor of reptiles"⁴⁸⁶.

Robert Carroll, points out that there is no fossil showing the transition from frogs to reptiles in his book called "*Problems of the Origins of Reptiles*":

*"We do not have a single fossil specimen that could be the true ancestor of the first reptile. Therefore, the absence of such an intermediate form invalidates the claim that there is a transition from frogs to reptiles"*⁴⁸⁷.

10.3.5- Transition from Reptiles to Birds

It is suggested that reptile scales turned into feathers during the transition from the reptile to the bird. However, some evolutionists point out that this view is wrong. Barbara, one of them, evaluates the issue as follows:

*"Feathers have a very complex structure ... There is no form with the feature of transition between scales and feathers"*⁴⁸⁸.

Brush is of the view that feathers appeared suddenly; he states the following:

*"Feathers emerge suddenly in the fossil record as a characteristic of birds only"*⁴⁸⁹.

Feduccia states that the transition from the reptile to the bird is impossible:

*"Transition from the reptile to the bird is not possible in terms of biophysics"*⁴⁹⁰.

Archaeopteryx

Archaeopteryx is suggested as the transitional form between reptiles and birds. A fossil was found among the Upper Jurassic limestones (Figure 7.4).



Figure 3. a- Archaeopteryx fossil, b- Estimated form of archaeopteryx.

Archaeopteryx lived approximately 140 million years ago (Figure 3).

The reptile-like features of archaeopteryx, which is usually in bird form, can be listed as follows:

- a) The presence of claws on the edge of the wings.
- b) The presence of teeth in the mouth.
- c) The presence of the spine in the tail.

It is stated in the work titled “*Jurassic Bird Challenges Origin Theories*” that Archaeopteryx is not the passage form between reptiles and birds and the following points are put forward about the issue:

1-The Hoatzin bird (*Opisthocomus hoatzin*), now living in South America, and the Tourako bird of Africa (*Touracocoryhaix of the Musophogidae* family) also have claws at the edge of their wings in their youth, and the spine structure of the Hoatzin bird is similar to that of the archaeopteryx (Figure 4). There are also three claws on the wings of the *Ostrich* living in South America⁴⁹¹.

2-The archaeopteryx has an asymmetrical feather structure like that of modern birds. This is regarded as evidence for its flying.

3-It was claimed that the archaeopteryx did not have the necessary breastbone to fly. The last seventh Archaeopteryx fossil that was found revealed the presence of the breastbone.

Paleontologists Lianhai Hou and Zhonghe Zhou of the Vertebrate Paleontology Institute in China found a bird fossil, which they called “*Confuciusor*” in 1995. *Confuciusor*, which was the same age as the archaeopteryx, about 140 million years old, had no teeth, and its beak and feathers had the same features as those of modern birds. The skeletal structure of this bird, which is the same as the birds of today, had claws on its wings just like the archaeopteryx.



Figure 4 .Hoatzin bird, which has claws on its wings.

Shipman states that the discovery of *Confuciusor* refuted the thesis that archaeopteryx was the ancestor of birds⁴⁹².

A bird named *Liaoningornis*, which is 130 million years old, was found by Hou, Martin and Alan Feduccia in China in 1996. *Liaoningornis*, which is 10 million years younger than the archaeopteryx, is reported to have a breastbone that holds the flight muscles, which are also found in the birds of today; the only difference is that the birds of today have teeth in their mouths. Feduccia also states that *Liaoningornis* invalidates the claim that “*the origin of birds is dinosaurs*”⁴⁹³.

Another fossil related to birds was found in the West Texas Desert. This two-piece fossil, which was evaluated by Sankar Chatterjee in 1984, is called “*the first bird*” (Protoavis) and is said to have lived 225 million years ago⁴⁹⁴.

If it is considered that archaeopteryx lived 140 million years ago, it will be understood that the fossil discovered by Sankar Chatterjee lived 85 million years before archaeopteryx.

According to the claim of evolutionists archaeopteryx must have evolved from dinosaurs. However, in light of the recent fossils, some evolutionists do not accept archaeopteryx’s being the intermediate form. Alan Feduccia, who specializes in birds, states the following:

*“I have studied bird skulls for twenty-five years. I do not see any similarities whatsoever between them and dinosaurs. The theropod origins of birds, in my opinion, will be the greatest embarrassment of paleontology of the 20th century!”*⁴⁹⁵

There was a different claim regarding the archaeopteryx in the Punch magazine dated September 2, 1987. It is claimed in the article published by

“William Hewison” that the feather marks belonging to the fossil of the archaeopteryx found in 1861 were put later by Richard Owen with a printing block. The common opinion about the archaeopteryx is that it is a toothed bird, that it lived for a certain period of life and that it disappeared later ^{496,497,498}.

As a matter of fact, some reptiles and frogs today have teeth, while others do not.

10.3.6-Transition from Reptiles to Mammals

Seymouria and *didactes* are regarded as the ancestors of reptiles. *Synapsidae* suborder, which is regarded as the pioneer of mammals, was seen on earth before those orders, which are regarded as the ancestors of reptiles. Therefore, it is impossible for reptiles to be the ancestors of mammals.

In his book titled “*The Reptiles That Became Mammals*”, Kemp insists that there are no transitional forms showing the transition from reptiles to mammals⁴⁹⁹.

In his book called “*Vertebrata Paleontology*”, Romer points out that there is no fossil showing that bats (of flying mammals) come from reptiles ⁵⁰⁰.

Ommaney states that the bat fossils found between the aged strata are no different from those of today⁵⁰¹.

The evolutionist George Gaylord Simpson, one of the founders of the Neo-Darwinist Theory, states in his work called “*Life Before Man*” that there is no intermediate form related to mammals:

*“The most puzzling event in the history of life on earth is the change from the Mesozoic, the Age of Reptiles, to the Age of Mammals. It is as if the curtain were rung down suddenly on the stage where all the leading roles were taken by reptiles, especially dinosaurs, in great numbers and bewildering variety, and rose again immediately to reveal the same setting but an entirely new cast, a cast in which the dinosaurs do not appear at all, other reptiles are supernumeraries, and all the leading parts are played by mammals of sorts barely hinted at in the preceding acts”*⁵⁰².

10.3.7-The Horse is put forward as an Example to the Evolution of Higher Organisms

The changes that the horse underwent during its phylogeny are given as an example to the evolution of higher organisms. According to the claim of Weller,

Eohippus, known as the “primitive horse”, which lived in the Eocene Epoch, had four toes on each forefoot and three on each hind foot; all of the toes pressed on the ground when it walked⁵⁰³.

According to Johnson, the third toe of the horse developed while the others were gradually reduced and disappeared. It is claimed that it was because the horses ate the young branches and leaves of the trees but later began to eat grass since the pastures became dominant beginning from the Miocene Epoch.

It is assumed that only by running fast can it be possible to be protected from the enemies in plains where the horses graze on the grassland; thus, the third toe developed and enlarged, causing the others to disappear. The toes other than the third toe atrophied and became useless and vestigial organs⁵⁰⁴.

The Evaluation of the Evolution of the Horse

The decrease in the number of toes is attributed to the feeding style hence running and fleeing from the enemies.

The assumption, “If an organ is used, it will develop, and if it is not used, it will atrophy” is known as “Lamarck’s Principle”. It has been understood for the last 20 years that Lamarck’s principle was based on modification, that is, the transfer of the change in somatic cells to the youngs is impossible; however, it is transferred through a change in the gametes. Besides, through the same reasoning, it will be necessary to explain why many animals primarily rabbits that escape from their enemies did not undergo similar changes.

Wells states the following regarding the issue:

“Three years before Charles Darwin’s death in 1882, Yale University paleontologist Othniel Marsh published a drawing of horse fossils to show how modern one-toed horses had evolved from a small four-toed ancestor. His drawings, which included only foot bones and teeth, were supported by the addition of the skull and the drawings of horse fossils, and quickly found their way into museum exhibits and biology textbooks as evidence for evolution”⁵⁰⁵.

It is disputable whether the splint bones in the horse leg are vestigial organs because they have some functions. According to Cousins, the functions are as follows:

1. They provide strengthening for the horse’s leg.
2. They are attachment areas for several leg muscles..

3. They make a protective groove for the suspensory ligament that supports a horse's weight⁵⁰⁶.

Dunouy and Goldschmidt state that the single-toed horse existed on the earth in the Mesozoic Era, 130 million years ago, that is, long before the multi-toed horse. According to them, the first multi-toed horse appeared in the Eocene, 55 million years ago and the last generation of the multi-toed horse became extinct in the Miocene, about 25 million years ago^{507,508}.

Boyce Rensberger, one of the evolutionist biologists, states that the scenario of the evolution of the horse has no foundation in the fossil record, and that no evolutionary process has been observed that would account for the gradual evolution of horses:

“The popularly told example of horse evolution, suggesting a gradual sequence of changes from four-toed fox-sized creatures living nearly 150 million years ago to today's much larger one-toed horse, has long been known to be wrong. Instead of gradual change, fossils of each intermediate species appear fully distinct, persist unchanged, and then become extinct. Therefore, they are not transitional forms but different forms with separate structures”⁵⁰⁹.

Evolutionist Colin Patterson, one of the administrators of the British Museum of Natural History, expresses a similar view:

“The exhibit on horse evolution prepared fifty years ago, which is still on exhibit downstairs, is nothing but a bad imaginary story. The evolution of the horse has been presented as ‘the great truth’ in hundreds of scientific books. However, what those people do is nothing but speculation”⁵¹⁰.

It is stated that the fossils that the equine evolution are based on the invented sequences of fossils, set out in order of size, belonging to different life forms that lived at different times in India, North America, South America and Europe. There is no consensus regarding the issue among the evolutionists. Various researchers have proposed more than 20 different equine evolution sequences. The only thing these sequences have in common is the belief that the first ancestor of the horse was a dog-like animal known as *Eohippus (Hyracotherium)*, which lived in the Eocene Period some 55 million years ago. However, Hitching says, “Eohippus, which is presented as the “ancestor of the horse”, is in fact identical to the animal known as the “Hyrax”, which is still to be found in Africa today, which has nothing to do with the horse and bears no resemblance to it⁵¹¹.

Gordon R. Taylor, an evolutionist, writes the following in his book, “*The Great Evolution Mystery*” about the sequences of horses:

“Paleontologists failed to find the fossils related to the equine sequences put forward by evolutionists. The sequence of horses is presented as the only fully worked-out example regarding evolution, but it is not so. The line from Eohippus to today’s Equus is very erratic. Specimens from different sources can be brought together in a convincing-looking sequence, but there is no evidence that they were actually ranged in this order in time”⁵¹².

It is understood that each species of the multi-toed horses is a separate kind and that they lived in a certain period and then became extinct... The ancestors of the single-toed horses are also single-toed.

10.3.8-The Past of Insects

Fossils of insects were found in materials like amber, volcanic ashes and coal. Since even the internal organs, tissues and cell structures were kept in very good condition in amber, they could be compared with the existing insects. In his book called, “*Insects in Amber*”, Brues states that there are no differences in shape between insects that were created 350 million years ago and the insects living today⁵¹³.

Throughout the geological periods on Earth, different organisms and different living species emerged; some of them did not change at all and some of them survived until today with minor changes. Some lived for a certain period and disappeared.

However, some of the insects in the past were larger and bigger than their relatives today like big

cockroaches and giant ants. One feature of insects is that they have very different forms. Therefore, it is difficult to identify from which source they may have formed. In his book called “*The Evolution of Life*”, Olsen draws attention to the fact that there is no information about how insects started flying⁵¹⁴.

10.3.9-General Evaluation about Transitional Forms

The theory of evolution explains the arrival of living beings on earth with “gradual emergence”. Living organisms must have slowly formed over time from

simple to higher structures. Evidence of it will be fossils. When this view was put forward in the 1850s, the general idea was like that. However, since fossil materials to support this view could not be found in the course of time, evolutionists criticized this view. The famous British paleontologist Derek states the following:

*“When we examine the fossil record in detail, we see groups that developed on earth suddenly, not through gradual evolution”*⁵¹⁵.

The evolutionist Carlton expresses a similar view:

*“Did life on earth evolve slowly and gradually over time? The answer of the fossil record to this question is ‘no’”*⁵¹⁶.

Tom from Oxford University says that there are no fossils showing the transition of species:

*“According to the fossil record, many species emerged suddenly, remained unchanged for several million years and disappeared suddenly. There is no single fossil specimen showing the transition of species from one generation to another”*⁵¹⁷.

Steven points out that there is no fossil evidence to confirm gradual evolution and states the following:

*“The known fossil record has not been able to provide any fossil evidence that gradual evolution could be valid”*⁵¹⁸.

Adler points out that intermediate form researchers are disappointed with what they have achieved and states the following:

*“The more scientists look for inter-species forms, the more disappointment occurs”*⁵¹⁹.

Mark, who is an **evolutionist**, states that species appear suddenly and disappear suddenly:

High organisms appeared on Earth gradually, depending on time. There can be only one explanation for it: The living beings that were suitable for the earth conditions that improved gradually were sent to the earth. In other words, sheep were created after grass and plants were created. The fossils proposed as intermediate or transitional forms do not have the feature of being intermediate forms.

“Species form suddenly and disappear suddenly. This supports creationists who claim that species are created by Allah”⁵²⁰.

Gould, the evolutionist, of Harvard University states that the evolutionary family tree was drawn based on the imagination of evolutionists, not on the fossil record:

“The evolutionary family trees in our books are based on our design, not on the fossil record”⁵²¹.

Throughout the geological periods on Earth, different organisms and different living species emerged; some of them did not change at all and some of them survived until today with minor changes. Some lived for a certain period and disappeared.

One thing that draws attention here is the gradual appearance of high organisms on Earth depending on time. There can be only one explanation for it: The living beings that were suitable for the earth conditions that improved gradually were sent to the earth. In other words, sheep were created after grass and plants were created. The fossils proposed as intermediate or transitional forms do not have the feature of being intermediate forms. It has now been a general opinion that the fossils proposed so far are not sufficient and reliable material.

10.3.10-THE PAST OF MAN

Some of the fossils proposed as intermediate forms about the past of man are as follows:

10.3.10.1-Long-armed Ape (*Ramapithecus*)

The being put forward by the evolutionists as the ancestor of man is *Ramapithecus*. It is claimed to have lived in the Pliocene period, that is, about 14 million years ago.

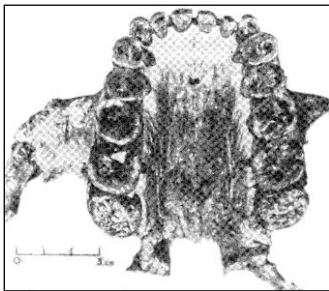


Figure 5. Parabolic jaw in *Ramapithecus*.

This being, which is known only from its jawbone and which is claimed to be the ancestor of human beings based on dental structures, has been shown to be a hominid and not a long-armed monkey⁵²².

10.3.10.2-Southern Ape (*Australopithecus*)

Another group that is put forward as the ancestor of man is the group of *Australopithecus*. Various forms of it are proposed. This name was given to various fossils found by Louis Leakey and many others in East Africa. The fossils found by Dart were named as “*Australopithecus africanus*” (African man). Then, the following were included in the same group: *Zinanthropus*, *Paranthropus*, *Pleisanthropus*, *Telanthropus* and *Homo habilis*.

Australopithecus is proposed as a hominid being that lived two to three million years ago, walked upright and used coarse tools. The brain volume is

about 500 cc, the same as in some monkeys with high structure. Its teeth are claimed to be similar to those of *Ramapithecus*.

Zinjanthropus boisei, which was found by Louis Leakey in the Olduvai Gorge region of Tanzania, is said to be a variant of *Australopithecus robustus*. *Australopithecus* was grouped under two species after that. One is *A. africanus* and the other is *A. Robustus*.

10.3.10.2.1-African Man (*Australopithecus africanus*)

It was found in Africa by Dart in 1924. It has small teeth, small jaws and a thin structure. The volume of the skull is estimated to be about 1/3 of today's human being, i.e. 500 cc; its age is estimated to be 1.8-2.6 million years. (Figure 6)

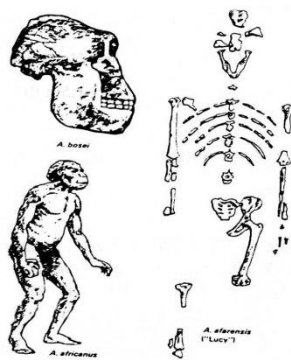


Figure 6. African Man(*Australopithecus africanus*) (Lucy Man). Each of the fossils in this skeleton belongs to different living beings. The lower left image was drawn based on this skeleton.

Evolutionist Gould states that the African ape *Australopithecus afarensis* cannot be the ancestor of man. He points out that the fossil fragments that are considered to belong to African apes are fossils of various organisms and that they have been assembled incorrectly⁵²³.

10.3.10.2.2- *Australopithecus boisei*(zinjanthropus)

It is suggested that this form is a variant of *Australopithecus robustus*. It was discovered in 1959 by Leakey in Tanzania. It has very thick teeth and thick jaws; its upper temple bones protrude as in gorilla and orangutan. The teeth arch and the

jaw curve are very parabolic. It is similar to orangutans and chimpanzees of higher organisms. The skull volume is stated to be 500 cc and the age 2 million years.

It is claimed that based on some pieces of the pelvis, arm and foot bones of both *A. africanus* and *A. robustus* that *Australopithecus* was an upright walking being⁵²⁴.

Critique of *Australopithecus*

Almost none of the fossil materials of the past show integrity. In other words, the fossil material that is available represents only a small part of the organism that is claimed. The fact that the fragments belonging to different organisms were brought together on the assumption that they belonged to a single species has an important role in it. In addition, sometimes big mistakes are made in fossil age determinations.

Oxnard and Zuckerman, who investigated the *Australopithecus* fossil for years, state that *Australopithecus* is not an upright walking being. Oxnard and Zuckerman's multi-faceted statistical research on *A. africanus*' hand, wrist, foot, shoulder and pelvic bones shows that they do not resemble man but orangutan and chimpanzee⁵²⁵.

Zuckerman, who worked with a team on *A. africanus* for 15 years states the following:

*"It is impossible for A. africanus to be the ancestor of man"*⁵²⁶.

Mantagu states that all *Australopithecus* resemble monkeys with high structure (apes) in their head structure⁵²⁷.

Evolutionist Gould is of the view that the African ape, *Australopithecus afarensis* and *A. Africanus*, cannot be the ancestor of man; he states that fossil fragments that are considered to belong to African apes are fossils of various organisms and that they were assembled incorrectly⁵²⁸.

10.3.10.3- *Homo erectus* Group

Java Man, Peking Man, Heidelberg Man and Meganthropus were grouped as "*Homo erectus*". They are considered to have lived about 500 thousand years ago. It is stated that they walked upright and that their brain volumes were approximately 1000 cc.

A little time after Darwin published *The Origin of Species* in 1858, Ernst Haeckel published *The History of Creation* by being inspired by it. In this work, Haeckel put forward the Mute Ape Man as “the ancestor of man”. He also gave it a Latin name: *Pithecanthropus alalus* ...

When this imaginary being was found as a fossil, it would resemble a human in terms of some of its characteristics and a monkey in terms of some of its characteristics. They also indicated where the remains of this being would be found: the ancient hypothetical Lemura continent extending from Madagascar to India and from the Indian Ocean to Indonesia⁵²⁹.

10.3.10.3.1- Java Man (*Pithecanthropus erectus*)

In 1887, the Dutch anatomist Eugene Dubois set out with his wife and children to Java, a Dutch colony in East India, as “a health care worker for the Dutch army”. Dubois was on his way to find the Mute Ape Man, which Haeckel had suggested, in the place where he suggested. Two years after his arrival in Sumatra, Dubois convinced the government to carry out paleontological excavations in Java. Some prisoners were sent to the excavation near the Solo River near the village of Trinil, and soldiers were assigned the duty of controlling of the excavation. It is stated that Dubois did not participate in the field work in these excavations and that he examined the findings of the workers brought to him periodically at home⁵³⁰.

In 1891, Dubois encountered two important findings among the bones that were brought to him. They were a tooth and a skull found one month after the other in the same fossil bed. However, their exact location could not be determined because they were not recorded during the excavation. At first, Dubois was convinced that they belonged to a chimpanzee. A few months later, however, the prisoners found a femur at the same site. This was the thigh bone of a person walking upright. Dubois combined these pieces to form **Upright Walking Ape-Man** *Pithecanthropus erectus* (*Homo erectus*). The brain volume of this being was about 900 cc. A small molar tooth was found in 1898. It was stated that those teeth also belonged to *Pithecanthropus* (*Homo erectus*) said. The age of this being was estimated to be 500 thousand years (Figure 7).



Figure 7. The picture of *Homo erectus* (Java Man), which is assumed to be the “ancestor of man”, drawn based on the fossils.

When Dubois introduced those fossils at the International Congress of Zoology held in Leyden in 1895, the British zoologists claimed that those fossils belonged to man, the Germans claimed that they belonged to human-like apes, and the French stated that they belonged to a transition form between a higher form of ape and man.

Critique of Java Man (*Homo erectus*)

Koenigswald is of the opinion that the big molar tooth of Java Man belongs to an orangutan and the small one to a human. He states that the skull is similar to that of chimpanzees and gibbons⁵³¹.

In 1906, a large excavation was carried out in the place where Dubois found the fossils, but nothing except a small piece of bone was found. It is stated that the being called “Java Man” (*Homo erectus*) is in fact a chimpanzee or gorilla type of ape, that the skull of the ape was combined with the human thigh bone and that it was given the name “*Pithecanthropus erectus*” (Java Man-*Homo erectus*)⁵³².

What is noteworthy here is the fact that the confession of Dubois, who discovered the fossil *Pithecanthropus* (*Homo erectus*) in 1922, has been ignored. In his book “Mankind in the Making”, Howells states that he found two skulls with a brain volume close to that of modern man in the place where Dubois found the first fossil. However, Dubois did not state for 30 years that he had found those skulls. Dubois admitted thirty years later that the being he presented as Java Man (*Pithecanthropus-Homo erectus*) was actually a big gibbon monkey⁵³³.

The explanation of Dubois was included in the Encyclopedia of Archeology. The following statement exists in the encyclopedia:

“At first, there was much opposition to the status implied by the name the ape-man, ‘who walked erect’, but it became generally accepted though Dubois himself finally changed his mind and said that the fossils he found belonged to a giant ape, but this skull gained general acceptance⁵³⁴.

The remarkable point here is as follows:

Dubois, who brought forward the Java Man and found the fossils, admitted that those fossil fragments belonged to an ape, not to the ancestor of man, but this being is still presented as the first ancestor of man in both universities and high schools.

There can be only one explanation of it: Such behavior is not scientific but ideological behavior based on atheism, making a fool of everybody.

Oddly enough, some scientists interpret verses of the Quran and hadiths by accepting this Java Man (Homo erectus group), which is claimed to be the ancestor of human beings, as a fact.

How can some scholars and scientists be fooled by these frauds?

Badiuzzaman Said Nursi points out that the reason for such deceptions is the fact that Satan shows what is wrong as right and what is impossible as possible:

“Firstly: When seen from a great distance, the greatest thing appears the same as the smallest. A star may even appear as a candle.

Secondly: Also, when seen both as secondary and superficially, something which is completely impossible may appear to be possible.

One time an old man was watching the sky in order to spot the new moon of Ramadan when a white hair fell on his eye. Imagining it to be the moon, he announced: ‘I have seen the new moon.’ Now, it is impossible that the white hair should have been the moon, but because his intention was to look for just the moon and the hair was by the way and secondary, he paid it no attention and thought that impossibility was possible.

Thirdly: Also, non-acceptance is one thing and denial is something quite different. Non-acceptance is indifference, a closing of the eyes to something, an ignorant absence of judgement. Many completely impossible things may be concealed within it, and the mind does not concern itself with them.

As for denial, it is not non-acceptance, but an acceptance of non-existence; it is a judgement. The mind is compelled to work.

So a devil like you takes hold of the mind of a person, then leads it to denial. And, showing the false as truth and the impossible as possible through satanic wiles like heedlessness, misguidance, fallacious reasoning, obstinacy, false arguments, pride, deception, and habit, you make those unfortunate creatures in human form swallow unbelief and denial, although they comprise innumerable impossibilities."⁵³⁵

Thus, the main reason for being deceived is the fact that what is wrong is shown as right and what is impossible is shown as possible. That is to say, what is baseless, unreal, superstitious, wrong and false is presented as true and real. In addition, something impossible, and unthinkable is shown as possible. The reasons for this mistake and deception are listed as follows:

The first one is heedlessness. That is, thoughtlessness and being unaware of the facts.

The second one is aberration. That is, to go astray, to leave and move away from the right knowledge.

The third one is sophistry. That is to be deceived by lies, fabrication and unreal words.

The fourth one is stubbornness. In other words, being misled by one's interlocutor.

The fifth one is conceit. That is, to insist on refusing to accept what is right or truth knowingly. In other words, to insist on what is wrong and to act arrogantly despite knowing that one is wrong and one's interlocutor is right.

The sixth one is seduction. That is, deception.

The seventh one is the deception of some people who think they are clever by devilish tricks and traps and by denialism, which causes many impossible things to be regarded as possible.

10.3.10.3.2- Piltdown Man (*Eanthropusdawsoni*)

Arthur Smith Woodward, the director of the London Museum of Natural History, and medical doctor Charles Dawson, dug out a jaw and skull fossil with a ceremony from a gravel pit near Piltdown, England in 1912. The jaw bone was very similar to that of the monkey, and the teeth and skull were very similar to

that of human beings. Those materials were called “Piltdown Man” (*Eanthropus dawsoni*). The age was determined to be 500 thousand years.

In the 1930s, the discussions about “did man’s brain or body develop first?” were answered by bringing evidence from Piltdown Man. As a matter of fact, Smith indicates this issue and says:

“The most interesting aspect of “Piltdown Man” is that it justified the idea that ‘the brain was first in the evolution of man’. The idea that human beings got rid of being apes thanks to the development of the head structure is the most realistic view. Man is an orangutan whose brain is highly developed. Here, the importance of the Piltdown skull lies in its strict validation of those judgements⁵³⁶.

In 1950, the amount of fluoride absorbed by the bones from the soil was tested in order to determine the age of Piltdown Man. If the fossil had allegedly remained in the soil for 500,000 years, it would have contained a lot of fluoride. However, there was no fluoride in that fossil... Thus, it was discovered that the material of Piltdown Man was not a fossil, and that it had not remained in the soil for more than a year when it was discovered.

Later, it was found that the bones, which were subjected to a serious examination, were stained with potassium dichromate to give the appearance that they belonged to the past. Teeth on the jaw bone had been rasped so that they would have a worn and torn appearance¹⁹³.

Thus, they had combined the jaw of a 10-year-old orangutan with human skull and placed human teeth on the jawbone to make it resemble a being between an ape and a human (Figure 8).

When the people who were responsible for this hoax were searched, no one took the blame. Arthur Smith Woodward and the medical doctor Charles Dawson, who planned this hoax and dug the bones out of the gravel pit with a great ceremony, had died. The journals and other publishing organizations that presented the issue did not accept responsibility.

Clark Howell attracts attention to the fact that the scientific circles were deceived by Piltdown Man for 50 years:

“Piltdown man was nothing more than a being that consisted of a human skull and an ape’s jaw. It was a hoax placed on purpose. They declared it as the common ancestor of man and ape that lived 500,000 years ago. Some 500 books

were written on it. on it. The paleontologists were fooled for 50 years with that discovery”⁵³⁷.

The fact that the Piltdown hoax could not be understood for about 50 years despite the research of the greatest authorities of the world increased the doubts about the other fossils. S. Zuckerman holds the view that when the Dubois fossils of Java Man is examined seriously, the result will be no different than the Piltdown Man⁵³⁸.



Figure 8. Piltdown Man (*Eanthropusdawsoni*). Orangutan jaw was fixed on human head. It is understood that the jaw of this fossil, which is accepted as “the ancestor of man”, belonged to an orangutan, the skull and the teeth belonged to a human and that it was rasped in order to make it fit the jaw⁵³⁹.

10.3.10.3.3- Peking Man (*Sinanthropuspekinensis*)



Figure 9- Peking Man (*Sinanthropuspekinensis*). Peking Man model made of plaster.

Dr. Davidson Black found two molar teeth in 1921 in a pit 40 km away from Beijing, China, and called them “*Sinanthropuspekinensis*”. W. C. Pei found the third molar tooth in 1927, and skull fragments and two lower jaws in 1928. Black said those fossils belonged to Peking Man⁵⁴⁰.

The materials claimed to be Peking Man were claimed to have been lost during the invasion of Beijing by the Japanese during World War II except for two teeth. O’Connel states that the Japanese did not enter this city and that he was there at that time. O’Connel states that evolutionists themselves destroyed those

materials; thus, he states that they shaped the plaster models based on their own evolutionist thoughts⁵⁴¹.

10.3.10.3.4- Nebraska Man (*Hesperopithecuseroldcookii*)

In 1922, Henry Fairfield Osborn found a large molar tooth in the Western Nebraska and this tooth was named *Hespeperopitpitheircusharoldcookii* (Nebraska Man).

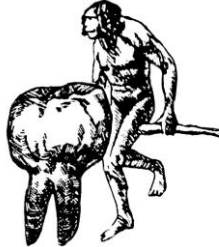


Figure 10. Nebraska Man (*Hesperopithecuseroldcookii*). A picture drawn based on a pig's molar tooth.

It was claimed that this being, which is estimated to have lived about 500 thousand years ago, belonged to the prehistoric ancestor of man and had the characteristics of half ape and half man; and the picture above was drawn with this idea.

It was later found out that the tooth belonged to a pig⁵⁴².

10.3.10.3.5- Neanderthal Man (*Homo sapiens neanderthalensis*)

It was discovered by Dr. Fuhtrott in the Feldhofer cave of the Neanderthal valley in Düsseldorf, Germany in 1856. The skull size of the Neanderthal Man, a race of *Homo sapiens*, is about as big as that of modern man. It is estimated to have lived 35 thousand to 100 thousand years ago. The Neanderthal Man has been described and presented for more than a hundred years as “a thick-eyed being with a coarse nature, wild-character that walked in a curved state”. In fact, the difference between Neanderthal Man and today's man is less than the difference between the current people of different tribes⁵⁴³.

The protrusion of the mouth and eyebrows, which are the characteristics of the Neanderthal race, is typical of the black race. Neanderthal man has a curved skeletal structure. In his article called “Neanderthals Had Rickets”, Ivanhoe states that this structure is not due to kinship with apes without tails, but due to the joint and bone disease caused by lack of vitamin D.⁵⁴⁴

It is known that Neanderthal Man grew plants, painted pictures with elegant tools, had some religious beliefs, buried the dead and used a kind of scripture⁵⁴⁵.

Today Neanderthal Man is classified as “*Homo sapiens*” (today’s man). It is stated that Neanderthal Man could not be distinguished from other people if he walked in our streets wearing overalls⁵⁴⁶ (Figure 11).

Paleontologist Erik Trinkaus draws attention to the fact that there is no difference between modern man and Neanderthal Man and states the following:

*“Neanderthal ruins and detailed comparisons made between Neanderthal bones and modern human bones show that there is no difference in Neanderthal’s anatomy or in terms of his movement, instrument use, intelligence or speech.”*⁵⁴⁷

It is claimed that Neanderthal Man was absorbed by dominant races over time⁵⁴⁸.

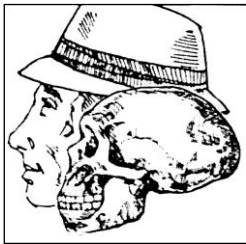


Figure 11- Neanderthal Man.

There are many different opinions and thoughts about Neanderthal Man. Noting that almost everyone has a comment on this issue, Wells states the following:

*“Currently in the news is the never-ending controversy over Neanderthals. Were they our ancestors? Were they a separate species, now extinct? Or were they a race of humans, eventually absorbed into our modern global family? Almost every month, a proponent of one view or another takes to the print media or the airwaves, declaring the matter settled. Wait a few months, however, and someone will probably say the opposite with equal confidence”*⁵⁴⁹.

Mentioning the same issue, James Shreeve says:

*“I talked to one hundred and fifty scientists—archaeologists, anatomists, geneticists, geologists, dating experts—and sometimes it seemed I had come away with one hundred and fifty different points of view” about the place of Neanderthals in human evolution Any theory about Neanderthals is like the weather in many parts of the country: If you do not like it, wait a little while and it will change!*⁵⁵⁰.

10.3.11- Evaluation Related to the Past of Man

The evolutionist T. Dobzhansky, who is considered the father of genetics, made the following statement about races:

*“We have not been able to solve the problem of the origin of different races of human species though over one and a half centuries passed since Darwin. The issue is still as complicated as it was a century ago”*⁵⁵¹.

The famous paleontologist David Pilbeam states the following about the past of man:

“Introductory books - or book reviews - are hardly the place to argue that perhaps generations of students of human evolution, including myself, have been flailing about in the dark: that our data base is too sparse, too slippery, for it to be able to mold our theories. Rather the theories are more statements about us and ideology than about the past.!”^{552, 553}

Geoffrey Clark, Arizona State University anthropologist, states the following in the book he wrote in 1997:

*“Scientists have been trying to arrive at a consensus about modern human origins for more than a century. Why have they not been successful? It is because paleoanthropologists proceed from such different biases, preconceptions and assumptions. Thus, explanatory models of human evolution are little more than a house of cards — remove one card... and the whole structure of inference is threatened with collapse”*⁵⁵⁴.

No fossil form has been found to show transition through evolution among fish, frogs, reptiles, birds, insects and mammals. Similarly, there is no fossil that connects human beings with the living beings that lived before them.

All this shows that each species is created directly with its genetic potential, abilities and characters.

Henry Gee states the following in his book about the past of man:

*“All evidences about the evolution of man can fit in a small box. To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime story—amusing, perhaps even instructive, but not scientific”*⁵⁵⁵.

Schiller points out that human beings emerged differently from other living beings:

*“The fossils about the past of man could not show the transitional forms that were expected... It can easily be said that we did not evolve from a being lower than man and that we come from our own lineage”*⁵⁵⁶.

Robert Eckhardt, Professor of Anthropology at Pennsylvania State University, states the following:

*“In the Hominoids series, there is no fossil with a morphology showing that man has a hominid ancestor”*⁵⁵⁷.

Thousands of fossils have been found in the last 150 years. However, none of them shows the characteristics of an intermediate form indicating that one living being came from

Conclusion

The genetic structure of living beings shows that there is no evolution in the sense of evolvment; and the fossils show that living beings did not emerge from one another in the form of a chain.

From plants like algae and unicellular animals, which appeared first on earth, to higher organisms, the great majority of living beings exist almost in the same shape and form as they first appeared.

All this proves that the creator of those creatures in the past and the creator of these creatures today is the same Being. As a matter of fact, this issue is expressed as follows in a verse:

“See they not how Allah originates creation, then repeats it: truly that is easy for Allah.” (al-Ankabut, 19)

A more striking aspect of the issue is the differences among the individuals of the same species. In other words, although individuals of the same species are

similar to one another in terms of organs such as eyes and ears, one individual does not resemble other individuals with their unique characteristics

The similarities in the main organs are evidence for the existence and oneness of the Creator; on the other hand, the fact that each living being has its own genetic characteristics clearly shows that the Creator's will, preference and that He can create in any way He wishes, along with showing His uniqueness.

These characteristics peculiar to each individual showing the uniqueness of the creator are much more obvious in man in particular; this is also extremely important as a necessity of wisdom for the realization of justice, rights and law among people. Otherwise, if everyone had the same facial features and characteristics, there would be chaos and confusion in society; and many rights would be lost and it would be impossible to maintain the order and safety.

We see this manifestation of the uniqueness of the creator in the whole world. If all animals were of the same shape and structure, it would not be possible to distinguish and recognize them.

This difference also takes place in the realm of non-living beings; every being, including snowflakes, is created with a different form and shape.

It has no aspect that can be explained by science, by the structure of the existing beings, or by reason and logic to say, "all living beings emerged in the form of a chain from one another by chance" by ignoring all those structures mentioned above. It is nothing but an ideological attitude based entirely on atheism and positivist philosophy.

All those wonderful creations cannot happen by chance, nor can they come into being by themselves. On the other hand; it cannot be the work of ignorant, will-less and unconscious nature and causes. Those extremely wise, artistic, orderly, purposeful and planned creations are the work of Allah, who has attributes such as infinite knowledge, will and power.

EVALUATION QUESTIONS

- 1-What is the difference between evolution and takamul and tahawwul?
- 2-What are the fossils proposed as an intermediate form between fish and frogs and how true are they?
- 3- Is *Archaeopteryx*, which is accepted as the ancestor of birds, reliable?
- 4- Why are the fossils put forward by evolutionists as the ancestors of man not accepted by the world of science?
- 5-Why can Java Man, the representative of the *Homo erectus* group, not be an ancestor of man?

10.4-TIME FALLACY OF THE EVOLUTIONIST VIEW

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LEARNING OUTCOMES OF	EVALUATION QUESTIONS
1- The student understands that there is a time problem in evolution in terms of the half-life unstable components in living beings. 2- He knows that there is a time problem in evolution in terms of time dependence of biochemical reactions. 3- He understands that there is a time problem in evolution in terms of probability calculations in	1-Evolutionists claim that one species emerged from another species, that is, a change in the sense of evolution took place in a very long time. There is no limit to this long time. They propose the longest period they can express. Could the real reason for it be to prevent such a claim from being tested?

What is time?

Time is a relative being that occurs as a result of the movement of matter. Time is an important element in being alive because every living being has a life span that contains a certain period of time a certain and very limited time for the realization of the biochemical reactions that ensure the survival of that living being. If those reactions cannot occur in the relevant unit of time, life will not continue. For example, the conditions that should occur at the same time during a new cell formation are as follows:

- If the letter errors that occur in the chain when DNA is copied cannot be repaired at a certain time,

- If free radicals formed by oxygen respiration are not suppressed within a certain time,
- If foreign elements such as viruses and bacteria that enter into the body are not prevented and fought within a certain period of time,
- If proteins are not synthesized within a certain period of time, etc., life will not go on.

It is possible to lengthen this list for 3000 different reactions that occur each minute in a cell. If these biochemical reactions cannot be carried out at specific and short times, it is not possible to mention the existence and continuity of life.

However, according to the evolutionist view, this timing is hardly taken into account and there is a rather extravagant approach regarding the issue. For example, it is said that the first

Every reaction within the cell must be performed in very short periods of time, such as thirds, seconds and minutes. Sometimes a delay of a few hours causes the creature to die.

cell formed as a result of random transformations over millions of years, and that defense mechanisms such as producing responses to oxidative stress and pathogens could be developed as a result of trial and error that occurred over millions of years and billions of times.

In fact, there is still no real time determinant to measure this time. However, since it is believed that the longer time they mention, the more credible they will be, they mention longer times with exaggeration.

However, there is one important point that they miss: this approach is far from being scientific and real because the organism has a certain life span, and every reaction within the cell must be performed in very short periods of time, such as thirds, seconds and minutes. Sometimes a delay of a few hours causes the creature to die.

For example, if the antioxidant defense mechanism of a cell that starts aerobic respiration does not take place even for 1 hour, DNA, proteins and fats, which are the main components of the cell, will be exposed to oxidative stress and become functionless; then, the cell will die. Due to all these reasons, evolutionist approaches to time need to be questioned again from a biochemical perspective.

10.4.1-The Problem of Time in Evolution in terms of the Half-Life of Unstable Components in Living beings

Half-life is the time period required for a substance to be reduced to half the initial amount in chemical reactions⁵⁵⁸.

Although it is generally used for radioactive elements, it can also be used for all reacting compounds. Since the biochemical compounds are often degraded by the effect of the reactive components in the medium, a half-life of each biochemical compound can be mentioned⁵⁵⁹.

For example, RNA is a compound with a very short half-life in a laboratory environment. Therefore, effective precautions should be taken against chemicals that destroy RNA, and chemicals that destroy endogenous proteins showing nuclease activity should be added to isolation buffers. In addition, the test medium should have a certain temperature (0 to +4 °C) and acidity (pH; 7.2-8.5). Otherwise, the RNA degrades immediately, loses its stability and the experiment is wasted. This also applies to enzymes, coenzymes, other proteins and lipids involved. In fact, the same problem applies to some co-factors in mineral structure such as Fe^{+2} , Cu^{+1} and Mn^{+2} , which are involved in the enzyme structure because these elements react with oxygen in the air and become oxidized in a very short time; after that, they can no longer function as a co-factor⁵⁶⁰.

An experience I underwent in the laboratory

I can give an example of my experience in the laboratory regarding the issue. It is necessary to produce hydroxyl radicals (OH) to imitate the oxidative stress occurring in the cell in antioxidant activity determination tests. Fenton reactions are used for this. In other words, +2 valent iron (Fe^{+2}), should break down hydrogen peroxide (H_2O_2) into hydroxyl radical. Hydrogen peroxide and dissolved iron chloride should be added to the test medium in order to do it.⁵⁶¹

I prepared them and added them to the experiment medium, but I could not get the result I wanted. I did the experiment again and again but I could not succeed in doing it. It took 5 days. At the end of the 5th day, I realized that +2 valent iron (Fe^{+2}) reacted with the oxygen in the air and became oxidized, that is, was converted to +3 valent iron (Fe^{+3}) and became useless for this reaction. That is, it was necessary to add Fe^{+2} to the experiment medium as soon as I prepared it. However, I added this solution about half an hour after I prepared it. Thanks to

this tiny but very important detail that I learned, I was able to do this experiment, which I could not accomplish in 5 days, in 5 minutes.

These unsuccessful experiments that I experienced helped me to notice a great operation. Yes, many reactions in living beings could not tolerate waiting. A successful biochemical reaction could take place only under certain conditions (temperature, concentration, pH, etc.) and at very short time periods.

Evolutionists' claim that unstable compounds such as DNA, RNA and protein evolved under atmospheric conditions and in millions of years is contrary to the biochemistry of those molecules in the first

However, evolutionists mention longer times with exaggeration in order to increase the credibility of their claims in terms of time by ignoring this delicate issue in living beings. Nevertheless, there is a very important point that they miss; biological functioning has no tolerance to this extravagance. Evolutionists' claim that unstable compounds such as DNA, RNA and protein evolved under atmospheric conditions and in millions of years is contrary to the biochemistry of those molecules in the first place.

10.4.2- The problem of time in evolution in terms of time dependence of biochemical reactions

The change in the amount of one of the reactants or products that occur as a result of the reaction is called the rate of reaction. Every reaction has a rate. In a chemical reaction, the measurement of the progression of the reaction over time is the rate of that reaction and is called chemical kinetics.

Chemical kinetics is one of the fields of chemistry that gives information about how a reaction works, how fast it proceeds, with which mechanism it works, and which factors affect its rate. There is always a term (t) in chemical kinetic equations⁵⁶².

In chemical reactions in inanimate nature, the term time can be seconds, years or even centuries. In biochemical reactions, it usually corresponds to third and smaller time terms because every living being has a life span that includes a certain and short time limit, and a certain and very limited time required for the realization of the biochemical reactions that have an importance place in the continuation of their life. Enzymes are activated to accelerate these chemical reactions in life. If it were not for the enzymes, living beings would be able to perform even the simplest looking activities like breathing over a period of hundreds of years. It can even be said that if there were no enzymes, there would be no life because at least 3000 different reactions are performed in a cell at the same time.⁵⁶³

If the reactions in living beings did not occur quickly, that is, in a very short time, the vital needs of the cell, especially the energy and defense system, could not be met and cell integrity would be disrupted.

If the reactions in living beings did not occur quickly, that is, in a very short time, the vital needs of the cell, especially the energy and defense system, could not be met and cell integrity would be disrupted. In addition, the factors disrupting biochemical reactions would prevail and the desired products would not be obtained from the reaction.

For example, as a natural consequence of oxygenated respiration, chemical radicals such as superoxide, which will be an element of oxidative stress, emerge⁵⁶⁴.

As for those radical compounds, they have the potential to destroy vital components in the cell, particularly DNA and proteins. However, since the defense system to neutralize these radicals is placed in the cell, these harmful effects are often suppressed. When these radical compounds cannot be suppressed, they become the main cause of many diseases, especially cancer.

Evolutionists' claims regarding the time dimension in living beings are not scientific, but ideological.

It is stated that 10,000 radical attacks per day occur only in one cell. However, these attacks are prevented by enzymes such as superoxide dismutase, catalase

and glutathione peroxidase, and if the attack is successful, DNA repair enzymes are activated and the harmful effects are eliminated⁵⁶⁵.

What is the life span of a cell?

If we accept that this defense system was developed over millions of years as evolutionists claim, how can we explain the cell's survival and its ability to transfer itself soundly from generation to generation? How and with what means did a being with a very short life span manage to protect itself from the attacks that took place ten thousand times a day? Did a miracle take place? Or, was it brought into existence with those defense systems?

The most reasonable, logical and scientific approach is definitely the creation of the cell together with defense enzymes as a manifestation of mercy and wisdom. We can think of this approach for each of the three thousand different reactions within the cell because all life is based on biochemical reactions. Therefore, evolutionists' claims regarding the time dimension in living beings are not scientific, but ideological. It cannot be expected that these evolutionist claims, which have no basis in biochemistry, may have come true. If it is expected, it is necessary to attribute extraordinary powers to nature and to believe in the concept of miracle. However, the evolutionist view wants to escape from 'believing in something miraculous'. Sadly enough, the evolutionist view fell into the thing from which it escaped, and became a means of a bigoted system of faith while trying to escape believing.

10.4.3- The problem of time in evolution in terms of the calculation of probabilities in genetic changes

Since the possibility of one species transforming into another species requires a tremendous change, evolutionists argue that this change did not occur suddenly, but as a result of mutations over long periods of time like millions of years. In fact, at first glance, it is not far from the imagination that such a change may take place over such a long period of time. However, this possibility is only an imaginary possibility because such a possibility must have a genetic basis to be a reasonable and real possibility. It is claimed that this change occurred as a result of mutations in genes. However, when calculations of probability are made with genetic methods, it is seen that the life of the universe, let alone the life of the

world, will not be enough for such a possibility. It is impossible to convert one species into another with mutation even if such advanced technology and accumulated experience are used.

For example, it is impossible for a chimpanzee, which is genetically closest to a human being, to turn into a human being with mutations because there is a 96% similarity at best and 4% difference⁵⁶⁶.

There is a total of three and a half billion genetic letters (nucleotides) in its genes⁵⁶⁷.

That is, there is a difference of $3.5000.000.000 \times 4/100=140.000.000$ nucleotides (genes) between two species. In other words, if an engineer who is an expert in genetics wants to do it, he must replace 140 million letters carefully. However, if this work is to be expected from blind and purposeless tools, such as nature and coincidence that have no engineering ability, the possibility of closing the difference by random mutations is $1/4^{140.000.000}$ based on the probability of the 4 different genetic letters in the DNA chain (Adenine, Guanine, Cytosine and Thymine) being in 140 million different positions.

The chance of success of this mutation when we turn it into decimal figures for easier understanding is $1/10^{84.000.000}$. That is, you need to put 84 million zeroes next to 10; what number would you get? That is the number of possibilities. Let us also calculate this possibility in terms of time, to which evolutionists often resort. According to the claim of the evolutionist view, this transformation took place in 100 million years as a result of mutations. Well, if it happened in a hundred million years, how many mutations would have to occur in one year? Let us calculate it.

$$10^{84.000.000.000} / 100.000.000 \text{ years} = 10^{84.000.000.000} / 1 * 10^8 = 10^{84.000.000.000-8}$$

That is, you have to put 83 million 999 thousand 992 zeros next to 1. That is the possibility: $1/100000000.....$ (83 million 999 thousand 992 zeros will have to be added next to 1). It is also possible to understand it as follows: More than $10^{83999992}$ DNAs will form by chance in a year; and only one of them can be the DNA of today's man. Look! I do not say 83 million 999 thousand 992, I say $10^{83999992}$. This detail is very important because even only the last two digits, that is, 92 becomes a huge number that we cannot name when it becomes an exponent of 10. It would be impossible even if it was a probability of 10^{92} , let alone 1 in a quintillion or centillion.

Therefore, since 100 million years = 10^8 , time has no effect on this possibility. If the life of the world was 100 billion years, it would be equal to 10^{11} , which would be of no effect again. It must be acknowledged that the world must have almost an eternal life for such a possibility to be realized,. This cannot be accepted by anyone because it is a claim against reason, science and mathematics.

In fact, millions of years does not weaken such a low possibility. Even if they say billions of years, only 10 zeros will be reduced from 84 million zeros since there are 10 zeros in a billion. How much will a million be reduced if ten or a hundred is subtracted from it? Moreover, such mutations should occur **regularly** every year.

In mathematics, 10^{40} means impossible.

Why should we judge that so many mutations in the past occurred in one year while the total number of mutations in a cell in a year is so few?

Can a person who says such an impossible probability is possible be regarded as a sane person?

10.4.4- The problem of time in evolution in terms of the effect of the atmosphere of the world on living beings

According to evolutionists, advanced organisms emerged about 250 million years ago. This claim of long period, which is not based on any validated experiment, is based on simple assumptions and estimated calculations. As a matter of fact, it was understood that radiocarbon (C-14) dating method, which is one of the most important techniques used in these calculations, produced wrong results and it was understood as a result of experimental studies that it was not a reliable technique⁵⁶⁸.

In addition, these claims should be supported not only by theoretical calculations but also by the fossil record. Around 200 million large fossils and billions of small fossils have been found and archived worldwide. This comprehensive and detailed fossil record shows that all large groups of animals suddenly appeared and remained almost unchanged, and many species suddenly appeared and disappeared⁵⁶⁹.

Since this issue is of particular interest to anthropologists, it is clear that what is claimed cannot be proved without giving a clear answer to the following

questions even though we look at the issue only from a biochemical point of view without entering into details.

What was the amount of gases in the Earth's atmosphere 250 million years ago, and was it suitable for the living conditions of highly organized cells in particular? For example, radon gas is one of the most important causes of lung cancer.

How was it possible for the living beings to survive in the atmosphere when this gas was released in abundance as a result of volcanic eruptions?

What was the oxygen content of the atmosphere 250 million years ago, and was it enough for living beings with aerobic respiration, or was it excessive and not poisoning?

When exactly was the ozone layer formed?

It is claimed that the ozone layer is produced from the oxygen released by the organisms involved in photosynthesis. How did these living beings protect themselves from radiation when there was no ozone layer?

Without giving clear answers to all these questions, it is not possible to give a definite answer to the question if life existed at that time; how should the claims of evolutionists be evaluated then?

EVALUATION QUESTIONS

- 1-What kind of time problem does evolutionists have related to evolution?
- 2- What kind of time problem does evolution have in terms of time dependence of biochemical reactions?
- 3- What kind of time problem is there in evolution in terms calculations of probability in genetic changes?
- 4- What kind of time problem does evolution have in terms of the effect of the Earth's atmosphere on living beings?

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- ³⁸⁵Nursi, B.S. Lem'alar., p. 217.
- ³⁸⁶Nursi, B.S.Lemalar, p. 226; (On Sekizinci Deva). Allah is not cruel. See Mehmed Vehbi, Akâid-iHayriye, p. 29-32; Keskin, p. 134.
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- ³⁸⁸Seear-Rahman,33.
- ³⁸⁹ Umara, p. 340, nr. 530; (Bukhari, Tafsirul-Quran, 65/45, 1); Munawi, IV, 470, nr. 6024; Sarıcık, Cahiliye, p. 133-134.
- ³⁹⁰SeeTaslaman, C. ibid. p. 211- 212.
- ³⁹¹Misfortunes hitting people due to what they do; seean-Nisa, 4/62, 79; ash-Shura, 30; an-Nahl, 34; az-Zumar, 51; Aal-ilmran , 72; ar-Ra'd, 31; Qasas, 47; al-Maida, 49.
- ³⁹²Munawi, IV, 481; Watt, p. 111.
- ³⁹³Sarıcık, M.Çağrı- Medine, p. 369- 372.
- ³⁹⁴Hay'ah, Majmaut-Tafasir, III, 197.
- ³⁹⁵There is a sign related to the existence of qadar here.
- ³⁹⁶Hay'ah, Majmaut-Tafasir, III, 197.
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