

THE QURAN

SCIENTIFIC EXEGESIS

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**NOTHING IN THIS UNIVERSE MAKES SENSE
EXCEPT IN THE LIGHT OF HOLY QURAN**

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Preface

In this era of science and technology, the importance of rationality and accuracy of belief systems cannot be overemphasized. There is the general but wrong notion that religion and science are mutually contradicting epistemic spaces. The scientific community believes that religion and God are just another human invention. To defend this argument, it had introduced certain theories assuming that the physical universe and biological species are products of chance evolution with no purpose to serve. The conditions of rationality and accuracy are equally applicable to such theories also. Unfortunately it is generally taken for granted that any information originating from the scientific community is rational and based on evidence. On the contrary, the probability of a Scripture being rational and true is not even considered.

Even after fourteen hundred years, the Quran exists in its pristine form under divine protection. It is the only available Scripture that is not authored by a human being. It is the only source that reveals to mankind the purpose of creation of *Homo sapiens* and the universe. The Quranic revelations including the purpose of creation are scientifically verifiable. It is the amenability of the holy Quran to scientific verification and explanation that places it in a class of its own.

The Quran is divine treasure of knowledge to mankind. The world has not realized this truth yet. Science is also as divine as the Quran although the general belief including that of religious scholars and the scientific community is it is man-made. Science has its limitations and cannot deliver all the information man is looking for. The Quran provides the information what science cannot generate and vice versa. It is noteworthy that it is in the Muhammadan era scientific knowledge is released by Allah. To the dispassionate unbiased truth seeker, these two domains of knowledge are two sides of the same coin.

The scientific exegesis of the Quran presented in this book is a compilation of the results of my research already published in a couple of books as well as several new additions. It paves way for the fruitful and harmonious blending of the Quran with science generating holistic knowledge of the universe and human life. The approach adopted in this work is comprehensive. The Quran serves as the divine lens through which man can look at the creations and understand them scientifically from the divine perspective – as Creator Allah sees them. Science serves as the effective and efficient tool not only to verify the rationality and veracity of the Scripture to the best satisfaction of human mind but also to greatly enhance human perception of the boundless power of God Almighty. Scientific validity of the Quranic revelations offers the unequivocal proof of the existence of God and divinity of the Quran.

Praise be to Allah – the Creator and Sustainer of the worlds – for giving me the strength, determination and perseverance all through this work. I submit to Him in all humility.

P.A.W.

1. INTRODUCTION

Belief in God is considered by most scientists as irrational and blind. Although this is the general notion of the scientific community, it is this view that goes against the well-established scientific facts. However, this view goes uncontested because people invariably consider the view of scientists as scientific, which in this case is not. It is imperative that the belief system we follow and the knowledgebase we develop should be scientifically sound. In this era of knowledge societies, particularly the religious traditions and beliefs without rational basis are bound to be rejected. Acceptance of a Scripture is going to be based on its scientific validity. Therefore, scientific explanation of the Scriptural revelations assumes great significance. This is possible only if the Scripture is amenable to scientific treatment and explanation. The very amenability of a Scripture to scientific explanation points to its divinity and rationality. As we shall see in this exegesis the Quran proves itself it is truth from God based on this criterion. The Quran and science blend harmoniously with each other indicating both these domains of knowledge originated from the same source, God. Merger of science with Quran leads to the development of holistic knowledge, which is referred to here as *Islamic Science*. The term *Islamic Science* is not used here to mean scientific contributions of Muslim scientists as generally used in Islamic literature.

Holistic knowledge of the universe and man can be developed only if the purpose of creation is known. The Quran is the only source that provides this information. This fact also strengthens that Islamic Science alone can claim the status of holistic knowledge. The universe must be treated, studied and understood as a system created by Allah in the light of the divine purpose revealed through the Quran. Neither science nor the Quran can give us the complete knowledge about the

universe and human life but in combination they can. Understanding of the universe and human life consistent with Allah's purpose of creation will render our knowledge scientific, true and holistic.

It is without considering the divine purpose of creation but instead declaring that the universe and man originated by chance with no purpose to serve, science is 'advancing'. The knowledge so generated will indeed be wanting in several respects. To the scientific world, man is just a component of the universe like any other component. Information about man is generated under that premise. Obviously scientific knowledge developed independently of the Quran will not only be limited in scope but will also be misleading. True and holistic knowledge of human species and the universe can only be developed through fusion of science with the Quran encompassing the divine mission and purpose of creation to suit that mission.

The Quran is regarded by the world as no more than a religious text that provides information on matters relating to Islam. This view about the Quran is indeed an underestimate of its scope and applicability. The religious content apart, it also provides substantial information on many and varied aspects of the universe and human life. The Quran conveys this fact in no uncertain terms:

وَنَزَّلْنَا عَلَيْكَ الْكِتَابَ تِبْيَانًا لِكُلِّ شَيْءٍ وَهُدًى وَرَحْمَةً وَبُشْرَى لِلْمُسْلِمِينَ

16:89 "...We (Allah) sent down the Book to you as an explanation to everything, a guide, a mercy, and good news to Muslims (i.e., those who submit to the will of God)."

We have not realized the scope of the Quran in its entirety nor have we examined its applicability in various domains of knowledge other than the religion Islam. The Quran may be best described as the detailed account of divine mission with man and universe. Every subject discussed in the Quran

including religion should be seen as part of the overall mission of God. It is only then will we be able to fully grasp the significance and relevance of the Quranic revelations. To put it differently, we should perceive the universe and human species from the angle of divine mission to get the true picture and to live purposefully, meaningfully and successfully.

The process of Quran-science integration involves application of the Quran to science as well as application of science to the Quran. The former is a purification process. It enables us to bring science within the framework of the Quran weeding out the Quran-hostile areas particularly atheism-oriented theories from the domain of science. Such theories are the handiwork of Satan. The latter enables us to comprehend the Quranic revelations scientifically and convincingly. It is the overall product of these two processes that is referred to here as Islamic Science. Islamic Science is the totality of the knowledge of the universe and man revealed to the people of Prophet Muhammad by the Creator – Allah. It represents the quantum of knowledge man is entitled to get. Science is not a static domain of knowledge. It is dynamic and advances qualitatively and quantitatively with time. This implies that understanding of the Quranic revelations about the universe and man will also go hand in hand with the advancement of science to suit the mental caliber of the people of future generations till the end of the world, which also marks the end of the Muhammadan era.

A general apprehension about scientific exegesis of the Quran is that as scientific theories change, the scientific explanation given to the Quranic revelation will also change for the better or for the worse. This implies that an explanation given now in the light of a current theory may become outdated sometime later. Further, it is also likely that the new theory that replaces the current one in future may be contradictory to the Quranic revelation. Given the present general attitude towards science and the way people view it as rational and true, this

apprehension is justifiable. But this will not happen because any theory that contradicts the Quran will not stand up to scientific scrutiny and will eventually be proven wrong. How do then such theories enter science? A dispassionate analysis of the current scenario in science will bring to light certain startling facts about the deliberate attempts of the scientific community to manipulate science to promote atheism. It is high time the world realized this fact.

It will not be difficult to find there is deep-rooted, well-organized conspiracy going on to promote atheism in the garb of science. In this context, it is necessary to distinguish technology-oriented domain of science from technology-not-oriented (or non-tech) domain. Scientific knowledge in the technology-oriented domain is self-correcting and directional as otherwise the targeted technology will not result. This domain has therefore factual content and will not in any way contradict the Quran. On the other hand, the non-tech domain lacks mechanism for self-correction. Since this space does not contribute to the development of technologies, it does not attract much attention and remains not of immediate concern to the people. Obviously, this domain can be easily manipulated and is being manipulated. It is the non-tech domain of science that nurtures theories against theism. Rejection of the non-tech domain of science will not hamper the scientific and technological advancement of any country. The non-tech domain of science should be developed in conformity with the Quran. As the Quran is truth from Allah and is guidance to every sphere of human activity including science (Q. 16:89 quoted above), this approach alone can pave way for the development of true knowledge. The scientific exegesis of the holy Quran presented in this book is based on that approach. The apprehension about the changing nature of scientific theories and its influence on the scientific exegesis of the Quran is thus unfounded. It may be reminded here that the scientific exegesis presented here does not involve verses relating to the religion Islam but involves only verses

pertaining to the universe and man. The exegesis therefore does not in any way affect the understanding of the religious matters. As science advances, the future generations will understand the Quranic revelations about the universe and man with greater level of scientific acumen and sophistication. These aspects have also been discussed in my paper “Development and promotion of Islamic science” published in *Muslim World League Journal* (2011, vol. 39, issue 12, p. 45-48).

The Quranic revelations pertaining to the universe are concerned with only natural phenomena and not theoretical aspects. Application of science to explain those revelations does not in any way change the meaning of the verse(s) concerned. Scientific explanation (exegesis) differs from the presently available *tafsir* of the Quran (interpretation or explanation given to the verses) in this respect. Generally speaking, the literal *tafsir* attempts not just verbatim translation but also interpretation of the Quranic text. It can therefore cause alteration of the meanings of the verses. Thus we find grossly different interpretations given by different scholars for certain verses. In contrast, scientific *tafsir* does not distort or alter the meaning of any word in the Quran as it is by and large concerned with understanding of the phenomena mentioned in the Quran. For example, take the word ‘Satan’. Through scientific explanation, we are only attempting to understand the phenomenon called ‘Satan’ from whatever hints the Quran gives us. That will provide us with a picture of what Satan is or can be. The scientific understanding of Satan so arrived at will not in any way affect the meaning of the verse containing the word ‘Satan’. It is like explaining a phenomenon scientifically. For example, electricity is a phenomenon. We explain it scientifically as flow of electrons. The explanation suits well as it yields workable solutions for practical application.

Voluminous literature is available today in science and technology that is quite useful and appropriate to explain and

understand the Quranic revelations. These include technological models, well-established scientific facts, discoveries of various natural phenomena, inventions, etc. This book attempts to provide scientific explanation of the Quranic verses wherever applicable. It is hoped that the book covers most of the Quranic verses that are amenable to scientific explanation in the light of available scientific information.

The synergistic fusion of science with the Quran will not only revolutionize our worldview from purposeless to purposeful, but will also allow us to perceive the physical universe and biological organisms as programmed systems like computers operating on divine instructions (software) immanent in them. Every component system is fully automated and there is coordination at the level of the universe. The scientific exegesis of the Quran explains the automated functioning of the living and nonliving components of the universe to accomplish the divine mission. The Quranic revelations about the physical universe and biological components particularly man can be efficiently explained based on computer analogy.

Scientific explanation of the Quranic revelations is divided into chapters each discussing a subject of scientific merit. The organization of the chapters is so done as to reflect and preserve the overall mission of Allah with His creations. It will be evident that the Quran and science can harmoniously blend to generate scientifically valid answers to the big questions like who I am, why I am here, what is the purpose of this universe, what is the fate of the universe, what is the future of human species and so on. There is no other source that offers answers to these questions. The scope of Islamic Science is very broad and extensive. A lot of work can be done in this virtually unexplored virgin field.

The need for scientific exegesis (*tafsir*) of the Quran cannot be overemphasized. It brings Islamic belief system on sound scientific footing. Whole-hearted participation of

scientists in various fields and Quran scholars is required for developing this epistemic domain. Continued and concerted effort through such joint venture alone can lead to the understanding of the Quran in keeping with the advancement of science.

2. ALLAH – THE ONLY GOD

The Quran provides substantial information about the attributes of Almighty God, Allah. “Allah” (*Al Ilah*) in Arabic means “the God”. The word “God” is also used in this book to mean Allah. Allah has not made Himself visible to man. Through the Quran, Allah conveys to us His multifaceted attributes and power. Being the originator and creator of everything, beginningless and immortal, He alone can claim ego. He is the only God. Everything else is His creation. We are directed through the Quran to believe in Him unseen. Every attribute mentioned in the Quran is unique to Him. Some of the important attributes of Allah conveyed through the Quran are given below. The list is certainly not complete as it covers mostly those relevant to the subject matter covered in this book.

God is Allah. He is One. There is no God but Allah (Q. 20:98; 2:163). And there is none like Him (Q. 112:1-4). There is nothing whatsoever that resembles Him (Q. 42:11). The doctrine of oneness of God (*al-tawhid*) and worshipping the only God form the core message the divine Scriptures – the earlier as well as the final (the Quran) – convey to humanity (Q. 21:25). He is the Creator, Evolver and bestower of forms. To Him belong the most beautiful names (Q. 59:24) and He creates what He likes (Q. 28:68).

إِنَّمَا إِلَهُكُمُ اللَّهُ الَّذِي لَا إِلَهٌ إِلَّا هُوَ ۖ وَسَعَ كُلَّ شَيْءٍ عَلَيْهِ

20:98 Indeed your God is Allah. There is no God but He. His knowledge encompasses all things.

وَالْحَكْمُ إِلَهٌ وَاحِدٌ ۚ لَا إِلَهٌ إِلَّا هُوَ الرَّحْمَنُ الرَّحِيمُ

2:163 And your God is One God. There is no God but He, Most Gracious, Most Merciful.

فُلُونَ هُوَ اللَّهُ أَحَدٌ اللَّهُ الصَّمَدُ لَمْ يَكُنْ لَّهُ كُفُواً أَحَدٌ

112:1-4 Say: He is Allah, the (only) One; Allah on whom depend all. He begets not, nor is He begotten. And there is none like Him.

فَاطِرُ السَّمَاوَاتِ وَالْأَرْضِ ۖ جَعَلَ لَكُمْ مِنْ أَنفُسِكُمْ أَرْواحًا وَمِنَ الْأَنْعَامِ أَرْواحًا ۖ
يَكْرِهُكُمْ فِيهِ ۚ لَيْسَ كَمِثْلِهِ شَيْءٌ ۖ وَهُوَ السَّمِيعُ الْبَصِيرُ

42:11 (Allah is) the Creator of the skies and the earth. He made spouses for you from among yourselves and mates among cattle. Through that (design) He multiplies you. There is nothing whatsoever that resembles Him. And He hears and sees (all things).

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ مِنْ رَسُولٍ إِلَّا نُوحِي إِلَيْهِ أَنَّهُ لَا إِلَهَ إِلَّا أَنَا فَاعْبُدُونَ

21:25 We (Allah) had not sent an apostle before you (Prophet Muhammad) except to convey to him, “There is no God but I; therefore serve (i.e., worship) Me”.

هُوَ اللَّهُ الْخَالِقُ الْبَارِئُ الْمُصَوِّرُ ۖ لَهُ الْأَمْمَاءُ الْحَسْنَىٰ ۖ يُسَبِّحُ لَهُ مَا فِي السَّمَاوَاتِ
وَالْأَرْضِ ۖ وَهُوَ الْعَزِيزُ الْحَكِيمُ

59:24 He is Allah, the Creator, the Evolver, the Bestower of Forms (or Colours). To Him belong the most beautiful names. Everything in the skies and the earth sings His praises. And He is the Mighty, the Wise.

وَرِئَتُكَ يَخْلُقُ مَا يَشَاءُ وَمَخْتَارٌ ۖ مَا كَانَ لَهُمُ الْخِيَرَةُ ۖ سُبْحَانَ اللَّهِ وَتَعَالَى عَمَّا يُشَرِّكُونَ

28:68 Your Lord creates what He pleases and He chooses. They (i.e., the created) have no choice (in any matter). Glory to Allah and so elevated is He above the partners they ascribe (to Him)!

He is the beginner and repeater of creations (Q. 10:34).

فَلَمْ هَلْ مِنْ شَرَكَائِكُمْ مَنْ يَبْدأُ الْخَلْقَ ثُمَّ يُعِيدُهُ ۖ قُلِ اللَّهُ يَبْدأُ الْخَلْقَ ثُمَّ يُعِيدُهُ ۖ فَأَنَّى
تُؤْفِكُونَ

10:34 Ask (those who join partners with Allah): Is there any among your partners who originates creation and then repeats it? Say: It is Allah who originates creation and then repeats it. Then how do you get misled?

He is the One who guides mankind to the Truth (Q. 10:35).

فُلْ هَلْ مِنْ شَرَكَائِكُمْ مَنْ يَهْدِي إِلَى الْحَقِّ ۝ فُلْ اللَّهُ يَهْدِي لِلْحَقِّ ۝ أَفَمَنْ يَهْدِي إِلَى
الْحَقِّ أَحَقُّ أَنْ يُتَبَعَ أَمْنَ لَا يَهْدِي إِلَّا أَنْ يُهْدَى ۝ فَمَا لَكُمْ كَيْفَ تَحْكُمُونَ

10:35 Ask: Is there any among your partners who guides to the truth? Say: It is Allah who guides to the truth. Is the one who guides to the truth more worthy to be followed or the one who cannot find guidance unless guided? What then is the matter with you? How do you judge?

Being the Creator, the only God, Allah needs nothing. He is free of all wants.

وَاللَّهُ عَلَيْهِ حَلِيمٌ

2:263 “.... Allah is free of all wants and Most-Forbearing.”

Allah is incomparable with anything or anyone. Everything is only His creation. It is His creations people associate with Him as His partners. People also use idols to represent Him. He cannot be represented by anything. He is far above human imagination. He alone can have ego. Ego is the prerogative of Allah and none else can claim that. Every description of the attribute of Allah is of the highest order, unmatched, supreme and unique to Him.

وَمَا قَاتَلُوا اللَّهَ حَقًّا قَاتِلُوهُ وَالْأَرْضُ جَمِيعًا قَضَيْنَا يَوْمَ الْقِيَامَةِ وَالسَّمَاوَاتُ مَطْوِيَاتٍ بِيَمْنِينِهِ
سُبْحَانَهُ وَعَالَىٰ عَمَّا يُشْرِكُونَ ۝

39:67 No just estimate have they made of Allah such as is due to Him. On the Day of Judgment the whole of the earth will be but His handful, and the skies will be rolled up in His right

hand. Glory to Him! High is He above the partners they attribute to Him!

فُلَّا أَنْتُمْ لَتَكُفُّرُونَ بِاللَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَجَعَلَهُنَّ لَهُ أَنْدَادًا ۝ ذُلِّكَ رَبُّ
الْعَالَمِينَ

41:9 Say: Do you deny the One (Allah) who created the earth in two Days and (also) invent equals to Him? He is the Lord of the worlds.

He is the Great (Q. 17:43; 22:62). He is the Truth (Q. 22:6, 62). He is the Exalted (Q. 17:43). He is the Creator of all things (Q. 67:14; 39:62). He is the Guardian of all things (Q. 39:62). He is the Omniscient (All-Knowing) (Q. 2:115). He is the Most High (Q. 2:255).

سُبْحَانَهُ وَتَعَالَىٰ عَمَّا يَقُولُونَ عُلُوًّا كَبِيرًا

17:43 Glory to Him! He is high above what they say; the Exalted, the Great.

ذُلِّكَ بِأَنَّ اللَّهَ هُوَ الْحُقُّ وَأَنَّهُ يُحِبِّي الْمَوْتَىٰ وَأَنَّهُ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

22:6 That is so because Allah is the Truth and (because) He gives life to the dead, and (because) He has power over all things.

ذُلِّكَ بِأَنَّ اللَّهَ هُوَ الْحُقُّ وَأَنَّ مَا يَدْعُونَ مِنْ دُونِهِ هُوَ الْبَاطِلُ وَأَنَّ اللَّهَ هُوَ الْعَلِيُّ الْكَبِيرُ

22:62 That is because Allah is the Truth and what they invoke besides Him is false, and that Allah is the Great.

أَلَا يَعْلَمُ مَنْ خَلَقَ وَهُوَ الْلَّطِيفُ الْخَيْرُ

67:14 Does He, the Creator, not know? He knows the finest details, well acquainted with everything.

اللَّهُ خَالِقُ كُلِّ شَيْءٍ ۝ وَهُوَ عَلَىٰ كُلِّ شَيْءٍ وَكِيلٌ

39:62 Allah is the Creator of all things and He is the Guardian of all things.

وَلِلَّهِ الْمُشْرِقُ وَالْمَغْرِبُ ۝ فَإِنَّمَا تُولُوا فَيْقَمَ وَجْهُ اللَّهِ ۝ إِنَّ اللَّهَ وَاسِعٌ عَلَيْهِ

2:115 To Allah belong the east and the west. Wherever you turn, you will find the face of Allah. Indeed Allah is All-Pervading, All-Knowing.

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُومُ ۝ لَا تَأْخُذُهُ سَيْنَةٌ وَلَا نُوْمٌ ۝ لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ ۝ مَنْ ذَا الَّذِي يَسْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ ۝ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفُهُمْ ۝ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلَّا بِمَا شَاءَ ۝ وَسَعْ كُرْسِيُّهُ السَّمَاوَاتِ وَالْأَرْضَ ۝ وَلَا يَغُوْدُهُ حَفْظُهُمَا ۝ وَهُوَ الْعَلِيُّ الْعَظِيمُ

2:255 Allah. There is no God but He, the Living, All-Governing. Neither drowsiness nor slumber seizes Him. To Him belong all things in the skies and the earth. Who can intercede with Him without His permission? He knows what is before them and what is behind them. They will not get anything from His knowledge except what He wills. His Throne extends over the skies and the earth and their protection is no burden to Him. And He is the Most High, the Supreme.

He is the Strong (Q. 42:19). He is the true King (Q. 23:116). He is the Evident (Q. 57:3). He is the Immanent (Q. 57:3).

اللَّهُ لَطِيفٌ يَعْبَادُهُ يَرْبُقُ مَنْ يَشَاءُ ۝ وَهُوَ الْقَوِيُّ الْعَزِيزُ

42:19 Allah is gracious to His servants. He gives sustenance to whom He pleases. And He is the Strong, the Mighty.

فَتَعَالَى اللَّهُ الْمَلِكُ الْحَقُّ ۝ لَا إِلَهَ إِلَّا هُوَ رَبُّ الْعَرْشِ الْكَبِيرِ

23:116 Therefore exalted is Allah, the true King. There is no God but He, the Lord of the Throne of Honour!

هُوَ الْأَوَّلُ وَالآخِرُ وَالظَّاهِرُ وَالبَاطِنُ ۝ وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

57:3 He is the First, the Last, the Evident and the Immanent. And He has full knowledge of everything.

He is the Beneficent (Q. 59:22). He is the knower of the hidden and the manifest (Q. 59:22). He is the Merciful (Q. 2:163 quoted above). He is the Wise (Q. 3:6). He is the Omnipotent (Q. 3:6). He is the Bountiful (Q. 40:3). He is worthy of all praise (Q. 2:267).

هُوَ اللَّهُ الَّذِي لَا إِلَهٌ إِلَّا هُوَ ۖ عَالِمُ الْغَيْبِ وَالشَّهادَةِ ۖ هُوَ الرَّحْمَنُ الرَّحِيمُ

59:22 He is Allah. There is no God but He, knower of the hidden (i.e., intangible to man) and the manifest. He is the Beneficent, the Merciful.

هُوَ الَّذِي يُصَوِّرُكُمْ فِي الْأَرْضِ كَيْفَ يَشَاءُ ۚ لَا إِلَهٌ إِلَّا هُوَ الْعَزِيزُ الْحَكِيمُ

3:6 It is He who shapes you in the wombs as He likes. There is no God but He – the Mighty, the Wise.

عَافِرُ الذَّنْبِ وَقَابِلُ التَّوْبِ شَدِيدُ الْعِقَابِ ذِي الطُّولِ ۖ لَا إِلَهٌ إِلَّا هُوَ ۖ إِلَيْهِ الْمَصِيرُ

40:3 Forgiver of sin and Acceptor of repentance, Strict in Punishment, the Bountiful. There is no God but He. To Him is the destination.

يَا أَيُّهَا الَّذِينَ آمَنُوا أَنْفَقُوا مِنْ طَبَابِتِ مَا كَسَبْتُمْ وَمَا أَخْرَجْنَا لَكُمْ مِنَ الْأَرْضِ ۖ وَلَا
تَيَمَّمُوا الْحُجَّىٰ مِنْهُ تُنْفِقُونَ وَلَسْتُمْ بِآخِذِيهِ إِلَّا أَنْ تُعْمِلُوهُ فِيهِ ۚ وَاعْلَمُوا أَنَّ اللَّهَ غَنِيٌّ

حَمْدُ

2:267 O believers! Spend the good things from what you have earned and from what We have produced for you from the earth (i.e., crop produce). Do not set aside the bad things for spending (in charity) which you yourself will not receive except with closed eyes. And know that Allah is free of all wants and worthy of all praise.

He is the Sovereign (Q. 59:23). He is the Holy One (Q. 59:23). He is the Irresistible (Q. 59:23). He is the Supreme (Q.

59:23). He is the Source of Peace (Q. 59:23). He is the Guardian of Faith (Q. 59:23). He is the Preserver of Safety (Q. 59:23). He is the Light of the skies and the earth (Q. 24:35).

هُوَ اللَّهُ الَّذِي لَا إِلَهٌ إِلَّا هُوَ الْمُكْرِنُ الْعَدُوُسُ السَّلَامُ الْمُؤْمِنُ الْمُهَيْمِنُ الْعَزِيزُ الْجَبَّارُ
الْمُتَكَبِّرُ ۝ سُبْحَانَ اللَّهِ عَمَّا يُشْرِكُونَ

59:23 He is Allah. There is no God but He, the Sovereign, the Holy One, the Source of Peace (and Perfection), the Guardian of Faith, the Preserver of Safety, the Exalted in Might, the Irresistible, the Supreme. Glory to Allah. (High is He) above the partners they attribute to Him.

اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ ۝ مَثَلُ نُورِهِ كَمِشْكَاهٍ فِيهَا مَصْبَاحٌ ۝ الْمِصْبَاحُ فِي زُجَاجَةٍ
۝ الزُّجَاجَةُ كَأَنَّهَا كَوَافِرُ دُرَّيٍّ يُوقَدُ مِنْ شَحْرَةٍ مُبَارَكَةٍ رَبِّتُونَةٍ لَا شَرِقَةَ وَلَا غَربَةَ يَكَادُ
رَبِّتُهَا يُضِيءُ وَلَوْلَا كُمْ تَمَسَّسَهُ نَارٌ ۝ نُورٌ عَلَى نُورٍ ۝ يَهْدِي اللَّهُ لِنُورِهِ مَنْ يَشَاءُ ۝
وَيَضْرِبُ اللَّهُ الْأَمْثَالَ لِلنَّاسِ ۝ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ

24:35 Allah is the Light of the skies and the earth. The similitude of His Light is a niche with lamp. The lamp is enclosed in glass. The glass is like a glittering star; (the lamp) is lit from a blessed tree, an Olive tree of neither the east nor the west, whose oil is luminous even without being lit. Light upon Light! Allah guides to His Light whom He pleases. And Allah explains (with the help of) analogies for the mankind. And Allah knows all things.

He is the Lord of the Throne of Honour (Q. 23:116 quoted above). He is the Lord of the Throne of Glory (Q. 85:15). He is the Lord of the Supreme Throne (Q. 9:129). His Throne extends over the skies and the earth (Q. 2:255 quoted above). He is God in the skies and in earth (Q. 6:3). He is the Lord of the skies and the earth (Q. 13:16). He is the Lord of *Shi'ra* (Q. 53:49).

دُوْلُ الْمَرْشِ الْمَجِيدُ

85:15 Lord of the Throne of Glory.

فِإِنْ تَوَلُّوْ فَقُلْنَ حَسْبِيَ اللَّهُ لَا إِلَهَ إِلَّا هُوَ عَلَيْهِ تَوَكِّلْتُ وَهُوَ رَبُّ الْعَرْشِ الْعَظِيمِ

9:129 But if they turn away, (O Muhammad) say: Allah is sufficient for me. There is no God but He. On Him do I place my trust and He is the Lord of the Supreme Throne.”

وَهُوَ اللَّهُ فِي السَّمَاوَاتِ وَفِي الْأَرْضِ يَعْلَمُ سِرْكُونَ وَجَهْرَكُونَ وَيَعْلَمُ مَا تَكْسِبُونَ

6:3 And He is Allah (the God) in the skies and in earth. He knows your secrets and what you reveal and He knows what you earn (by your deeds).

فُلَّ مَنْ رَبُّ السَّمَاوَاتِ وَالْأَرْضِ قُلِ اللَّهُ قُلْنَ أَفَاخْتَدُمُ مَنْ دُونِهِ أُولَيَاءُ لَا يَمْلِكُونَ لِأَنْفُسِهِمْ نَفْعًا وَلَا ضَرًّا قُلْنَ هَلْ يَسْتَوِي الْأَعْمَى وَالْبَصِيرُ أَمْ هَلْ تَسْتَوِي الظُّلُمَاتُ وَالنُّورُ أَمْ جَعَلُوا لِلَّهِ شُرَكَاءَ خَلَقُوا كَخَلْقِي فَتَسْتَابَةَ الْحَقِّ عَلَيْهِمْ قُلِ اللَّهُ خَالِقُ كُلِّ شَيْءٍ وَهُوَ الْوَاحِدُ الْغَهَّارُ

13:16 (O Prophet Muhammad) ask: Who is the Lord of the skies and the earth? Say: (It is) Allah. Ask: Do you then take, besides Him, protectors that have no power to do good or harm to themselves? Ask: Is the blind equal to the one with eyesight? Or is the darkness equal to light? Or do they invent for Allah partners who created (things) as He created and then they found the creation indistinguishable (i.e., similar to what Allah created)? Say: Allah is the Creator of all things. He is the One, the Supreme and Irresistible.

وَأَنَّهُ هُوَ رَبُّ الشَّعْرَاءِ

53:49 That He is the Lord of Sirius (the mighty star).

(Note: *Shi'ra* is the Sirius star, which was worshipped by some early Arabs. It is the brightest star in the Earth's sky because of its luminosity and proximity to Earth)

He has ordained on Himself the mercy (Q. 6:12). He is the Most-Forbearing (Q. 2:263 quoted above). Every creature in the skies and earth asks Him for its sustenance (Q. 55:29). He feeds (all) and He is not fed (Q. 6:14). On Allah depends everything (Q. 112:2 quoted above).

فُلْ لِمَنْ مَا فِي السَّمَاوَاتِ وَالْأَرْضِ ۖ فُلْ لِلَّهِ ۖ كَتَبَ عَلَىٰ نَفْسِهِ الرَّحْمَةَ ۖ لَيَحْمِّنُكُمْ
إِلَى يَوْمِ الْقِيَامَةِ لَا رَبِّ فِيهِ ۖ الَّذِينَ حَسِرُوا أَنفُسَهُمْ فَهُمْ لَا يُؤْمِنُونَ

6:12 Ask: To whom belong all that is in the skies and the earth? Say: To Allah. He has ordained on Himself the mercy. There is no doubt that He will gather you all for the Day of Judgement. Those who have lost their souls, they will not believe.

يَسْأَلُهُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ ۖ كُلُّ يَوْمٍ هُوَ فِي شَأْنٍ

55:29 Every creature in the skies and earth asks Him (for its sustenance). Every day He is in some matter.

فُلْ أَغَيْرُ اللَّهِ أَنْتَخُدُ وَلَيْا فَاطِرُ السَّمَاوَاتِ وَالْأَرْضِ وَهُوَ يُطْعِمُ وَلَا يُطْعَمُ ۖ فُلْ إِلَيْ امْرُكُ
أَنْ أَكُونَ أَوَّلَ مَنْ أَسْلَمَ ۖ وَلَا تَكُونَنَّ مِنَ الْمُشْرِكِينَ

6:14 Ask: Should I take for my protector any other than Allah, the creator of the skies and the earth? He feeds (all) and He is not fed. Say: I am indeed commanded to be the first of those who submit to Allah (in Islam) and I should not be among those who join gods with Allah.

Allah's Word is truth (Q. 4:87). Allah's promise is truth (Q. 4:122). Whose Word can be truer than Allah's? (Q. 4:122). Allah never breaks His promise (Q. 30:6). Allah's Word is fulfilled in truth and justice (Q. 6:115). None can change His Words (Q. 6:115).

اللَّهُ لَا إِلَهَ إِلَّا هُوَ ۖ لَيَحْمِّنُكُمْ إِلَى يَوْمِ الْقِيَامَةِ لَا رَبِّ فِيهِ ۖ وَمَنْ أَصْدَقُ مِنَ اللَّهِ

حَدِيثًا

4:87 Allah. There is no God but He. Indeed He will gather you together on the Day of Judgment; there is no doubt about that. And whose word can be truer than Allah's?

وَالَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ سَنُنْدِخُهُمْ جَنَّاتٍ بَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ حَالِدِينَ فِيهَا
أَبَدًا ۖ وَعَدَ اللَّهُ حَقًّا ۝ وَمَنْ أَصْدَقُ مِنَ اللَّهِ قِيَادًا

4:122 But those who believe and do good deeds, we shall admit them to Gardens with rivers flowing beneath to dwell therein forever. Allah's promise is truth. And whose word can be truer than Allah's?

وَعَدَ اللَّهُ ۖ لَا يُخْلِفُ اللَّهُ وَعْدَهُ وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ

30:6 (It is) the promise of Allah. Allah never breaks His promise but most people do not know (that).

وَمَنْتَ كَلِمَتُ رَبِّكَ صِدْقًا وَعَدْلًا ۝ لَا مُبَدِّلٌ لِكَلِمَاتِهِ ۝ وَهُوَ السَّمِيعُ الْعَلِيمُ

6:115 The Word of your Lord is fulfilled in truth and in justice. None can change His Words. He hears and knows everything.

Allah bears witness that there is no God but He, and so do the angels and the erudite (Q. 3:18). Allah is firm on justice (Q. 3:18). Allah decrees. There is none to delay His verdict (Q. 13:41). Allah is hard plotter (Q. 13:13).

شَهَدَ اللَّهُ أَنَّهُ لَا إِلَهَ إِلَّا هُوَ وَالْمَلَائِكَةُ وَأُولُو الْعِلْمُ قَائِمًا بِالْقِسْطِ ۝ لَا إِلَهَ إِلَّا هُوَ الْعَزِيزُ
الْحَكِيمُ

3:18 (As the One) standing firm on justice, Allah bears witness that there is no God but He and (so do) the angels and the erudite. There is no God but He – the Mighty, the Wise.

أَوْمَّ يَرَوُا أَنَا نَأْتِي الْأَرْضَ نَنْصُبُهَا مِنْ أَطْرَافِهَا ۝ وَاللَّهُ يَحْكُمُ لَا مُعَقَّبٌ لِحُكْمِهِ ۝ وَهُوَ
سَرِيعُ الْحِسَابِ

13:41 Do they not see that We certainly shrink the earth from its boundaries? Allah decrees. There is none to delay His verdict. And He is swift in calling to account.

وَيُسَبِّحُ الرَّعْدُ بِحَمْدِهِ وَالْمَلَائِكَةُ مِنْ خِيفَتِهِ وَيُرْسَلُ الصَّوَاعِقُ فَيُصِيبُ بِكَا مَنْ يَشَاءُ وَمُنْ يُجَادِلُونَ فِي اللَّهِ وَهُوَ شَدِيدُ الْمِحَاكَالِ

13:13 Thunder extols His praises and so do the angels with fear of Him. He sends thunderbolts and He strikes with it whomsoever He intends. Yet they (i.e., nonbelievers) dispute about Allah. And He is a hard plotter.

Allah is Forgiver of sin (5:98; 15:49-50; 40:3 quoted above). Allah is Acceptor of repentance (40:3 quoted above). Allah is strict in punishment (5:98; 8:25; 15:49-50). Allah's punishment is very severe (Q. 85:12).

أَعْلَمُوا أَنَّ اللَّهَ شَدِيدُ الْعِقَابِ وَأَنَّ اللَّهَ عَفُورٌ رَّحِيمٌ

5:98 Know that Allah is indeed strict in punishment and Allah is certainly Oft-Forgiving, Most Merciful.

وَأَتَّقُوا فِتْنَةً لَا تُصِيبَنَّ الَّذِينَ ظَلَمُوا مِنْكُمْ خَاصَّةً ۝ وَاعْلَمُوا أَنَّ اللَّهَ شَدِيدُ الْعِقَابِ

8:25 And fear a trial, which will affect not those who do wrong among you alone and know that Allah is strict in punishment.

إِنَّ بَطْشَ رَبِّكَ لَشَدِيدٌ

85:12 Truly the grip (i.e., punishment) of your Lord is very strong.

نَّبِيٌّ عَبَادِي أَنِّي أَنَا الْغَنُورُ الرَّحِيمُ وَأَنَّ عَذَابِي هُوَ الْعَذَابُ الْأَلِيمُ

15:49-50 Inform My servants that I am indeed the Most Forgiving, Most Merciful; and certainly My punishment is the most painful punishment.

قُلْ يَا عِبَادِيَ الَّذِينَ أَسْرَرُوْا عَلَىٰ أَنفُسِهِمْ لَا تَقْنَطُوا مِنْ رَحْمَةِ اللَّهِ إِنَّ اللَّهَ يَعْفُرُ
الذُّنُوبَ حَمِيمًا إِنَّهُ هُوَ الْغَفُورُ الرَّحِيمُ

39:53 Say: O My servants who have transgressed against themselves! Do not despair about the mercy of Allah, for Allah forgives all sins. Indeed He is Oft-Forgiving, Most Merciful.

It may be noted that the statement “Allah forgives all sins” given in verse 39:53 refers to all sins except *shirk* (i.e., joining partners with Him) as indicated in verses 4:48 and 4:116.

إِنَّ اللَّهَ لَا يَغْفِرُ أَنْ يُشْرِكَ بِهِ وَيَغْفِرُ مَا دُونَ ذُلِّكَ لِمَنْ يَشَاءُ وَمَنْ يُشْرِكُ بِاللَّهِ فَقَدْ
أَفْتَرَى إِثْمًا عَظِيمًا

4:48 Verily Allah will not forgive joining partners with Him, but He forgives anything else to whom He pleases. Whoever ascribes partners to Allah, has indeed fabricated a dreadful sin.

إِنَّ اللَّهَ لَا يَغْفِرُ أَنْ يُشْرِكَ بِهِ وَيَغْفِرُ مَا دُونَ ذُلِّكَ لِمَنْ يَشَاءُ وَمَنْ يُشْرِكُ بِاللَّهِ فَقَدْ
ضَلَّ ضَلَالًا بَعِيدًا

4:116 Allah does not forgive (the sin of) joining other gods with Him. But He forgives (all sins) besides that to whom He pleases. One who joins other gods with Allah has strayed far away.

After creating the universe, Allah is seated on the Throne (of authority) regulating and governing all things (Q. 10:3). He governs everything (Q. 3:2). The sun, the moon and the stars (all) obey His commands (Q. 7:54). Allah directs what He intends (Q. 5:1). He does what He intends (Q. 85:15-16). Protection of the universe is no burden to Him (Q. 2:255 quoted above). Neither drowsiness nor slumber seizes Him (Q. 2:255 quoted above). He is engaged in governance all days (Q. 55:29 quoted above).

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ
يُدَبِّرُ الْأَمْرَ مَا مِنْ شَفَاعَةٍ إِلَّا مِنْ بَعْدِ إِذْنِهِ ۚ ذَلِكُمُ اللَّهُ رَبُّكُمْ فَاعْبُدُوهُ ۖ أَفَلَا
تَذَكَّرُونَ

10:3 Verily your Lord is Allah who created the skies and the earth in six days and is firmly established on the Throne (of authority) regulating and governing all things. No intercessor (can plead with Him) without His permission. This is Allah, your Lord. Therefore you serve (or worship) Him. Will you not then think over?

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ

3:2 Allah. There is no God but He – the Living, All-Governing.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ يُعْشِي
اللَّيْلَ النَّهَارَ يَطْلُبُهُ حَنِيفًا وَالشَّمْسَ وَالْقَمَرَ وَالنُّجُومَ مُسْتَخْرَجَاتٍ بِأَمْرِهِ ۚ أَلَا لَهُ الْحَلْقُ
وَالْأَمْرُ ۖ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ

7:54 Your Lord is Allah who created the skies and the earth in six days, and then was seated on the Throne (of authority). He draws the night as veil over the day each seeking the other in rapid succession. He created the sun, the moon and the stars (all) obeying His command. Are not the creation and command His? Blessed be Allah, Lord of the worlds!

يَا أَيُّهَا الَّذِينَ آمَنُوا أَوْفُوا بِالْعَهْدِ ۚ أَحِلَّتْ لَكُمْ هَيْمَةُ الْأَنْعَامِ إِلَّا مَا يُتَّسَّى عَلَيْكُمْ عَيْرَ
خُلُّي الصَّيْدِ وَأَنْتُمْ حُرُمٌ ۖ إِنَّ اللَّهَ يَحْكُمُ مَا يُرِيدُ

5:1 O believers! You fulfill agreements. Lawful to you (for food) are animals with the exceptions mentioned to you. But hunting is forbidden while you are in sacred pilgrimage (*hajj* or *umrah*). Verily Allah directs what He intends.

دُوْلُ الْعَرْشِ الْمَحِيدُ فَعَالٌ لِمَا يُرِيدُ

85:15-16 Lord of the Throne of Glory, One who does what He intends.

He gives life and also takes it away (Q. 9:116). He gives life to the dead (Q. 22:6 quoted above). All affairs go back to Allah (for decision) (Q. 3:109). With Allah is the decision (Q. 28:70). Enough is Allah to shoulder every burden (Q. 4:132). The power of judgement rests with Him (Q. 6:62). He is swift in taking account (Q. 6:62).

إِنَّ اللَّهَ لَهُ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ ۖ يُحْيِي وَيُمِيتُ ۖ وَمَا لَكُمْ مِنْ دُونِ اللَّهِ مِنْ وَلِيٍّ
وَلَا نَصِيرٌ

9:116 Indeed to Allah belongs the dominion of the skies and the earth. He gives life and He takes it. You have no protector or helper besides Allah.

وَلِلَّهِ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ ۚ وَإِلَى اللَّهِ تُرْجَعُ الْأُمُورُ

3:109 To Allah belong all that is in the skies and earth, and all affairs go back to Allah (for decision).

وَهُنَّ الَّذِينَ لَا إِلَهَ إِلَّا هُوَ ۖ لَهُ الْحَمْدُ فِي الْأُولَىٰ وَالآخِرَةِ ۖ وَلَهُ الْحُكْمُ وَإِلَيْهِ تُرْجَعُونَ

28:70 And He is Allah. There is no God but He. To Him is the praise in the first (i.e., this world) and the last (i.e., Hereafter). With Him is the decision and to Him you (all) will be returned.

وَلِلَّهِ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ ۚ وَكُفَّا بِاللَّهِ وَكِيلًا

4:132 To Allah belong all things in the skies and earth, and enough is Allah to shoulder all burden.

ثُمَّ رُدُوا إِلَى اللَّهِ مَوْلَاهُمُ الْحَقُّ ۗ أَلَا لَهُ الْحُكْمُ وَهُوَ أَسْعَى الْحَاسِبِينَ

6:62 Then they were returned to Allah, their real protector. The power of judgement rests with Him. And He is the swiftest in taking account.

To Allah belong the East and the West (Q. 2:115 quoted above). Allah is the Lord of the East and the West (Q. 73:9). He is the Lord of the two Easts and the Lord of the two Wests (Q. 37:4-5; 55:17). Allah is the Lord of the skies and the earth and all in between (Q. 37:4-5).

رَبُّ الْمَشْرِقِ وَالْمَغْرِبِ لَا إِلَهَ إِلَّا هُوَ فَاتَّخِذْهُ وَكِيلًا

73:9 (He is) the Lord of the East and the West. There is no God but He. Therefore take Him as your guardian.

إِنَّ إِلَهَكُمْ لَوَاحِدٌ رَبُّ السَّمَاوَاتِ وَالْأَرْضِ وَمَا بَيْنَهُمَا وَرَبُّ الْمَشَارِقِ

37:4-5 Verily, your God is one, Lord of the skies and the earth and all between them, and Lord of the Easts.

رَبُّ الْمَشْرِقَيْنِ وَرَبُّ الْمَغْرِبَيْنِ

55:17 (He is) Lord of the two Easts and Lord of the two Wests.

To Him belong all things in the skies and the earth (Q. 2:255 quoted above). To Him belong what is in the skies and in the earth, and all between them, and all that is beneath the soil (Q. 20:6). To Him belong all that dwell (or lurks) in the night and the day (Q. 6:13). To Him belongs the dominion of the skies and the earth (Q. 3:189). To Him belongs the mystery of the skies and the earth (Q. 16:77). To Him belong the armies of the skies and the earth (Q. 48:7). To Him belongs the loftiest description in the skies and in the earth (Q. 30:27). To Him belong this world and the Hereafter (Q. 92:13).

لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ وَمَا بَيْنَهُمَا وَمَا تَحْتَ الشَّرَى

20:6 To Him belong what is in the skies and in the earth, and all between them, and all that is beneath the soil.

وَلَهُ مَا سَكَنَ فِي الظَّلَلِ وَالنَّهَارِ ۚ وَهُوَ السَّمِيعُ الْعَلِيمُ

6:13 To Him belong all that dwell (or lurks) in the night and the day. And He hears and knows all things.

وَلِلَّهِ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ ۖ وَاللَّهُ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

3:189 To Allah belongs the dominion of the skies and the earth. And Allah has power over all things.

وَلِلَّهِ غَيْبُ السَّمَاوَاتِ وَالْأَرْضِ ۚ وَمَا أَمْرُ السَّاعَةِ إِلَّا كَلْمَحُ الْبَصَرِ أَوْ هُوَ أَقْرَبُ ۖ إِنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

16:77 To Allah belongs the mystery of the skies and the earth. And the (Final) Hour (Day of Judgment) is like the twinkling of an eye or even quicker. Verily, Allah has power over all things.

وَلِلَّهِ خُنُودُ السَّمَاوَاتِ وَالْأَرْضِ ۚ وَكَانَ اللَّهُ عَزِيزًا حَكِيمًا

48:7 And to Allah belong the armies of the skies and the earth. And Allah is Mighty, Wise.

وَهُوَ الَّذِي يَبْدِأُ الْخُلُقَ ثُمَّ يُعِيدُهُ وَهُوَ أَهْوَنُ عَلَيْهِ ۖ وَلَهُ الْمَلْكُ الْأَعْلَى فِي السَّمَاوَاتِ
وَالْأَرْضِ ۖ وَهُوَ الْعَزِيزُ الْحَكِيمُ

30:27 It is He who begins creation, then repeats it; and for Him it is most easy. To Him belongs the loftiest description in the skies and in the earth. And He is Mighty, Wise.

وَإِنَّ لَكَ لِلآتِرَةِ وَالْأُولَى

92:13 And truly, to Us (belong) the Hereafter and this world.

Allah is the source of knowledge. None will get anything from His knowledge except what He wills (Q. 2:255 quoted above). He is the knower of subtleties (Q. 6:103). He is well acquainted with all things (Q. 6:103). He knows the finest details (Q. 67:14 quoted above). Allah never errs or forgets (Q. 20:52). Allah knows deception by human eyes and what the human memories conceal (Q. 40:19). Nothing in the earth or in

the skies is hidden from Allah (Q. 3:5). Allah hears and sees (all things) (Q. 4:134).

لَا تُدْرِكُهُ الْأَبْصَارُ وَهُوَ يُدْرِكُ الْأَبْصَارَ ۖ وَهُوَ الْأَطِيفُ الْخَيْرُ

6:103 The eyes cannot find Him but He finds all eyes and He is the knower of subtleties, well acquainted with all things.

قَالَ عِلْمُهَا عِنْدَ رَبِّيٍّ فِي كِتَابٍ ۖ لَا يَضِلُّ رَبِّيٌّ وَلَا يَنْسَىٰ

20:52 Moses replied: That knowledge is with my Lord in a Record. My Lord never errs or forgets.

يَعْلَمُ خَاتَمَةَ الْأَعْيُنِ وَمَا تُحْفِي الصُّدُورُ

40:19 He (i.e., Allah) knows deception by eyes and what the (human) memories conceal.

إِنَّ اللَّهَ لَا يَحْفَى عَلَيْهِ شَيْءٌ فِي الْأَرْضِ وَلَا فِي السَّمَاءِ

3:5 Verily, nothing in the earth or in the skies is hidden from Allah.

مَنْ كَانَ يُرِيدُ ثَوَابَ الدُّنْيَا فَعِنْدَ اللَّهِ ثَوَابُ الدُّنْيَا وَالْآخِرَةِ ۚ وَكَانَ اللَّهُ سَمِيعًا بَصِيرًا

4:134 Whoever desires the reward of this world, (let him know that) with Allah is the reward of this world and the Hereafter. Allah hears and sees (all things).

His knowledge encompasses all things (Q. 20:98 quoted above). Allah knows what has gone before and what will come in the future (Q. 2:255 quoted above). Allah alone knows the hidden and the manifest (Q. 59:22 quoted above). Allah alone has the knowledge of the (Final) Hour (Q. 31:34). With Him are the keys of the skies and the earth (Q. 42:12). With Him are the keys of the unseen, which none but He knows (Q. 6:59). He knows whatever there is in the land and in the sea (Q. 6:59). Not a leaf falls without His knowledge (Q. 6:59). The eyes cannot find Him but He finds all eyes (Q. 6:103 quoted above).

إِنَّ اللَّهَ عِنْدَهُ عِلْمُ السَّاعَةِ وَيُنَزِّلُ الْعِيْثَ وَيَعْلَمُ مَا فِي الْأَرْحَامِ ۝ وَمَا تَدْرِي نَفْسٌ مَّا ذَرَ
تَكْسِبُ غَدَّاً ۝ وَمَا تَدْرِي نَفْسٌ بِأَيِّ أَرْضٍ تَمُوتُ ۝ إِنَّ اللَّهَ عَلِيمٌ حَسِيرٌ

31:34 Verily the knowledge of the (Final) Hour is with Allah (alone). He sends down the rain and He knows what is in the wombs. Nobody knows what he will earn tomorrow. And nobody knows in which land (i.e., place or country) he will die. Verily with Allah is full knowledge and He is acquainted (with all things).

لَهُ مَقَالِيدُ السَّمَاوَاتِ وَالْأَرْضِ ۝ يَبْسُطُ الرِّزْقَ لِمَنْ يَشَاءُ وَيَقْدِرُ ۝ إِنَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ

42:12 With Him are the keys of the skies and the earth. He enhances or restricts the sustenance to whom He pleases. Verily He has full knowledge of everything.

وَعِنْدَهُ مَقَاتِعُ الْعَيْبِ لَا يَعْلَمُهَا إِلَّا هُوَ ۝ وَيَعْلَمُ مَا فِي الْبَرِّ وَالْبَحْرِ ۝ وَمَا تَسْقُطُ مِنْ
وَرَقَةٍ إِلَّا يَعْلَمُهَا وَلَا حَيَّةٌ فِي ظُلُمَاتِ الْأَرْضِ وَلَا رَطْبٌ وَلَا يَابِسٌ إِلَّا فِي كِتَابٍ مُّبِينٍ

6:59 With Him are the keys of the unseen, which none but He knows. He knows whatever there is in the land and in the sea. Not a leaf falls without His knowledge. There is not a grain in the darkness (i.e., depths) of the earth or anything green (i.e., fresh) or dry without being (inscribed) in a clear Record.

Praise be to Allah, the Lord of the worlds. Allah is Master of the Day of Judgement (Q. 1:2-4). All praises are to Allah (Q. 40:65). Thunder extols His praises and so do the angels with fear of Him (Q. 13:13 quoted above). Whoever there is in the skies and in the earth prostrates to Allah (Q. 13:15). To Allah is the praise in this world and in the Hereafter (Q. 28:70 quoted above).

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ الرَّحْمَنِ الرَّحِيمِ مَالِكِ يَوْمِ الدِّينِ

1:2-4 Praise be to Allah, the Lord of the worlds. The Beneficent, the Merciful. Master of the Day of Judgement

هُوَ الْحَيُّ لَا إِلَهٌ إِلَّا هُوَ فَادْعُوهُ مُخْلِصِينَ لِهِ الدِّينُ ۖ الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ

40:65 He is the living (One). There is no God but He. So you call upon Him with sincere submission to Him alone. All praises are to Allah, Lord of the worlds.

وَلِلَّهِ يَسْجُدُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ طَوْعًا وَكَذَّابًا وَظَلَّاهُمْ بِالْعَدُوِّ وَالْأَصَابِلِ

13:15 To Allah prostrates whoever there is in the skies and in the earth willingly and compulsorily and (so do) their shadows in the mornings and evenings.

He is the First (Q. 57:3 quoted above). He is the Last (Q. 57:3 quoted above). To Allah belong the end and the beginning (Q. 53:25). He is All-Pervading (Q. 2:115 quoted above). Wherever you turn, you will find the face of Allah (Q. 2:115 quoted above). Everyone on the earth will perish except the Face of your Lord (Q. 55:26-27). He is the inheritor (when everything passes away) (Q. 15:23). He is the Living (Q. 3:2 quoted above). He is the (Ever) Living One who does not die (Q. 25:58).

فِيلَلَهِ الْآخِرَةُ وَالْأُولَى

53:25 It is to Allah the end and the beginning belong.

كُلُّ مَنْ عَلَيْهَا قَانِ وَبِيَقْنَى وَجْهُ رَبِّكَ دُوَ الجَلَالِ وَالْإِكْرَامِ

55:26-27 Everyone on it (i.e., the earth) will perish. And the Face of your Lord full of Majesty and Mercy (alone) will remain.

وَإِنَّا لَنَحْنُ نُحْيِي وَنُمْبِتُ وَنَحْنُ الْوَارِثُونَ

15:23 And verily, it is We who give life and who give death. And We are the inheritors (after everything else passes away).

وَنَوَّكُنَ عَلَى الْحَيِّ الَّذِي لَا يَمُوتُ وَسَيَّخُ بِخَنْدِيَ ۖ وَكَفَى بِهِ بِدُلُوبِ عِبَادِهِ خَيْرًا

25:58 And put your trust in the (Ever) Living One who does not die and you chant His praises. Sufficient is He as the knower of His servants' sins.

If you count the blessings of Allah, never will you be able to enumerate them (14:34). Blessed is the name of your Lord, full of Majesty, Bounty and Honour (Q. 55:78). Call Him Allah or call Him *Rahman* (the Benevolent). By whatever name you call Him, the most beautiful names belong to Him (Q. 17:110).

وَآتَاكُم مِّنْ كُلِّ مَا سَأَلْتُمُوهُ ۝ وَإِن تَعْدُوا بِعْمَتَ اللَّهِ لَا تُحْصُوهَا ۝ إِنَّ الْإِنْسَانَ لَظَلُومٌ
كَفَّارٌ

14:34 And He gave you from all that you asked for. And if you count the blessings of Allah, never will you be able to number them. Verily, man is a big offender and extremely ungrateful.

تَبَارَكَ اسْمُ رَبِّكَ ذِي الْجَلَالِ وَالْإِكْرَامِ

55:78 Blessed is the name of your Lord, full of Majesty, Bounty and Honour.

قُلْ اذْعُوا اللَّهَ أَوْ اذْعُوا الرَّحْمَنَ ۝ أَئِمَّا مَا تَدْعُوا فَلَهُ الْأَسْمَاءُ الْخَيْرَى ۝ وَلَا يَجْهَرُ بِصَلَاتِكَ
وَلَا تُخَافِتُ بِهَا وَانْتَعِ بَيْنَ ذَلِكَ سَبِيلًا

17:110 Say: Call Him Allah (i.e., the God) or call Him *Rahman* (i.e., the Benevolent). By whatever name you call Him, the most beautiful names belong to Him. Do not say your Prayer loud or say it in a low voice but follow a middle course.

God is Absolute Truth

Nature is the showcase of Allah's signs sufficient to convince man of His power and wisdom. The Quran urges us to turn to nature to find proofs of every hue. Consider the following verses.

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ وَالْفُلْكِ الَّتِي يَجْرِي فِي الْبَحْرِ إِمَّا يَنْفَعُ النَّاسَ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ مَاءٍ فَأَحْيَا بِهِ الْأَرْضَ بَعْدَ مَوْتَهَا وَبَثَّ فِيهَا مِنْ كُلِّ دَابَّةٍ وَتَصْرِيفِ الرِّيَاحِ وَالسَّحَابِ الْمُسَخَّرِ بَيْنَ السَّمَاءِ وَالْأَرْضِ لَآيَاتٍ لِقَوْمٍ يَعْقُلُونَ

2:164 In the creation of the skies and the earth, the alternation of the night and the day, the ship that sails through the ocean for the benefit of the mankind, the water which Allah sends down from the sky, then He gives life with it to the earth after its death and disperses in it all kinds of organisms, the controlling of the winds, and the clouds suspended between the sky and the earth, are indeed signs for people who think.

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لَآيَاتٍ لِأُولَئِكَ الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَى جُنُوبِهِمْ وَيَنْتَهُونَ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بِاطِّلا سُبْحَانَكَ فَقَنَا عَذَابَ النَّارِ

3:190-191 In the creation of the skies and the earth, and in the alternation of night and day, there are indeed signs for the intelligent ones who remember Allah standing, sitting, and lying down on their sides, and ponder over the creation of the skies and the earth (with the thought): “Our Lord! You have not created this for nothing! Glory to You! Save us then from the penalty of the Fire.”

وَهُوَ الَّذِي جَعَلَ لَكُمُ النُّجُومَ لِتَهْتَدُوا بِهَا فِي ظُلُمَاتِ الْبَرِّ وَالْبَحْرِ ۖ قَدْ فَصَّلْنَا الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ

6:97 It is He who made the stars for you to serve as guidance in the darkness of the land and the sea. We explain Our signs for people who know.

وَهُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَنَا بِهِ نَبَاتٌ كُلُّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ حَضِيرًا لُّخْبِرُ مِنْهُ حَبَّا مُتَرَابًا وَمِنَ النَّحْلِ مِنْ طَلْعِهَا قِنْوَانٌ دَانِيَةٌ وَحَتَّانٌ مِنْ أَغْنَابِ وَالرَّيْثُونَ وَالرُّثَانَ

مُشْتَهِيَّا وَغَيْرُ مُشْتَهَا يٰ أَنْطُرُوا إِلَى ثَمَرٍ إِذَا أَمْرَ وَيَنْعِهِ ۝ إِنَّ فِي ذَلِكُمْ لَآيَاتٍ لِّقَوْمٍ يُؤْمِنُونَ

6:99 It is He who sends down rain from the skies. With it We germinate all kinds of (seeds); then We produce from that green (crops) from which We produce closely packed grains; and from the date palm – from its bunches – (We produce) clusters of dates hanging down; and (We produce) gardens of grapes, olives and pomegranates of similar and dissimilar (varieties). Look at its fruit when it begins to form and when it ripens. Behold! In those things there are signs for the believing people.

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدْرَةً مَنَازِلَ لِتَعْلَمُوا عَدَدَ السَّنَينَ وَالْحِسَابَ ۝ مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحَقِّ ۝ يُفَصِّلُ الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ

10:5 It is He who made the sun to be (a source of) light and the moon a shining object and fixed for it (i.e., moon) residences (i.e., orbits) to enable you to know the number of years and for computation (of time). Allah had not created it except with truth. He (Allah) explains the signs for people who understand.

اللَّهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِعَيْرِ عَمَدٍ تَرَوْنَهَا ۝ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ ۝ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ ۝ كُلُّ يَجْرِي لِأَجْلٍ مُسَمًّى ۝ يُدَبِّرُ الْأَمْرَ يُفَصِّلُ الْآيَاتِ لَعَلَّكُمْ بِإِلَيَّ رَيْكُمْ تُؤْمِنُونَ

13:2 It is Allah who raised the skies without any visible pillars. He then established (Himself) on the Throne. He subjected the sun and the moon (to His law), all moving for a prescribed term. He regulates all affairs. He explains the signs in detail so that you firmly believe in the meeting with your Lord.

أَمْ يَرَوُا إِلَى الطَّيْرِ مُسَخَّرَاتٍ فِي جَوَّ السَّمَاءِ مَا يُمْسِكُهُنَّ إِلَّا اللَّهُ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِّقَوْمٍ يُؤْمِنُونَ

16:79 Do they not look at the birds subjected to the environmental conditions of the sky? Nothing holds them up but (the power of) Allah. Verily in this are signs for the people who believe.

الَّذِي جَعَلَ لَكُمُ الْأَرْضَ مَهْدًا وَسَلَكَ لَكُمْ فِيهَا سُبُّلًا وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ أَنْوَاحًا مِنْ نَبَاتٍ شَائِئٌ كُلُوا وَارْعُوا أَنْعَامَكُمْ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِأُولَئِكَ النَّاسِ

20:53-54 (Allah) who made the earth like a spread out carpet for you, provided therein routes, and sent down water from the sky. With it We produced pairs of diverse plants. You eat and let your cattle graze. Verily, in that are signs for intelligent people.

وَجَعَلْنَا السَّمَاءَ سَقَفاً مَغْنُوطًا وَهُمْ عَنْ آيَاتِهَا مُعْرِضُونَ وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ كُلُّهُ فِي فَلَكٍ يَسْبَحُونَ

21:32-33 And We have made the sky a well-guarded canopy. Yet, they turn away from its signs! It is He who created the night, the day, the sun and the moon. Every (celestial body) moves in its orbit.

أَوْلَمْ يَرَوُا إِلَى الْأَرْضِ كُمْ أَنْبَتَنَا فِيهَا مِنْ كُلِّ رُوْجٍ كَيْمٍ إِنَّ فِي ذَلِكَ لَآيَةً وَمَا كَانَ أَكْثَرُهُمْ مُؤْمِنِينَ

26:7-8 Do they not look at the earth? How many things have We produced therein from all kinds of noble pairs! Verily, in that is a sign. But most of them do not believe.

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَالْخِلَافُ الْسِتَّةُ كُمْ وَالْوَازِنُ كُمْ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِلْعَالَمِينَ

30:22 And among His signs is the creation of the skies and the earth, and the variations in your languages and your colours. Verily in that are signs for those with knowledge.

وَمِنْ آيَاتِهِ مَنَامُكُمْ بِاللَّيْلِ وَالنَّهَارِ وَابْتِغَاوُكُمْ مِنْ فَضْلِهِ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَسْمَعُونَ

30:23 Among His signs are your sleep in the night and your seeking (livelihood) from His bounty during the day. Verily in that are signs for those who hear.

وَمِنْ آيَاتِهِ أَنْ يُرْسِلَ الرِّيَاحَ مُبَشِّرًاٍ وَلِيُنذِيقُكُمْ مِنْ رَحْمَتِهِ وَلِتَخْرِي الْفُلُكَ بِأَمْرِهِ وَلِتَبْعَثُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشَكُّرُونَ

30:46 Among His signs are: Sending the winds bringing the good news (of rain), giving you the taste of His mercy, sailing of ships by His command to enable you to seek from His bounty and (thus) you may become grateful (to Him).

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَمَا بَثَّ فِيهِمَا مِنْ ذَائِبٍ وَهُوَ عَلَى جَمْعِهِمْ إِذَا يَشَاءُ فَقِيرٌ

42:29 And among His signs is the creation of the skies and the earth and the organisms He distributed in both of them. And He has power to gather them together when He feels so.

وَمِنْ آيَاتِهِ الْجُوَارُ فِي الْبَحْرِ كَالْأَعْلَامِ

42:32 And among His signs are the huge mountain-like (ships) sailing in the sea.

وَفِي خَلْقِكُمْ وَمَا يُبْثِثُ مِنْ ذَائِبٍ آيَاتٌ لِقَوْمٍ يُرِقُّونَ وَاخْتِلَافِ اللَّيلِ وَالنَّهَارِ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ رِزْقٍ فَأَخْيَا بِهِ الْأَرْضَ بَعْدَ مُؤْتَمِنًا وَتَصْرِيفِ الرِّيَاحِ آيَاتٌ لِقَوْمٍ يَعْقِلُونَ

45:4-5 And there are signs for the firm believers in the creation of yourself and the organisms He disperses, and in the alternation of the night and the day, and (in) what Allah sends down as sustenance (i.e., water) from the sky and with it He gives life to the earth after its death, and (in) the control of the winds, there are indeed signs for people who think.

As the Quran puts it, nature offers innumerable signs of the Creator sufficient to convince man of His power. Scientists who ponder over these signs realize this fact much more than the others. As rightly pointed out by Sir Isaac Newton “(the beautiful universe he observed) could only proceed from the counsel and dominion of an intelligent and Powerful Being.”

3. SCIENTIFIC EVIDENCE OF GOD AND IRRATIONALITY OF ATHEISM

Scientific proof for the existence of God is an essential pre-requisite while making any attempt to scientifically explain the Quran for the obvious reason that the Quran is believed to be revelation from God. Any argument in favour of theistic doctrine or atheism should be based on scientific evidence. Atheists question the existence of God without producing scientific evidence for His nonexistence. They assume that the universe with all its living and nonliving components originated by itself by chance. This belief is not founded on scientific facts. The universe, as we shall discuss later (see chapter 7), is a system designed, programmed and created by Allah with purpose. It is like a computer system. There is no such phenomenon called ‘chance’ or ‘accident’ in the programmed natural system. The very word is a misfit and incompatible with a computerized set up. The question whether God exists or not cannot be subjected to direct experimental verification. However, it can be ascertained through other scientific means. There is sufficient direct evidence in science for the existence of God but no evidence to even doubt it.

Big bang cosmology

In 1917, Albert Einstein described the universe based on general theory of relativity, which inspired many scientists including Russian mathematician Alexander Friedmann. Much of today’s cosmology is based on Friedmann’s solutions to the mathematical equations in Einstein’s theory. In 1922 and 1924 Friedmann published papers that used solutions to Einstein’s general theory of relativity to predict the expansion of the universe. The general theory of relativity implied a non-static universe which was however modified by Einstein himself by introducing a cosmological constant into the theory to bring in anti-gravity effect and thereby avoiding the prediction of a

non-static universe. It was perhaps that Einstein was so much influenced by the then prevalent view of a static universe that he made such a modification. Einstein regretted this modification later calling it the biggest blunder of his life. On the contrary, Friedmann preferred to explain the non-static implication of the theory in an elegant manner.

Friedmann's models predicted that all galaxies were moving away from each other. In other words, the universe has been expanding ever since it began. His models thus indicated that at some point of time in the past, the galaxies were together and compressed into a tiny mass of infinite density. This point of infinite density is known in physics as "singularity" to which the Cambridge astrophysicist Fred Hoyle gave the fashionable epithet 'big-bang' [1]. Time had a beginning at the big bang. Later, Roger Penrose, a British physicist and Stephen Hawking showed that the general theory of relativity implied that the universe had a beginning and possibly, it would have an end too [2].

Studies conducted in astronomy and physics have shown beyond a shadow of doubt that our universe had a beginning, which marked the beginning of time also. Before that there was nothing. Scientific proofs validating predictions of the big bang model have been obtained. Direct scientific evidence to the predictions made by Friedmann's models came in 1924, when the American astronomer Edwin Hubble demonstrated that ours (Milky Way) was not the only galaxy; there were some hundred thousand million galaxies spaced far between. The spectral analysis of the radiation coming from them revealed that most galaxies were redshifted. That is, they were moving away from us. In other words, the universe has been expanding ever since its origin and the galaxies were together in the distant past. (The expansion of the universe and the existence of its components together in the early stage are also revealed in the Quran. The subject has been discussed in chapter 4).

Another prediction of the theory was the existence of a cosmic background radiation. This also has been proven correct. The strongest evidence supporting this prediction came in 1965 when Arno Penzias and Robert Wilson of the Bell Laboratories, USA, reported the presence of a microwave radiation (3 K radiation) pervading the whole universe. The universe was hot and dense in the beginning which implied an ionized plasma where matter and radiation were inseparable. As the expansion and cooling of gas cloud continued, a stage was reached when the radiation (photons) decoupled from the matter. It would have been cooled now to 2.7 K. This radiation is believed to be the relic of the big bang and the one which Arno Penzias and Robert Wilson discovered [3].

A third proof in favour of the big bang model was provided by the relative abundances of light elements. The abundances of deuterium (^2H), tritium (^3H), helium (^4H) and lithium (^7Li) in the universe are consistent with the predicted reactions occurring in the first three minutes following the big bang.

The big bang theory implied divine intervention since there was a beginning for the universe. While discussing the big bang model, Stephen Hawking wrote: “Many people do not like the idea that time has a beginning, probably because it smacks of divine intervention....There were therefore a number of attempts to avoid the conclusion that there had been a big bang. The proposal that gained widest support was called the steady state theory.” [2].

In 1949 Hermann Bondi and Thomas Gold (two Austrian scientists) along with British astronomer Fred Hoyle proposed the steady state model. According to this theory, the universe does not evolve or change with time. There was no beginning in the past and there will be no change in the future. This model is based on the perfect cosmological principle, which states that the universe is the same everywhere on the large scale at all times. This theory attracted lot of attention as

it avoided the big bang event and hence a beginning for the universe which implied divine hand. The steady state universe postulates creation of matter out of vacuum so that the perfect cosmological principle (i.e., density is constant) is satisfied. The theory held the centre stage for nearly two decades. The prediction of continual matter creation from nothing is however violation of the law of conservation of the mass and energy and could not be proved. Added to that, discovery of the cosmic microwave background strengthening the validity of the big bang cosmology came as fatal blow to the steady state theory [4]. There are, however, efforts to revive the theory. The Quasi-Steady State Cosmology is such an attempt in order to allow for the evolution of the cosmic microwave background temperature and to explain the faint radio sources in a universe that is always the same over the very long term. All these have been, however, found to be inconsistent with the observations [5].

Thus the big bang theory, which upholds the existence of God, remains as the acceptable theory in cosmology despite the deliberate efforts of the atheists to overthrow it.

Energy cannot originate by itself

First law of thermodynamics asserts that energy is conserved thus making it unambiguously clear that energy cannot be created or destroyed. It can only transform from one form to another. One of the most famous outcomes of Albert Einstein's special relativity theory is the relation between mass and energy: $E = mC^2$ (where E is energy, m is mass, and C is velocity of light). Mass is the amount of matter in an object. The equation presents the mass-energy relationship and their interconvertibility. The total energy content of the universe is therefore constant. That is the basic truth about energy and has been well accepted in science since at least two centuries. The generally adopted statement that "energy can neither be created nor destroyed" might appear a little misleading to the lay

public as it does not make it clear it is the situation in this universe. A better expression would be: “energy can neither originate nor destroy by itself.” The fact that energy exists leads to the question as to how it originated in the first place. There is only one answer to it – energy had to be created. Energy lacks autogenetic ability. First law of thermodynamics indicates only conservation of energy. Therefore energy has to have a Creator. This is a direct scientific evidence for the existence of Creator God.

It is reminded here that attempt to develop steady state cosmology discussed above was made by the scientific community not because the big bang theory was inadequate to explain the origin of the universe but because it implied that the universe had a beginning and hence it was created. It is this implication of the existence of Creator God that frustrated the scientific community and led them to replace it with the steady state cosmology, which implied autogenesis of energy and universe. But it flopped miserably as its prediction of continual matter creation is against scientific facts. There is no evidence whatsoever for the production of new energy in the universe. The rejection of steady state cosmology should be seen as another confirmatory scientific evidence of the existence of God.

Recently an attempt has also been made to question the law of conservation of energy, the bedrock law of nature that is central to physics, by suggesting a hypothetical mode of production of energy in the universe [6]. However, it did not receive any serious attention as it is not grounded on evidence.

Every scientific evidence available to us points to the truth that energy was created and the creation of energy is a one-time event in the history of the universe and its quantum is conserved. Yet scientists blindly argue against this well-established scientific fact to promote the idea that the universe originated by itself as an accident. As of today we have only scientific evidence for God and not for ‘no God’ (atheism). In

other words, God is truth. Anybody who refutes God is refuting a scientific truth.

There are of course questions about the nature of God for which we have no answers. The most frequently asked question by atheists is: "If there is God, who created that God?" This is an endless question because if you say God was created by another God, then the question of who created that God arises. It is also important to note that this question however does not challenge the existence of Creator God for the universe because the existence of God has been well proven scientifically as already discussed. What the atheists cannot bring themselves to believe is how God came into existence without being created. They should realize that a thing created cannot be described as Creator. The very question is irrational. God has no beginning, no end and lives forever. Although atheists are prepared to believe that universe has no beginning, no end and no change (e.g., steady state cosmology) for a system which is known to have no such property, they cannot accept this attribute for God whose nature is unknown to us! None of the arguments put forward by the atheist scientific community questions the existence of God. The existence of God has been conclusively proven by the big bang theory, the failure of steady state cosmology, and the inability of energy to originate by itself. What we do not know is only His nature. On the other hand, we have not even an iota of scientific evidence to support atheism, which the scientific community promotes!

In addition to these direct scientific evidences for the existence of God, there are also scientifically valid indirect evidences based on the Quran. These are discussed in the next chapter.

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4. SCIENTIFIC VALIDITY OF THE QURANIC REVELATIONS

There are several verses of scientific significance in the Quran. These verses give very useful hints about certain aspects of the physical universe such as its origin, structural components and organization. There are also verses relating to human biosystem and other organisms. Scientific discoveries made during the past couple of centuries had shown very good agreement with many of these revelations. In this context, it is reminded here that while hailing these discoveries, Muslims do make statements like “what is discovered now in science was revealed by the Quran 1400 years ago” out of sheer pleasure and excitement over the fact that their belief system is scientifically sound and rational. Such statements are however uncalled for because they do convey the wrong message that science is man-made. There is nothing man-made in this world. Science is no exception. The source of scientific information is also God (see chapter 12).

We should also realize that it is in the divine scheme of things to prove to the unbelievers the divinity of the Quran through scientific validation of its revelations. In other words, revelations of scientific significance are included by Allah in the Quran for this purpose. The agreement between the Quranic revelations and science is another confirmatory evidence of the validity of the Quran and existence of God. Earlier generations had not received the kind of scientific knowledge and intellect, which we receive now. Consequently, it is unlikely they had the inner urge for rational approach towards their beliefs. It is in the Muhammadan era Allah is releasing scientific knowledge and it is in this era people look for scientific evidence to believe in anything. Obviously Allah included those revelations in the Quran to be proved later through scientific discoveries. If we examine the messages conveyed through those revelations, it will be apparent that those

messages would have meant nothing to the people of Prophet Muhammad's time. The verses of scientific significance are therefore intended to prove the validity of the Quran scientifically to the later generations as more scientific knowledge is released by Allah. This will be made clear from subsequent discussions.

There is also another side to it. It may be noted that Allah has decided the unbelievers to be the discoverers and inventors of modern era. In the one hundred plus year history of Nobel Prize, there are only two Muslims, Ahmed H. Zewail (Chemistry, 1999) and Abdus Salam (Physics, 1979) who received the Nobel in science. The rest of over 500 Nobel laureates in science (Physics, Chemistry, and Physiology or Medicine) are non-Muslims. Looking back we find science and technology blossomed into the most spectacular intellectual enterprise during the past five centuries under the western patronage (although prior to that, Muslim contributions dominated the scene). Thus Allah provided a great opportunity for the unbelievers not only to contemplate over the natural phenomena, but also to study and find out for themselves the mechanisms involved in the structure and organization of the universe. They researched and found out the mechanisms, rules and laws that govern the physical and biological segments of the universe and so on. What they found from their research confirmed the revelations in the Quran. Yet they reject Allah. See what the Quran says.

أَوْمَئِيرَ الدِّينِ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَبْنًا فَقَتَّنَاهُمَا ۝ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ
شَيْءٍ حَيٌ ۝ أَفَلَا يُؤْمِنُونَ

21:30 Do not the unbelievers see that the skies and the earth were joined together (as one unit) before We clove them asunder? We made from water every organism. Will they not believe then?

Mark it; the verse addresses the unbelievers in general and atheist scientists in particular. The verse encompasses both

cosmology and biological segment of the universe. The reference is to the formative stage of the skies and the earth when they all remained together as single unit. It is a reminder of Edwin Hubble's observation of the expanding universe that proved Russian mathematician Alexander Friedmann's prediction in his solutions to Einstein's general theory of relativity, paving way for the confirmation of the big bang model (see chapter 3). The Quranic verse 21:30 must be understood against this background. How elegantly Allah asks the unbelievers: "Will they not then believe?" One can find such questions relating to science and addressed to the unbelievers including scientists only in the Creator's Book. The divine strategy is very clear. It is to prove to the unbelievers the validity of the Quranic revelations through scientific discoveries. This in turn proves the existence of God unequivocally. It should also be understood that the Quranic revelations of scientific significance are so programmed as to become comprehensible to the targeted future generations when sufficient scientific information is made available to them. In other words, not all revelations of scientific significance will make sense to the entire mankind at any given point of time. This is very much implied in another divine proclamation:

سُنُرُّهُمْ آيَاتِنَا فِي الْأَفَاقِ وَفِي أَنفُسِهِمْ حَتَّىٰ يَتَبَيَّنَ لَهُمْ أَنَّهُ الْحَقُّ ۖ أُولَئِكَ أُكْفَرٌ بِرَبِّكَ أَنَّهُ
عَلَىٰ كُلِّ شَيْءٍ شَهِيدٌ

41:53 Soon will We show them Our signs in the (furthest) regions and in themselves until it becomes manifest to them that this (Quran) is the truth. Is it not enough that your Lord is witness over all things?

Very clearly Allah's plan is to prove His revelations in the Quran scientifically to the unbelievers and thereby confirming the existence of God Almighty and divinity of the Quran. In verse 41:53 this is stated as a promise from Him.

The Quranic revelations confirmed in science

We have already seen scientific (big bang cosmology and first law of thermodynamics) and natural (absence of new events of production of energy) evidence for the existence of God (see chapter 3). True, we cannot test the question of God or ‘no God’ through direct experimentation. We do come across several such situations in science where it is impossible to carry out experiments to prove or disprove a theory directly. Theories relating to origin of the universe, origin of life, evolution of biological species, etc., belong to this category. In such cases, the most widely used scientific method is to prove or falsify the predictions of the theory. The very same approach can be adopted here also. In this case the Quranic revelations of scientific import form the ‘predictions’. These revelations can be tested for their validity or falsified and hence they can be treated at par with scientific theories. Falsifiability was introduced by Karl Popper as the criterion to judge and characterise a scientific theory [1]. The criterion of falsifiability distinguishes a scientific theory from pseudoscience. It can be applied to any assertion or ideology. In the case of the Quran, scientific validity of the revelations can be assessed based on their conformity with proven scientific facts. Once the validity is confirmed, the revelation becomes a scientific fact. If not, it gets falsified.

Non-Muslim scientists Maurice Bucaille [2, 3], a French Catholic Christian physician, and Keith Moore [4], an anatomist at the University of Toronto, Canada, were the pioneers in bringing to light the agreement between many Quranic revelations and modern scientific findings. Their works started appearing in print from the latter half of 1970s. Maurice Bucaille found several Quranic verses conforming to scientific facts. Prof. Keith Moore explained scientifically the Quranic revelations relating to human embryology [4]. It is again non-Muslims whom Allah appointed for the job. Let us

examine the Quranic revelations of scientific significance in the light of available scientific information.

a) Primordial ‘smoke’, existence of the universe as single unit prior to separation into component systems and its expansion following separation

Allah informs us that the first component of the universe to be created was Earth. The rest of the universe was then ‘smoke’.

فُلَّا أَنْتُمْ لَتَكُفُّرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَجَعَلَهُنَّ لَهُ أَنْدَادًا ۚ ذَلِكَ رَبُّ
الْعَالَمِينَ

41:9 Say: Do you deny the One (Allah) who created the earth in two Days and (also) invent equals to Him? He is the Lord of the worlds.

ثُمَّ اسْتَوَى إِلَى السَّمَاءِ وَهِيَ دُخَانٌ فَقَالَ لَهَا وَلِلأَرْضِ ائْتِنَا طَوْعًا أَوْ كَرْهًا قَالَتَا أَتَيْنَا
طَائِعَيْنَ

41:11 Then He turned to the sky and it was ‘smoke’. He said to it and to the earth: “You both come together willingly or as from compulsion. They said: “We do come (together) obediently.”

أَوْلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْنًا فَقَنَعْنَا هُنَّا ۖ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّهُ
شَيْءٌ حَتَّىٰ ۖ أَفَلَا يُؤْمِنُونَ

21:30 Do not the unbelievers see that the skies and the earth were joined together (as one unit) before We clove them asunder? We made from water every organism. Will they not believe then?

وَالسَّمَاءَ بَثَثْنَاهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ

51:47 With hands did We construct the sky: For it is We who create the vastness of space (i.e., expansion of the universe).

The Quranic revelation of the primordial state of the universe as ‘smoke’ may be taken to mean the gas cloud produced by the big bang (see also chapter 8). A team of astronomers headed by Michele Fumagalli at the University of California, Santa Cruz (UCSC) reported in 2011 the detection of two clouds of gas that formed in the first few minutes after the big bang that created the universe. The primordial gas clouds were found to contain only light elements (hydrogen and helium). A few hundred million years later, clumps of these gas clouds condensed to form the first stars, which created and dispersed heavier elements throughout the universe. The new observations appear to match the theoretical predictions about the chemical makeup of the early universe [5, 6]. The discovery of the pristine gas clouds offers the scientific proof of the Quranic revelation of the primordial smoke (see also chapter 8).

The Quran further reveals that the universe existed as single unit in its formative stage (Q. 21:30). Following its separation into various components, it has been expanding (Q. 51:47). These revelations agree well with the expectations of the big bang cosmology and Edwin Hubble’s observation of expanding universe. These have been discussed above and also in chapter 3 in detail.

b) Description of the sun as lamp and the moon as light

أَمْ تَرَوْا كَيْفَ خَلَقَ اللَّهُ سَبْعَ سَكَنَاتٍ طِبَابًا وَجَعَلَ الْقَمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ
سِرَاجًا

71:15-16 Do you not see how He created seven skies in layers, and placed the moon as a light in them and made the Sun a blazing lamp?

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدَرَهُ مَنَازِلَ لِتَعْلَمُوا عَدَدَ السَّيَّئَاتِ وَالْحِسَابَ
مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحُقْقِ يُفَصِّلُ الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ

10:5 It is He who made the sun to be (a source of) light and the moon a shining object and fixed for it (i.e., moon) residences (i.e., orbits) to enable you to know the number of years and for computation (of time). Allah had not created it except with truth. He (i.e., Allah) explains the signs for people who understand.

تَبَارَكَ الَّذِي جَعَلَ فِي السَّمَاوَاتِ نُورًا وَجَعَلَ فِيهَا سِرَاجًا وَقَمَرًا مُنِيرًا

25:61 Blessed is He who made constellations in the skies and placed therein a lamp (i.e., the sun) and a shining moon.

These verses make clear distinction between the sun and the moon based on the nature of radiation coming from them. While the radiation coming from the moon is described as “light” (*noor* in Arabic), the sun is described as “lamp” (*siraj* in Arabic). The distinction is consistent with the scientific information on these two celestial objects. The sun being a natural nuclear fusion reactor generates energy and emits light. It is therefore comparable with a burning lamp. It is this fusion reactor that Allah created to serve as the primary source of energy for Earth. The moon on the other hand does not produce light; it only reflects the sun’s light incident on it. The revelations about the sun and moon are in conformity with scientific facts.

c) Limited lifespan of the sun

وَالشَّمْسُ بَحْرٌ لِمُسْتَقْرٍ لَهَا ۚ ذُلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

36:38 And the sun moves on for a period determined for it. That is the decree of (Allah), the Mighty, the All-Knowing.

The stars cannot go on forever. The lifespan of the sun like any other star is finite. Being a nuclear reactor it should die when the hydrogen fuel supply is exhausted. In the sun’s core 600 million tons of hydrogen are converted into helium every second generating 4×10^{27} watts of energy. The amount of hydrogen available in the core of the sun is not unlimited [7]. The verse 36:38 reveals that the amount is so adjusted to run

for a period pre-determined by Allah; that is, till the end of this universe.

d) Motion of celestial bodies in their tracks

لَا السَّمْسُن يَنْبَغِي لَهَا أَنْ تَدْرِكَ الْقَمَرَ وَلَا اللَّيْلُ سَابِقُ النَّهَارِ ۚ وَكُلُّ فِي فَلَكٍ يَسْبِحُونَ

36:40 The sun cannot reach up to the moon and the night cannot outstrip the day; each moves along a path.

وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ ۖ كُلُّ فِي فَلَكٍ يَسْبِحُونَ

21:33 It is He who created the night, the day, the sun and the moon; each moves along a path.

Substantial information exists in celestial mechanics on the motion of celestial bodies. The available information is consistent with the Quranic revelation of motion of the celestial bodies in separate courses or orbits.

Johannes Kepler formulated the basis of modern understanding of orbits. There are three laws he propounded to describe the motions of planets in our solar system. One is that the motion is along elliptical orbit and the sun is located at one focus and not at the centre of the orbits. Secondly, the orbital speed of the planet depends on its distance from the sun and is not constant. Thirdly, there is relationship in the orbital properties among the planets orbiting the sun. Isaac Newton showed that the size of the orbit is inversely proportional to the mass of the orbiting body. He also derived Kepler's laws from his theory of gravitation. According to Albert Einstein, the gravity is due to curvature of space-time. In relativity theory, orbits follow geodesic trajectories that approximate well to the Newtonian predictions. In view of its simplicity, Newtonian mechanics is largely used for most purposes.

e) The moon split

The Quran reveals to us that the moon had split during the time of Prophet Muhammad. It was a sign of the nearing of the end of the world.

أَفْتَرَتِ السَّاعَةُ وَانْشَقَ الْقَمَرُ وَإِنْ يَرُوا آيَةً يُعْرِضُوا وَيَقُولُوا سِحْرٌ مُسْتَمِرٌ وَكَذَّبُوا وَاتَّبَعُوا أَهْوَاءَهُمْ ۝ وَكُلُّ أَمْرٍ مُسْتَقْرٌ

54:1-3 The Hour (of Judgment) is near and the moon had split. But when they see a sign, they turn away saying, “This is lasting magic.” They rejected (the warning) and followed their (own) lusts and every matter has its appointed time.

Revelation of the splitting of the moon as a sign of fast-approaching doomsday is an important warning to mankind. The moon had split during the time of Prophet Muhammad and people had seen the portent but they ignored and rejected this warning. This is what we learn from the Quranic verses. No more information about the event is available in the Quran. However, since the moon continues to exist even now, there should be some tell-tale signature of the split left on the moon. Pictures taken by NASA’s lunar missions have clearly indicated crack on the surface of the moon (Fig. 4.1).

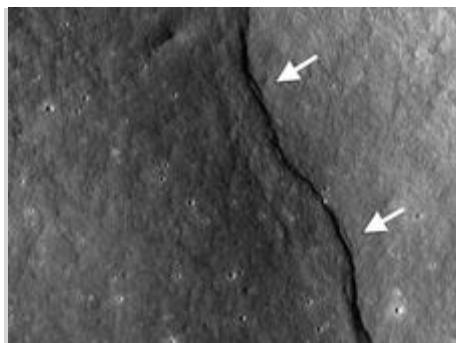


Fig. 4.1. Crack on Moon’s surface

Source: www.nasa.gov/mission_pages/LRO/news/shrinking-moon.html. Accessed June 22, 2012.

In the light of the Quranic revelation, the crack can be identified as the left-over mark of the split. The NASA scientists however give hypothetical explanations. An

explanation given to the crack seen on the moon's surface in an image from NASA's Lunar Reconnaissance Orbiter reads thus: "Over geological time, as the lunar interior cooled and contracted, the moon's radius shrank by about 100 m. As a result its brittle crust ruptured and thrust faults (compression) formed distinctive landforms known as lobate scarps. In a particularly dramatic example, a thrust fault pushed crustal materials (arrows) up the side of the farside impact crater named Gregory (2.1°N , 128.1°E). By mapping the distribution and determining the size of all lobate scarps, the tectonic and thermal history of the moon can be reconstructed over the past billion years." [8]. These explanations are too imaginary to be true. It is impossible to find out the actual cause of the crack by examining samples taken from the moon's surface and from the spectral data and images. It is also not possible to reconstruct with any degree of credibility the events occurred on the moon over the past billion years. The crack seen on the lunar surface in the pictures provides convincing proof of the Quranic revelation of the split that occurred some fourteen hundred years ago.

f) Velocity of light

Egyptian physicist Mansour Hassab El Naby had computed the speed of light from certain revelations in the Quran using sidereal month calendar system and speed of the moon.

وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ ۖ كُلُّ فِلَكٍ يَسْبِحُونَ

21:33 It is He who created the night, the day, the sun and the moon; each moves along a path.

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدْرَةً مَنَازِلَ لِتَعْلَمُوا عَدَدَ السَّنِينَ وَالْحِسَابَ
ۚ مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحَقِّ ۝ يُفَصِّلُ الْآيَاتِ لِئَوْمٍ يَعْلَمُونَ

10:5 It is He who made the sun to be (a source of) light and the moon a shining object and fixed for it (i.e., moon)

residences (orbits) to enable you to know the number of years and for computation (of time). Allah had not created it except with truth. He explains the signs for people who understand.

يُدَبِّرُ الْأَمْرَ مِنَ السَّمَاوَاتِ إِلَى الْأَرْضِ ثُمَّ يَعْرُجُ إِلَيْهِ فِي يَوْمٍ كَانَ مِقْدَارُهُ أَلْفَ سَنَةً مِمَّا تَعْدُونَ
 32:5 He directs the affair from the sky to the earth. Later it will go up to Him on a day whose length is a thousand years of your reckoning.

These revelations indicate that the ‘affair’ (*amr* in Arabic) mentioned travels in a day a distance equivalent to the distance covered by the moon in 1000 years or 12000 months.

$C.t = 12000.L$ (where C is the speed of the ‘affair’, t is time in a day, L is the route length of the moon’s trip in one month)

In sidereal system based on the relative motion of the moon and the sun to the star in universe:

1 day = 23 h 56 min 4.0906 s (where h is hour, min is minutes, s is second)

$$= 86164.0906 \text{ s}$$

$$1 \text{ month} = 27.321661 \text{ days}$$

Now consider the moon’s route during one sidereal month, which will be a curvature of length L.

$L = v.T$ (where v is the relative speed of the moon to the star in universe, T is the period of the moon in revolution, which is equal to 27.321661 days or 655.71986 h)

The angle A it makes for the curvature length $L = 27.321661 \times 360^\circ / 365.25636 = 26.92848^\circ$

$v = v_e \cdot \cos A$ (where v_e is relative speed of the moon to Earth, which is 3682.07 km/h)

From these:

$$C.t = 12000(v_e \cdot \cos A)T$$

$$C = 12000(v_e \cdot \cos A)T/t$$

$$C = 12000 \times 3682.07 \times 0.89157 \times 655.71986 / 86164.0906$$

$$C = 299792.5 \text{ km/s}$$

The speed of the ‘affair’ C so arrived at is equivalent to the speed of light, which is well established in science. In this way speed of light could be calculated from the Quranic revelations [9]. Considering *amr* (Q. 32:5) as Allah’s command (information), it is also possible to interpret that information travels at the speed of light between the sky and Earth. In other words, information is transmitted in the form of electromagnetic radiation.

g) Structural geology of Earth’s interior

The Quran reveals to us that the earth has been stratified into seven layers as in the case of cosmic space.

اللَّهُ الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ وَمِنَ الْأَرْضِ مِثْلَهُنَّ يَتَنَزَّلُ الْأَمْرُ بِيَنْهُنَّ لِتَعْلَمُوا أَنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ وَأَنَّ اللَّهَ قَدْ أَحْاطَ بِكُلِّ شَيْءٍ عِلْمًا

65:12 (It is) Allah who created seven skies and similarly from the earth. (Allah’s) command descends into their midst to make it known to you that Allah has power over all things and that Allah indeed encompasses all things in (His) knowledge.

Earth can be distinguished into seven layers from the outer crust to the inner core (Fig. 4.2). These are: 1) Crust 0- 40 km, 2) Upper mantle 40- 400 km, 3) Transition region 400- 650 km, 4) Lower mantle 650-2700 km, 5) D” layer 2700-2890 km, 6) Outer core 2890-5150 km, and 7) Inner core 5150-6378 km [10, 11]. The earth has distinct outer and inner core. The outer layer is chemically distinct silicate solid crust below which lies a highly viscous solid mantle.

The scientific literature however indicates differences in the characterization and stratification of the earth’s interior [12]. One finds differences in the boundaries defined,

overlapping of the boundaries between layers, description of the strata, etc. Studying the structural geology of Earth's interior down to thousands of kilometers is not an easy task and not a direct one either. Further, the data are collected from indirect observations [12]. Given these difficulties and the indirect methods involved, it is not surprising to find differences in the interpretations made and the conclusions drawn from the studies.

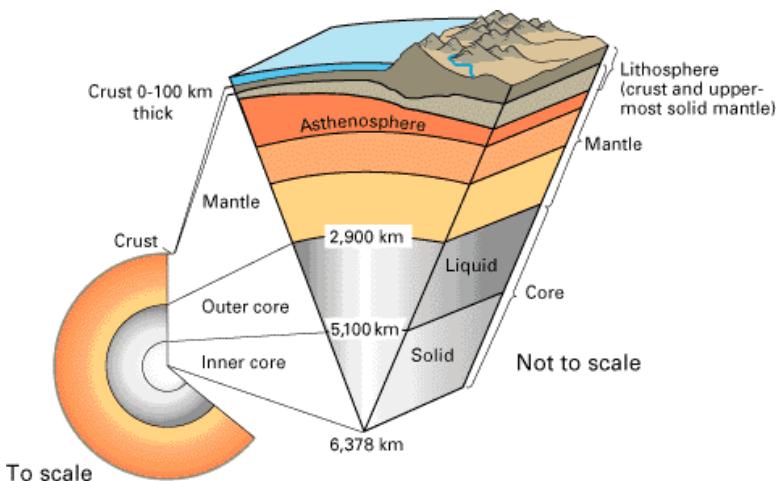


Fig. 4.2. Diagrammatic representation of the structural organization of Earth in seven layers

Source: <http://pubs.usgs.gov/publications/text/inside.html>

For example, the interior of the earth (from the surface downwards) has been divided into four component layers namely lithosphere (0-60 km), mantle (35-2890 km), outer core (2890-5100 km) and inner core (5100-6378 km). Lithosphere is subdivided into crust (0-35 km) and upper mantle (35-60 km) and mantle is shown to have a stratum (100-700 km) called asthenosphere [13]. Another study [12] indicated division of the interior into three shells namely, lithosphere, asthenosphere

and mesosphere. Another stratification suggested included three divisions namely, crust, upper mantle and lower mantle. Ultimately boundaries were set for seven layers namely crust (0-10 km), Mohorovicic discontinuity (10-70 km), depth of compensation (30-130 km), 20° discontinuity (approximately 410 km), seismicity cutoff (approximately 670 km), vp gradient change (approximately 2700 km) and core-mantle boundary (2886 km). None of these goes against the Quranic revelation. All these studies confirm stratification of the interior of the earth. The differences are only in the number of strata specified. The Quran gives us the true information on this (i.e., seven strata) and our understanding of Earth should be consistent with it. This is one of those areas where the Quran can be applied to correct scientific interpretations.

Verse 65:12 is often misunderstood as conveying there are seven earths as there are seven skies. But what can be scientifically understood from the message “(It is) Allah who created seven skies and similarly from the earth” is that the revelation is pertaining to the stratification of the sky and Earth. According to the Quran Allah created Earth first. Then the sky (the cosmic space surrounding Earth) was smoke, which was subsequently stratified into seven layers (see Q. 2:29, 41:12, 67:3 discussed later). Verse 65:12 must be seen in this light. It conveys that as the sky is stratified into seven layers, the earth is also stratified into seven layers. In other words, there are only one Earth and one sky (cosmic space surrounding Earth); both are stratified into seven layers (Fig. 4.3).

h) The shrinking Earth

The Quran reveals to us about the shrinking of the earth.

أَوْلَمْ يَرَوُا أَنَّا نَأْتِي الْأَرْضَ نَنْفَصِّهَا مِنْ أَطْرَافِهَا ۝ وَاللَّهُ يَعْلَمُ لَا مُعَذَّبٌ لِحُكْمِهِ ۝ وَهُوَ

سَرِيعُ الْحِسَابِ

13:41 Do they not see that We certainly shrink the earth from its boundaries? Allah decrees. There is none to delay His verdict. And He is swift in calling to account.

بَلْ مَتَّعْنَا هُؤُلَاءِ وَآبَاءَهُمْ حَتَّىٰ طَالَ عَلَيْهِمُ الْعُمُرُ ۝ أَفَلَا يَرَوْنَ أَنَّا نَأْتِي الْأَرْضَ نَسْقُصُهَا مِنْ أَطْرَافِهَا ۝ أَفَهُمُ الْغَالِيُونَ

21:44 We gave the good things of this life to these people and their fathers until they had a prolonged life. Then do they not see We are gradually shrinking the earth from its various sectors? Are they then the victors?

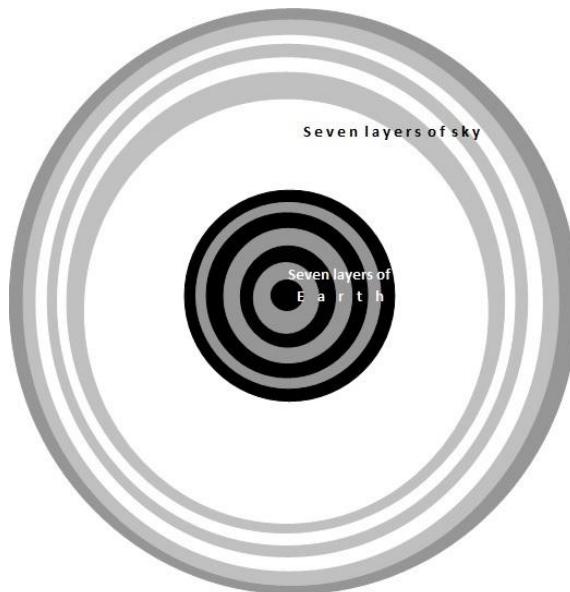


Fig. 4.3. Stratified organization of Earth and sky based on the Quran

Note: Both Earth and sky are stratified into seven layers one above the other. The widths of strata shown in the diagram are arbitrary.

This aspect has been ascertained by the studies conducted by Vyacheslav Orlenok, professor of geology at the

Kant Russian State University in Kaliningrad [14]. He has been concentrating in studies relating to the formation of Earth's crust and oceans during the past thirty years. His studies indicated that the radius of the earth has now reduced by 585 km. The estimated original radius of the earth was 6956 km. Over the eons, this shrinking process has caused reduction of the earth's surface by 128 million square kilometers. The shrinking is a major factor in tectonic processes. The reduction of size was explained as due to gravitational forces and the loss of mass caused by the sun's radiation blowing away hydrogen atoms from the earth's atmosphere.

There are however theories in science that go against this report. Alternate theory of expanding Earth also exists. Nevertheless, all those theories should be discarded and the theory of shrinking Earth should be accepted as it is the truth revealed by the Creator. The work of Vyacheslav Orlenok confirms that.

i) Fixation of mountains like pegs

The Quran reveals to us that the mountains are fixed on the earth as pegs to prevent shaking or tilting.

أَمْ بَخْعَلَ الْأَرْضَ مِهَادًا وَالْجِبَالَ أُوتَادًا

78:6-7 Have We not made the earth a vast expanse and the mountains as pegs?

خَلَقَ السَّمَاوَاتِ بِغَيْرِ عَمَدٍ تَرْكَنُهَا ۝ وَالْقَوْمَ فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمْبَدَّيْ بِكُمْ

31:10 “He created the skies without any visible pillar and He fixed on the earth nails (mountains), lest it would tilt with you...”

وَجَعَلْنَا فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمْبَدَّيْ بِكُمْ

21:31 “And We have made (mountains) firmly fixed on the earth to prevent its tilting with them....”

وَالْقَوْمَ فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمْبَدَّيْ بِكُمْ

16:15 “And He has established on the earth (mountains) standing firm lest it (Earth) should tilt with you....”

The firmly rooted formation of the mountains is now widely accepted. The mountains are not just protrusions on the Earth’s surface but have subterranean extensions that anchor them firmly. Mountains also function as stabilizers. Peter Molnar, Professor of Geological Sciences, University of Colorado at Boulder, in a paper published in *Scientific American* wrote: “What holds mountains up? Some stand on plates of strong rock; others are buoyed by crustal roots reaching deep into the mantle. The latter may collapse when their flanks are not pushed together.” [15]. The study gives confirmatory evidence for the Quranic description of mountains as pegs on Earth.

Zaghoul El-Naggar, professor of earth science and geology is well-known for his research work in this area. Being a geologist, he has explained the Quranic verses on the formation of mountains on the earth. The following account was taken from his website [16].

“The modern theory of plate tectonics holds that mountains act as anchorages for the earth’s crust. The crust is broken up into several tectonic plates through cracks that range from 65 to 150 kilometers in depth; there are about 12 large plates and several small ones. These plates, which contain the world’s continents and oceans, float on hot, semi-molten material, drifting and bumping against one another. Movement between the plates occurs along a relatively narrow zone where plate tectonic forces are most active i.e. in a weak zone of the earth’s crust. Thus the movement of those plates floating on molten magma coupled with the Earth’s movement around itself amount to a lot of force.

In addition, as the ocean basin grows as the sea floor spreads, the magma injected at the line of divergence creates a new mountain range called a mid-oceanic ridge. Thus, the only

factor that limits the ferocity of the movement of the plates are the mountains that act as definite stabilizers for the earth's crust, safeguarding the continents and oceans from constantly running into each other and not only does it decrease their velocity, it also regulates their movement!

Modern earth sciences have proven that mountains have deep roots under the surface of the ground and that these roots are several times their elevation above the surface of the Earth. We can thus safely conclude that the Qur'an's description is accurate; the mountains are actually pegs in the earth's weakest zones to anchor it firmly in the same way that we use anchors to firmly pin ships to the ground."

This account of the current understanding of the formation of mountains and their role in stabilizing the tectonic plates is consistent with the Quranic revelations.

j) Sperm – the decider of sex in human beings

أَيْخُسِبُ الْإِنْسَانُ أَنْ يُتْرَكَ سُدًّا أَمْ يَكُنْ نُطْفَةً مِنْ مَنِيٍّ يُمْنَى ثُمَّ كَانَ عَلَقَةً فَخَلَقَ فَسَوَّى
فَجَعَلَ مِنْهُ الرَّوْحَمَنُ الذَّكَرَ وَالْأُنْثَى

75:36-39 Does man think that he will be left free? Was he not a drop of sperm emitted? Then he became an embryo; then He designed and shaped him in due proportion. And from it (i.e., sperm drop) He made two mates – male and female.

وَإِنَّهُ خَلَقَ الرَّوْحَمَنُ الذَّكَرَ وَالْأُنْثَى مِنْ نُطْفَةٍ إِذَا تُمْئَى

53:45-46 That He created the two spouses – the male and the female – from a drop of (semen) when it is emitted.

These verses reveal that it is the sperm that decides the sex of the human individual. This is a well-established scientific fact. Human beings have 22 pairs of chromosomes called autosomes and one pair called sex chromosomes [17]. The female has two X chromosomes and male has one X and one Y chromosomes. That is XX combination determines the femaleness and XY

combination determines the maleness. Altogether there are 46 chromosomes present in the somatic ($2n$) cell of the body. During gametogenesis, the cell undergoes meiosis leading to the production of four cells with half the number of chromosomes (n). Each of these cells is a gamete with 22 autosomes and one sex chromosome. The sex chromosome of the male gamete may be either X or Y whereas female egg (ovum) can have only X chromosome. During fertilization (i.e., fusion of male sperm with female egg) the male sperm supplies either X or Y but female egg supplies only X chromosome. The zygote (i.e., the fertilized egg) formed from the fusion of a sperm carrying X chromosome with female egg will have XX combination and it develops into female foetus. The zygote formed from the fusion of sperm carrying Y chromosome with female egg will have XY combination and it develops into male foetus. Thus it is the male sperm that determines the sex of the baby.

k) Human embryology

The Quran gives a detailed account of the development of human foetus following the formation of zygote.

خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ فَجَعَلَ مِنْهَا زَوْجَهَا وَأَنْزَلَ لَكُمْ مِنَ الْأَنْعَامِ مَنَّا يَرِيدُ أَنْوَاجٍ
يَخْلُقُكُمْ فِي نُطُونٍ أُمَّهَا إِنَّكُمْ خَلُقًا مِنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ تَلَاثٍ ۝ ذَلِكُمُ اللَّهُ رَبُّكُمْ لَهُ
الْمُلْكُ ۝ لَا إِلَهَ إِلَّا هُوَ ۝ فَإِنَّ قَاتِلَنَّ ثُصُرُفُونَ

39:6 He created you (all) from a single soul (*nafs*); then He created from it its mate; and he sent down from the cattle eight pairs; He develops you in your mothers' wombs in stages one after another in three veils of darkness. That is Allah – your Lord; to Him belongs (all) dominion. There is no God but He; then how do you get misled (from the truth)?

ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ ثُمَّ خَلَقْنَا النُطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْعَةً فَخَلَقْنَا الْمُضْعَةَ عِظَاماً فَكَسَوْنَا الْعِظَامَ لَهُمَا ثُمَّ أَسْتَأْنَاهُ حَلْقًا آخَرَ ۝ فَبَارَكَ اللَّهُ أَحْسَنُ الْحَالِقِينَ

23:13-14 Then We placed him as drop (zygote) in a safe place. Then We transformed the drop (zygote) into a clot of congealed blood; then We transformed that clot into a lump of flesh; then we transformed that flesh into bones and clothed the bones with flesh; then We developed it into another creation (i.e., from zygote to human being). So blessed be Allah, the best of creators!

ثُمَّ سَوَّاهُ وَنَفَخَ فِيهِ مِنْ رُوحِهِ ۝ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئَدَةَ ۝ فَلَيْلًا مَا شَكُرُونَ

32:9 Then He fashioned him (Adam) in due proportion and breathed into him from His *rooh*. And He made for you hearing, sight and mental faculties. Little thanks it is you give!

يَا أَيُّهَا النَّاسُ إِنْ كُنْتُمْ فِي رَيْبٍ مِنَ الْبَعْثِ فَإِنَّا خَلَقْنَاكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُضْعَةٍ مُخْلَقَةٍ وَغَيْرِ مُخْلَقَةٍ لِتَبَيَّنَ لَكُمْ ۝ وَتُنَبَّرُ فِي الْأَرْحَامِ مَا نَشَاءُ إِلَى أَجْلٍ مُسَمَّى ثُمَّ نُخْرِجُكُمْ طَفْلًا ثُمَّ لَتَبَلُّغُوا أَشْدَكُمْ ۝ وَمِنْكُمْ مَنْ يُتَوَقَّى وَمِنْكُمْ مَنْ يُرُدُّ إِلَى أَرْذَلِ الْعُمُرِ لِكِيدَانٍ يَعْلَمُ مِنْ بَعْدِ عِلْمٍ شَيْئًا ۝ وَتَرَى الْأَرْضَ هَامِدَةً فَإِذَا أَنْزَلْنَا عَلَيْهَا الْمَاءَ اهْتَزَّتْ وَرَبَّتْ وَأَنْبَتْ مِنْ كُلِّ لَوْحٍ بَحْبِيجٍ

22:5 O mankind! If you are in doubt about the resurrection, (consider) that We created you from dust, then out of (sperm) drop, then out of a leech-like clot, then out of a morsel of flesh, partly developed and partly undeveloped; (that is) to make it clear to you (Our power). And We retain in the wombs whatever We wish for a fixed term; then We bring you out (from the womb) as baby, then (We foster you) to reach your full development. And some of you die (early in their life) and some are brought to the feeblest old age so that they know

nothing after having known (much). And you see the earth parched (and lifeless), but when We pour down rain on it, it stirs and swells, and it (causes) all kinds of wonderful pairs (of plants) to germinate (and grow).

إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْشَاجٍ يَتَّقْلِي فَجَعَلْنَاهُ سَيِّئًا بَصِيرًا

76:2 Verily We created man from a mixed drop in order to test him. So We gave him faculties of hearing and sight.

Prof. Keith Moore published a special edition of his embryology textbook in the early 1980s in which he discussed the Quranic revelations about the development of human embryo [4]. He said he was “astonished by the accuracy of the statements that were recorded in the 7th century AD, before the science of embryology was established.” [18]. Excerpts from his article published in 1986 are presented here [19]. Illustrations are given in Fig. 4.4.

“He makes you in the wombs of your mothers in stages, one after another, in three veils of darkness.” This statement is from verse 39:6. “The three veils of darkness” may refer to: (1) the anterior abdominal wall; (2) the uterine wall; and (3) the amniochorionic membrane. Although there are other interpretations of this statement, the one presented here seems the most logical from an embryological point of view.”

“Then We placed him as a drop in a place of rest.” This statement is from verse 23:13. The drop or *nutfah* is generally translated as sperm or spermatozoon. According to Moore, “a more meaningful interpretation would be the zygote which divides to form a blastocyst which is implanted in the uterus (“a place of rest”). This interpretation is supported by another verse in the Qur'an which states that “a human being is created from a mixed drop.” The zygote forms by the union of a mixture of the sperm and the ovum (“The mixed drop”).” The Quranic verse that states man is created from a mixed drop is 76:2.

“Then We made the drop into a leech-like structure.” This statement is from verse 23:14. “The word “alaqah” refers to a leech or bloodsucker. This is an appropriate description of the human embryo from days 7-24 when it clings to the endometrium of the uterus, in the same way that a leech clings to the skin. Just as the leech derives blood from the host, the human embryo derives blood from the decidua or pregnant endometrium. It is remarkable how much the embryo of 23-24 days resembles a leech (Fig. 4.4a). As there were no microscopes or lenses available in the 7th century, doctors would not have known that the human embryo had this leech-like appearance. In the early part of the fourth week, the embryo is just visible to the unaided eye because it is smaller than a kernel of wheat.

“Then of that leech-like structure, We made a chewed lump.” This statement is also from verse 23:14. The Arabic word “mudghah” means “chewed substance or chewed lump.” Toward the end of the fourth week, the human embryo looks somewhat like a chewed lump of flesh (Fig. 4.4b). The chewed appearance results from the somites which resemble teeth marks. The somites represent the beginnings or primordia of the vertebrae.

“Then We made out of the chewed lump, bones, and clothed the bones in flesh.” This continuation of the verse 23:14 indicates that “out of the chewed lump stage, bones and muscles form. This is in accordance with embryological development. First the bones form as cartilage models and then the muscles (flesh) develop around them from the somatic mesoderm.”

“Then We developed out of it another creature.” This next part of verse 23:14 implies that “the bones and muscles result in the formation of another creature. This may refer to the human-like embryo that forms by the end of the eighth week. At this stage it has distinctive human characteristics and possesses the primordia of all the internal and external organs and parts.

After the eighth week, the human embryo is called a fetus. This may be the new creature to which the verse refers.”

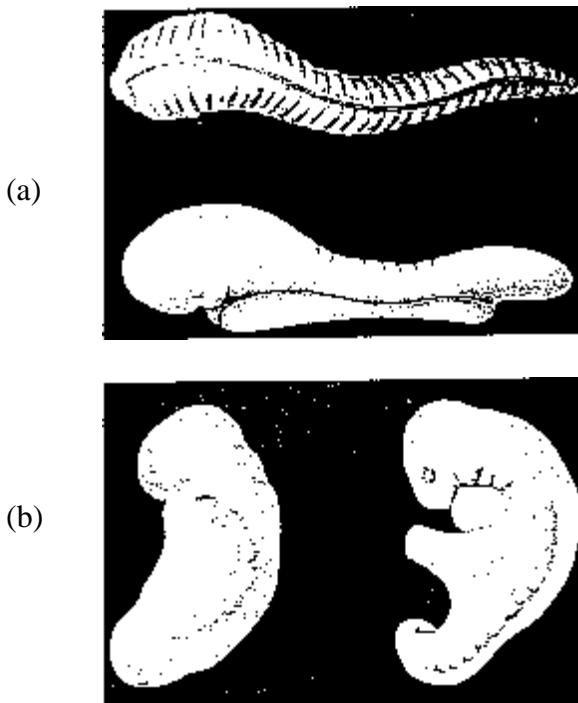


Fig. 4.4. Stages in human embryo development

(a) Top, a drawing of leech and below, a drawing of a 24-day old human embryo. (b) Left, a plasticine model of the human embryo, which has the appearance of chewed flesh. Right, a drawing of a 28-day old human embryo showing several bead-like somites that resemble the teeth marks in the plasticine model.

Source: Moore, K.L. 1986. A Scientist's Interpretation of References to Embryology in the Qur'an. *The Journal of the Islamic Medical Association*, Vol.18, Jan-June 1986, pp.15-16.

“And He gave you hearing and sight and feeling and understanding.” This part of the verse 32:9 indicates that “the special senses of hearing, seeing, and feeling develop in this

order, which is true. The primordia of the internal ears appear before the beginning of the eyes, and the brain (the site of understanding) differentiates last.”

“Then out of a piece of chewed flesh, partly formed and partly unformed.” This part of verse 22:5 “seems to indicate that the embryo is composed of both differentiated and undifferentiated tissues. For example, when the cartilage bones are differentiated, the embryonic connective tissue or mesenchyme around them is undifferentiated. It later differentiates into the muscles and ligaments attached to the bones.”

“And We cause whom We will to rest in the wombs for an appointed term.” This next part of the verse 22:5 “seems to imply that God determines which embryos will remain in the uterus until full term. It is well known that many embryos abort during the first month of development, and that only about 30% of zygotes that form, develop into fetuses that survive until birth. This verse has also been interpreted to mean that God determines whether the embryo will develop into a boy or girl.”

This explains the Quranic revelations on embryology very precisely indicating the validity and divinity of the Quran.

I) Production of honey in bees and its medicinal value

The Quran states that it is female honeybee that is involved in honey making and sheds light on the organ in the body of the female honeybee that produces honey. The Quran also indicates the usefulness of honey as medicine.

وَأَنْهَىٰ رِبُّكَ إِلَى النَّحْلِ أَنَّ الْمَخْرِيَّ مِنَ الْجِبَالِ بَيْوَاتٍ وَمِنَ الشَّجَرِ وَمَا يَعْرِشُونَ ثُمَّ كُلَّيْ مِنْ كُلِّ الشَّمَرَاتِ فَاسْلُكِي سُبْلَ رِبِّكِ دُلُلًا ۝ يَخْرُجُ مِنْ بُطُونِهَا شَرَابٌ مُّخْتَلِفٌ أَلْوَانُهُ فِيهِ شَفَاءٌ لِلنَّاسِ ۝ إِنَّ فِي ذَلِكَ لَآيَةً لِقَوْمٍ يَتَفَكَّرُونَ

16:68-69 And your Lord instructed the honeybee to build hives in the mountains, on trees, and in man’s high structures; then to

eat from all kinds of produce and freely enter the paths of your Lord. A drink of varying colours comes out of their stomachs; in it is healing for mankind. Verily in this is a sign for people who think.

The Quranic revelation that “Allah instructed the honeybee” indicates that the information on building hives, preparations for honey making, the mechanism, etc., is available in its biosoftware. It is true that every organism functions in accordance with its biosoftware (biological program). However cases like honeybee are specially mentioned in the Quran to make us think. This is also pointed out at the end of the verses quoted above. As we know the honeybee is a marvelous creation, a wonder to human mind.

The information given in the Quranic verses about the honey is scientifically valid. Honeybee colony comprises three castes namely, the queen bee, the worker bees, and the drones (idle bees). The queen and worker bees are females while drones are males. It is important to note that the use of the Arabic word “*attakhithi*” in the verse 16:68 indicates that it is female bee involved in the production of honey. This is true as it is worker bees that make honey.

The worker bees collect the liquid nectar from flowers by drinking it through its straw-like proboscis (mouth part). About 80% of the nectar is water. The nectar goes into a special stomach called the honey stomach for storage. Inside the honey stomach, the complex sugars of the nectar are broken down into simpler sugars by specific enzymes. Once the honey stomach is full, the worker bee returns to its hive and regurgitates the modified nectar into the mouth of a younger worker bee in the hive. The hive bee ingests the sugary offering and further breaks down the sugars. It then regurgitates the inverted nectar into a cell of the honeycomb. To bring down the water content of the regurgitated material, the hive bees flutter their wings vigorously fanning the nectar to evaporate water. This makes honey viscous as the water content comes

down to 14-18%. Following that, the hive bee caps the beeswax cell containing honey for consumption later during seasons when food is in short supply. The color and flavor of honey vary depending on the nectar source (flowers).

Scientific evaluation of the honey particularly its therapeutic value has been made only recently. More than 95% of the solids in honey are carbohydrates, a highly complex mixture of sugars that are readily digestible. Many of these are not present in the nectar but are formed during storage in the honey stomach of the bee. The honey is acidic (pH 3.2-4.5), the predominant acid being gluconic acid. Honey contains a number of amino acids and several enzymes predominantly invertase, glucose oxidase, amylase, catalyse, and phosphatase.

The honey is a good bactericidal agent though its cause is not clearly understood. The bactericidal property makes it very effective in the treatment of gastroenteritis. Anaemia could also be corrected by treatment with honey. Gastric ulcers have been successfully treated using honey as a dietary supplement. Honey is an effective treatment of wounds as it is non-toxic, non-irritating, self-sterile, bactericidal, nutritive, easily applied and more comfortable than other dressings. Honey was also found to be a suitable sweetener for the type II diabetic diet [20]. Studies have also shown that besides having antibacterial action, honey has several other beneficial effects on the wound healing process. It gives rapid autolytic debridement and deodorising of wounds, and stimulates the growth of wound tissues thus hastening healing and starting the healing process in dormant wounds. It also provides a moist healing environment for wound tissues with no risk of maceration of surrounding skin, and completely prevents adherence of dressings to the wound bed so that there is no pain and no tissue damage when dressings are changed [21]. All these confirm scientific validity of the Quranic revelations on the production and medicinal value of honey.

m) Destruction of ancient civilizations

Apart from the revelations of natural phenomena that are verifiable scientifically, the Quran also gives us information on certain historical events particularly destruction of earlier civilizations. The Quran draws our attention to the fate of many civilizations that had established earlier on the earth. They were destroyed by Allah for rejecting His messages. A few of these cases are presented here. The accounts reveal how and why they were destroyed.

فَدَخَلْتُ مِنْ قَبْلِكُمْ سُنَّتُ فَسَيِّرُوا كَيْفَ كَانَ عَاقِبَةُ الْمُكَذِّبِينَ هُدَا
بَيَانٌ لِلْتَّائِبِ وَهُدًى وَمَوْعِظَةٌ لِلْمُتَّقِينَ

3:137-138 Many ways of life (civilizations) have passed before you. So, travel through the earth and see what was the end of the rejecters. This is an account (conveyed) to mankind, a guidance and instruction to those who fear Allah.

لَقَدْ أَرْسَلْنَا تُوْحَادِي إِلَى قَوْمِهِ فَقَالَ يَا قَوْمَهُ اعْبُدُو اللَّهَ مَا لَكُمْ مِنْ إِلَهٍ غَيْرِهِ إِنِّي أَخَافُ
عَلَيْكُمْ عَذَابَ يَوْمٍ عَظِيمٍ قَالَ الْمَلَأُ مِنْ قَوْمِهِ إِنَّا لَنَرَاكَ فِي ضَلَالٍ مُّبِينٍ قَالَ يَا قَوْمَهُ لَيْسَ
بِي ضَلَالًا وَلَكُنِّي رَسُولٌ مِنْ رَبِّ الْعَالَمِينَ أُبَلِّغُكُمْ رِسَالَاتٍ رَّبِّي وَأَنْصَحُ لَكُمْ وَأَعْلَمُ مِنْ
اللَّهِ مَا لَا تَعْلَمُونَ أَوْعِجِبُتُمْ أَنْ جَاءَكُمْ ذِكْرٌ مِنْ رَبِّكُمْ عَلَى رَجُلٍ مِنْكُمْ لِيُنذِرُكُمْ وَلَسْتُعْلُمُ
وَلَعَلَّكُمْ تُرْجَحُونَ فَكَذَّبُوهُ فَأَنْجَيْنَاهُ وَالَّذِينَ مَعَهُ فِي الْفُلُكِ وَأَعْرَقْنَا الَّذِينَ كَذَّبُوا بِإِيمَانِنَا
إِنَّهُمْ كَانُوا قَوْمًا عَمِينَ

7:59-64 We sent Noah to his people. He said: O my people! Worship Allah. You have no God besides Him. Verily, I am afraid of punishment for you on a great Day (i.e., the Day of Judgement). The big shots among his people said: Indeed we see you in manifest error. He said: O my people! I am not in error. Instead, I am an apostle from the Lord of the worlds! I convey to you the messages of my Lord and I advise you sincerely. And I know from Allah what you do not know. Are you surprised to see a Reminder (i.e., the messages) coming from your Lord through a man among you to warn you so that

you may fear Allah and receive His mercy? But they rejected him. So We rescued him and those with him in the ship and We drowned those who rejected My messages. Indeed they were a blind people!

وَإِلَيْكُمْ أَخْاهُمْ هُودًا ۝ قَالَ يَا قَوْمَ اعْبُلُوا اللَّهُ مَا لَكُمْ مِنْ إِلَهٍ غَيْرِهِ ۝ أَفَلَا تَتَفَقَّنُ قَالَ
الْمَلَأُ الَّذِينَ كَفَرُوا مِنْ قَوْمِهِ إِنَّا لَنَزَّاكَ فِي سَفَاهَةٍ وَإِنَّا لَنَظَنَّكَ مِنَ الْكَاذِبِينَ قَالَ يَا قَوْمَ
لَيْسَ بِي سَفَاهَةٌ وَلَكُمْ رَسُولٌ مِنْ رَبِّ الْعَالَمِينَ أَتَلْعَغُكُمْ رِسَالَاتِ رَبِّي وَإِنَّكُمْ نَاصِحُ
أَمِينٌ أَوْ عَجِيبُهُمْ أَنْ جَاءَكُمْ ذِكْرٌ مِنْ رَبِّكُمْ عَلَىٰ رَجْحِ مِنْكُمْ لِيُذَرِّكُمْ ۝ وَإِذْكُرُوا إِذْ
جَعَلَكُمْ خُلَقَةً مِنْ بَعْدِ قَوْمٍ نُوحٍ وَرَادُكُمْ فِي الْخُلُقِ بِسَطْنَةٍ ۝ فَادْكُرُوا آلَةَ اللَّهِ لَعْلَكُمْ
تُفْلِحُونَ قَالُوا أَجْهَنْتَنَا لِنَعْبُدَ اللَّهَ وَحْدَهُ وَنَدَرَ مَا كَانَ يَعْبُدُ آبَاؤُنَا ۝ فَأَتَنَا إِمَّا تَعِدُنَا إِنْ
كُنْتَ مِنَ الصَّادِقِينَ قَالَ قَدْ وَقَعَ عَلَيْكُمْ مِنْ رَبِّكُمْ رِحْسٌ وَعَصْبٌ ۝ أَخْبَادُ لَوْنَيِّي فِي أَسْعَاءِ
سَمِيَّتُهُمَا أَنْتُمْ وَآبَاؤُكُمْ مَا نَزَّلَ اللَّهُ بِهَا مِنْ سُلْطَانٍ ۝ فَانْتَظِرُوْا إِنِّي مَعَكُمْ مِنَ الْمُنْتَظَرِينَ
فَأَنْجِنَاهُ وَالَّذِينَ مَعَهُ بِرْحَمَةٍ مِنَّا وَطَعَنَا دَابِرَ الَّذِينَ كَدَّبُوا بِإِيمَانِنَا ۝ وَمَا كَانُوا مُؤْمِنِينَ

7:65-72 To the 'Ad people, (We sent) their brother Hud. He said: O my people! Worship Allah. You have no God besides Him. Will you not fear (Allah)? The big shots from the unbelievers among his people said: We see you stupid and we think you are a liar. Hud said: O my people! I am not stupid. Instead, I am an apostle from the Lord of the worlds. I convey to you the messages of my Lord and I am a trustworthy adviser to you. Are you surprised to see a Reminder (i.e., the messages) coming from your Lord through a man among you to warn you? And remember that He made you the successors to the people of Noah and enhanced your physique. Therefore, remember Allah's favours so that you may be successful. They said: (O Hud!) Have you come to us to make us worship Allah alone and abandon what our forefathers were worshipping? Then bring us what you have promised us (i.e., punishment) if you are telling truth. He said: Punishment and wrath from your Lord are looming on you. Are you arguing with me over some names which you and your forefathers have given to them (i.e.,

false gods). Allah has not sent any authentication for that. Then wait; I will also wait with you. Thus We saved him and those with him by Our mercy and We cut off the base of those who rejected Our signs (messages). They were not believers.

فَلَئِنْ رَأَوْهُ عَارِضاً مُسْتَقْبِلَ اُوْدِيَّهُمْ قَالُوا هَذَا عَارِضٌ مُعْطِرُنَا ۝ بَلْ هُوَ مَا اسْتَعْجَلْنُمْ بِهِ ۝ رِيحٌ فِيهَا عَذَابٌ أَلَيْمٌ تُدَمِّرُ كُلَّ شَيْءٍ ۝ يَا أَمْرَ رَبِّهَا فَأَصْبَحُوا لَا يُرَى إِلَّا مَسَاكِنُهُمْ ۝ كَذَلِكَ يَخْزِي الْقَوْمَ الْمُسْجَرِمِينَ

46:24-25 Then, when they saw the (penalty in the form of) a cloud facing towards their valleys, they said, “This cloud will give us rain”. Nay, it is the (punishment) you were hastening about – a wind with a painful penalty! It destroys everything by the command of its Lord! Thus by morning, nothing could be found there except (the ruins of) their houses. That is how We reward the guilty people.

وَإِلَى ثُمَودَ أَخَاهُمْ صَالِحًا ۝ قَالَ يَا قَوْمَ اعْبُدُوا اللَّهَ مَا لَكُمْ مِنْ إِلَهٍ غَيْرُهُ ۝ قَدْ جَاءَتُكُمْ بَيْنَةً مِنْ رَبِّكُمْ ۝ هَذِهِ نَاقَةُ اللَّهِ لَكُمْ آيَةً ۝ فَذَرُوهَا تَأْكُلُنَّ فِي أَرْضِ اللَّهِ ۝ وَلَا تَمْسُوهَا بِسُوءٍ فَيَأْخُذُكُمْ عَذَابٌ أَلَيْمٌ وَادْكُرُوا إِذْ جَعَلْنَاكُمْ خُلَفَاءَ مِنْ بَعْدِ عَادٍ وَبَوَّأْكُمْ فِي الْأَرْضِ تَسْجِدُونَ مِنْ سُهُولِهَا قُصُورًا وَتَحْتُونَ الْجِبَالَ بُيُوتًا ۝ فَادْكُرُوا آلاءَ اللَّهِ وَلَا تَعْثُوا فِي الْأَرْضِ مُفْسِدِينَ قَالَ الْمَلَائِكَةِ اسْتَكْبِرُوا مِنْ قَوْمِهِ لِلَّذِينَ اسْتَضْعَفُوا لِمَنْ آمَنَ مِنْهُمْ أَتَعْلَمُونَ أَنَّ صَالِحًا مُرْسَلٌ مِنْ رَبِّهِ ۝ قَالُوا إِنَّا إِمَّا أَرْسَلَنَاهُ مُؤْمِنُونَ قَالَ الَّذِينَ اسْتَكْبَرُوا إِنَّا بِالَّذِي آمَنُنَا بِهِ كَافِرُونَ فَعَقَرُوا النَّاقَةَ وَعَتَّوْا عَنْ أَمْرِ رَجْحِمٍ وَقَالُوا يَا صَالِحَ ائْتِنَا إِمَّا تَعْدُنَا إِنْ كُنْتَ مِنَ الْمُرْسَلِينَ فَأَخْذُنُهُمُ الرَّجْحَةَ فَأَصْبَحُوهَا فِي دَارِهِمْ جَاثِيَنَ فَتَوَلَّ عَنْهُمْ وَقَالَ يَا قَوْمَ لَقَدْ أَبْلَغْنُكُمْ رِسَالَةَ رَبِّي وَنَصَّحْتُكُمْ وَلَكِنْ لَا تُجِبُونَ النَّاصِحِينَ

7:73-79 To the Thamud people (We sent) their brother Salih. He said: O my people! Worship Allah. You have no God besides Him. An evidence has come to you from your Lord. This she-camel of Allah is a sign to you. So leave her to graze on Allah's earth and do no harm to her or a grievous punishment will seize you. And remember He made you the

successors to the 'Ad people and gave you settlement on the land. You build mansions in its plains and carve out homes in the mountains. So remember Allah's favours and do not go about on the earth arrogantly creating troubles. The arrogant bigwigs among his people asked those of the believing weaker section: Do you really know that Salih is an apostle from his Lord?" They said: "We indeed believe in what was sent through him. The arrogant ones said: Indeed we will not believe in what you believe. Then they (i.e., the arrogant ones) killed the she-camel and defied the order of their Lord. And they said: O Salih! Bring us then what you have promised us (i.e., punishment), if you are an apostle. So the earthquake seized them and by daybreak they lay (still) face down in their homes! So Salih turned away from them saying: O my people! I have indeed conveyed to you the message of my Lord and I have also advised you (sincerely), but you did not like the advisors.

وَلُوطاً إِذْ قَالَ لِقَوْمِهِ أَتَأْتُونَ الْفَاحِشَةَ مَا سَبَقُكُمْ بِهَا مِنْ أَحَدٍ مِنَ الْعَالَمِينَ إِنَّكُمْ لَتَأْتُونَ الرِّجَالَ شَهْوَةً مِنْ دُونِ النِّسَاءِ ۝ بَلْ أَنْتُمْ قَوْمٌ مُسْرِفُونَ وَمَا كَانَ جَوَابُ قَوْمِهِ إِلَّا أَنْ قَالُوا أَخْرِجُوهُمْ مِنْ قَرِبَاتِكُمْ ۝ إِنَّهُمْ أَنَاسٌ يَتَطَهَّرُونَ

7:80-82 We also (sent) Lut. He said to his people: Do you commit lewdness such as no other people in the world had done before you? You approach men instead of women (to satisfy your sexual) appetite. You are a people transgressing all bounds. And the response of his people was nothing but their reply: "Drive them out of your city. They are indeed people who want to be pure."

وَلَمَّا حَاءَتْ رُسُلُنَا لُوطًا سِيَّءَ بِهِمْ وَضَاقَ بِهِمْ دُرُغًا وَقَالَ هُدًى يَوْمَ عَصِيبٍ
وَجَاهَهُ قَوْمُهُ يُهَرِّعُونَ إِلَيْهِ وَمِنْ قَبْلٍ كَانُوا يَعْمَلُونَ السَّيِّئَاتِ ۝ قَالَ يَا قَوْمَ هُولَاءِ
بَنَاتِي هُنَّ أَطْهَرُ لَكُمْ ۝ فَأَتَقْتُلُوا اللَّهَ وَلَا تُخْرُونِ فِي ضَيْفِي ۝ أَئِنَّ مِنْكُمْ رَجُلٌ
رَشِيدٌ قَالُوا لَقَدْ عِلِّمْتَ مَا لَنَا فِي بَنَاتِكِ مِنْ حَقٍّ وَإِنَّكَ لَتَعْلَمُ مَا نُرِيدُ قَالَ لَوْ أَنَّ

لِي بِكُمْ قُوَّةٌ أَوْ آوِي إِلَى رَجْنٍ شَدِيدٍ قَالُوا يَا لُوطُ إِنَّا رُسُلٌ رَّبُّكَ لَنْ يَصْلُو إِلَيْكَ فَأَسْرِي بِإِهْلِكَ بِقِطْعٍ مِنَ الْلَّيْلِ وَلَا يَلْتَفِتْ مِنْكُمْ أَحَدٌ إِلَّا امْرَأَكَ مُصِيبُهَا مَا أَصَابُهُمْ إِنَّ مَوْعِدَهُمُ الصُّبُّخُ أَلَيْسَ الصُّبُّخُ بِقَرِيبٍ فَلَمَّا جَاءَ أَمْرُنَا جَعَلْنَا عَالَيْهَا سَافِلَهَا وَأَمْطَرْنَا عَلَيْهَا حِجَارَةً مِنْ سِجِيلٍ مَنْصُورٍ

11:77-82 When Our messengers (angels) came to Lut, he felt uneasy on their account and lacked the strength (to protect) them (from his homosexual people). He said: This is a hard day. And his people came rushing towards him and they had been long since doing evil deeds. Lut said: O my people! Here are my daughters; they are the purest for you (if you marry)! Fear Allah and do not disgrace me with regard to my guests! Is there not a single right-minded man among you? They said: Well, you know we have no need of your daughters and you certainly know what we want. He said: How I wish I had the power to (overwhelm) you or I could lean on to a strong support! (The angels) said: O Lut! We are messengers from your Lord! Those people will not get to you! You travel with your family excepting your wife some time during night and let not any of you look back. Certainly whatever happens to them will also happen to her. Their promised time is daybreak. Is not the daybreak near? Thus when Our decree came, We turned (the cities) upside down and rained down on them brimstones as hard as baked clay, spread, layer on layer.

وَإِلَى مَدِينَ أَخَاهُمْ شَعِيْرًا فَالَّتِي يَا قَوْمَ اعْبُدُوا اللَّهَ مَا لَكُمْ مِنْ إِلَهٌ غَيْرِهِ قَدْ جَاءَتُكُمْ بَيْنَهُ مِنْ رَجُلِكُمْ فَأَوْفُوا الْكَيْلَ وَالْمِيزَانَ وَلَا تَبْخَسُوا النَّاسَ أَشْيَاءُهُمْ وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا ذِلِكُمْ خَيْرٌ لَكُمْ إِنْ كُنْتُمْ مُؤْمِنِينَ وَلَا تَغْعُدُوا بِكُلِّ صِرَاطٍ ثُوَّدُونَ وَتَصْدُونَ عَنْ سَبِيلِ اللَّهِ مَنْ آمَنَ بِهِ وَتَبْعُونَهَا عِوْجًا وَذُكُورًا إِذْ كُنْتُمْ قَلِيلًا فَكَثُرُوكُمْ وَانْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الْمُفْسِدِينَ وَإِنْ كَانَ طَائِفَةٌ مِنْكُمْ آمَنُوا بِاللَّهِ أَرْسَلْتُ بِهِ وَطَائِفَةً مَمْ يُؤْمِنُوا فَاصْبِرُوا حَتَّى يَحْكُمُ اللَّهُ بِيَنَّا وَهُوَ خَيْرُ الْحَاكِمِينَ قَالَ الْمَلَأُ الَّذِينَ اسْتَكْبَرُوا مِنْ قَوْمِهِ لَنُخْرِجَنَّكَ يَا شَعِيْرَ وَالَّذِينَ آمَنُوا مَعَكَ مِنْ قَرِيبِنَا أَوْ

لَتَعُودُنَّ فِي مِلَّتِنَا ۝ قَالَ أَوْلَوْ كُنَّا كَارِهِينَ قَدِ افْتَرَيْنَا عَلَى اللَّهِ كَذِبًا إِنْ عَدْنَا فِي مِلَّتِكُمْ
بَعْدٌ إِذْ بَخَانَ اللَّهُ مِنْهَا ۝ وَمَا يَكُونُ لَنَا أَنْ نَعُودَ فِيهَا إِلَّا أَنْ يَشَاءَ اللَّهُ رَبُّنَا ۝ وَسَعَ رَبُّنَا
كُلَّ شَيْءٍ عِلْمًا ۝ عَلَى اللَّهِ تَوَكَّلْنَا ۝ رَبِّنَا افْتَحْ بَيْنَنَا وَبَيْنَ قَوْمِنَا بِالْحَقِّ وَأَنْتَ خَيْرُ
الْفَاتِحِينَ وَقَالَ الْمَلَائِكَةُ كَفَرُوكُمْ مِنْ قَوْبِيْهِ لَعْنَ الْبَعْثَةِ شَعِيْبًا إِنَّكُمْ إِذَا حَاسِبُوكُمْ فَأَخْدَتُمُ
الرَّحْمَةَ فَأَصْبَحُوكُمْ فِي دَارِهِمْ جَاهِلِيْنَ الَّذِيْنَ كَذَّبُوكُمْ شَعِيْبًا كَانُوكُمْ لَمْ يَعْنُوكُمْ فِيهَا ۝ الَّذِيْنَ كَذَّبُوكُمْ
شَعِيْبًا كَانُوكُمْ لَهُمُ الْحَاسِبِيْنَ

7:85-92 To the Madyan people (We sent) their brother Shu'aib. He said: O my people! Worship Allah. You have no God besides Him. An evidence has come to you from your Lord. So you give full measure and weight (in your business) and do not reduce things of the people. Do not create troubles on the earth after its reform. That is good for you, if you are believers. And do not sit on every road threatening and hindering from the path of Allah those who believe in Him and you seek crookedness in it. And remember you were very few and then He multiplied you. And look how was the end of trouble makers. And if there is a group among you who believes in the message with which I have been sent and a group which does not believe, then wait patiently until Allah judges between us. And He is the best of judges. The arrogant bigwigs among his people said: O Shu'aib! We will certainly drive you and those who believe in you out of our city or you should return to our religion. He said: What! Even if we hate it? If we return to your religion after Allah has rescued us from that, it will be tantamount to fabricating a lie about Allah. We cannot return to it unless our Lord Allah so wishes. The knowledge of our Lord extends over all things. On Allah is our trust. Our Lord! Decide between us and our people with truth. And You are the best of decision makers. The big shots of the unbelievers among his people said: "If you follow Shu'aib, you will indeed be losers. So the earthquake seized them and by daybreak they lay face down in their homes! Those who rejected Shu'aib (thus)

became as if they had never lived there. Those who rejected Shu'aib were the losers.

كَذَّابٌ أَلِ فِرْعَوْنٌ ۝ وَالَّذِينَ مِنْ قَبْلِهِمْ ۝ كَفَرُوا بِآيَاتِ اللَّهِ فَأَخْذَهُمُ اللَّهُ بِذُنُوبِهِمْ ۝
إِنَّ اللَّهَ قَوِيٌّ شَدِيدُ الْعِقَابِ ذَلِكَ بِأَنَّ اللَّهَ لَا يَكُونُ مُعِيرًا نِعْمَةً أَنْعَمَهَا عَلَىٰ قَوْمٍ حَتَّىٰ
يُعَيِّرُوا مَا بِأَنفُسِهِمْ ۝ وَإِنَّ اللَّهَ سَمِيعٌ عَلَيْهِ

8:52-53 Like the way of the people of Pharaoh and those before them, they rejected the signs (messages) of Allah and so Allah seized (i.e., punished) them for their sins. Verily, Allah is strong and strict in punishment. That is because Allah will not change the mercy He bestowed on a people until they bring about change in themselves. And verily, Allah hears and knows (all things). Like the manner of the people of Pharaoh and those before them, they treated the signs of their Lord as false. So We destroyed them for their sins. And We drowned the people of Pharaoh. They were all wrongdoers.

وَلَقَدْ كَذَّبُ أَصْحَابُ الْجُحْرِ الْمُرْسَلِينَ وَآتَيْنَاهُمْ آيَاتِنَا فَكَانُوا عَنْهَا مُعْرِضِينَ وَكَانُوا
يَنْجِحُونَ مِنَ الْجِبَالِ يُبَيِّنُوا آمِينَ فَأَخْذَنَاهُمُ الصَّيْحَةُ مُصْبِحِينَ فَمَا أَعْنَىٰ عَنْهُمْ مَا كَانُوا
يَكْسِبُونَ

15:80-84 The Companions of the Rocky Tract also rejected the apostles. We sent them Our signs (messages), but they turned away from them. They (lived) fearlessly carving out houses from the mountains. Then the (mighty) blast seized them at dawn. And what they had earned (i.e., deeds) did not benefit them.

لَقَدْ كَانَ لِسَائِلًا فِي مَسْكِنِهِمْ آيَةٌ ۝ حَتَّىٰ نَأْتَنَا عَنْ يَمِينٍ وَشَمَائِلٍ ۝ كُلُّوا مِنْ رِزْقِ رَبِّكُمْ
وَاسْكُرُوا لَهُ ۝ بِلْدَهُ طَيْبَةٌ وَرَبُّ عَفْوٌ فَأَعْرَضُوا فَأَرْسَلْنَا عَلَيْهِمْ سِيلَ الْعَرِيمَ وَبَدَلْنَاهُمْ
بِجَنَّتِيهِمْ حَتَّىٰ دَوَّا إِلَيْهِنَّ أَكْلٌ حَمْطٌ وَأَثْلٌ وَشَيْءٌ مِنْ سِدْرٍ قَلِيلٌ ذَلِكَ حَرَثَنَاهُمْ بِمَا كَفَرُوا ۝
وَهُنَّ بُخَارِيٌّ إِلَّا الْكَهُورُ وَجَعَلْنَا بَيْنَهُمْ وَبَيْنَ الْفَرْقَيِّ الَّتِي بَارَكْنَا فِيهَا فُرْقَىٰ ظَاهِرَةٌ وَقَدَرَنَا فِيهَا

السَّيْرُ ۖ سِيرُوا فِيهَا لَيَالِيٍ وَأَيَامًا آمِنِينَ فَقَالُوا رَبَّنَا بَاعِدْ يَبْنَ أَسْفَارَنَا وَظَلَّمُوا أَنفُسَهُمْ فَجَعَلْنَاهُمْ أَحَادِيثَ وَمَرْقَاتَهُمْ كُلَّ مُرْقَى ۚ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِكُلِّ صَبَّارٍ شَكُورٍ

34:15-19 There was a sign for people of Saba (supposed to be a city in Yemen) in their homeland – two gardens (one) to the right and (the other) to the left. (We told them:) Eat from the sustenance (provided) by your Lord and be grateful to Him. A good country and a Lord Oft-Forgiving! But they turned away (from Allah's guidance) and We sent against them a flood of water from the dam and in place of their two gardens, We provided them two other gardens with bitter fruits, tamarisks and some lotus trees. That was our recompense to them for rejecting. And will We reward thus except the ungrateful rejecters? In between them (i.e., the land of Saba) and the countries which We had made prosperous, We developed some visible (prominent) countries facilitating journey through them. (And We said:) You travel through them fearlessly during night and day. But they said: Our Lord! Make our journeys long distance. And they wronged themselves. Then We made them (mere) legends and We shattered them. Verily in that are signs for those who are patient and grateful.

مَا آمَتْ قَبْلَهُمْ مِنْ قَرْيَةٍ أَهْلَكَنَا هَا ۖ أَفَهُمْ يُؤْمِنُونَ

21:6 None of the nations which We destroyed earlier has believed. (That being the case), will these (people) believe?

أَمْ يَرَوَا كُمْ أَهْلَكْنَا مِنْ قَبْلِهِمْ مِنْ قَرْيَةٍ مَكَّنَاهُمْ فِي الْأَرْضِ مَا مَمْكُنٌ لَكُمْ وَأَرْسَلْنَا السَّمَاءَ عَلَيْهِمْ مِدْرَازًا وَجَعَلْنَا الْأَنْهَارَ تَجْرِي مِنْ تَحْتِهِمْ فَأَهْلَكْنَاهُمْ بِإِنْوَاحِهِمْ وَأَنْشَأْنَا مِنْ بَعْدِهِمْ قَرْيَةً آخَرِينَ

6:6 Do they not see how many generations before them We had destroyed? We had made available to them on the earth what We had not given you. We had sent them the sky (i.e., rain) in abundance and We made the rivers flowing beneath

them. Yet for their sins We destroyed them and raised another generation after them.

وَكُم مِنْ قَرْيَةٍ أَهْلَكْنَاهَا فَجَاءَهَا بَأْسُنَا أَوْ هُمْ فَأَئْتُوْنَ فَمَا كَانَ دَعْوَاهُمْ إِذْ جَاءَهُمْ
بَأْسُنَا إِلَّا أَنْ قَاتَلُوا إِنَّا كُنَّا ظَالِمِينَ فَلَنَسْأَلَ الَّذِينَ أُرْسِلَ إِلَيْهِمْ وَلَنَسْأَلَ الْمُرْسَلِينَ فَلَنُفْصَنَّ
عَلَيْهِمْ يَعْلَمُ ۝ وَمَا كُنَّا عَابِرِينَ

7:4-7 How many towns We have destroyed (for their sins)! Our punishment came to them in the night or while they were in their afternoon siesta. Thus when Our punishment came to them, their shouting was nothing but “Indeed we were wrongdoers. So We will certainly ask the people to whom (messengers) were sent and (also) the messengers (themselves). And indeed We will explain to them (everything) with (full) knowledge for We have never been absent (at any time or place).

وَلَقَدْ أَهْلَكْنَا الْفُرُونَ مِنْ قَبْلِكُمْ لَمَّا ظَلَمُوا ۝ وَجَاءَتْهُمْ رُسُلُهُمْ بِالْبَيِّنَاتِ وَمَا كَانُوا
لَيُؤْمِنُوا ۝ كَذَلِكَ بَخْرِي الْقَوْمُ الْمُحْرِمِينَ ثُمَّ جَعَلْنَاكُمْ خَلَائِفَ فِي الْأَرْضِ مِنْ بَعْدِهِمْ
لِنَسْتَرِ كَيْفَ تَعْمَلُونَ

10:13-14 We had destroyed (many) earlier generations when they did wrong. Their apostles had come to them with clear signs, but they would not believe! Thus do We reward the sinners. Then We made you successors on the earth after them to see how you will perform.

فَكَيْنُ مِنْ قَرْيَةٍ أَهْلَكْنَاهَا وَهِيَ ظَالِمَةٌ فَهِيَ خَاوِيَةٌ عَلَىٰ عُرُوشَهَا وَبِنْ مُعَطَّلَةٍ وَفَصَرِ
مَشِيلٍ

22:45 Thus how many nations We had destroyed while they were engaged in wrongdoing! They tumbled down on their roofs. And how many wells were abandoned and lofty towers!

وَكُنْ أَهْلَكْنَا مِنْ قَرْيَةٍ بَطِرْتُ مَعِيشَتَهَا ۝ فَتَلْكَ مَسَاكِنُهُمْ لَمْ تُشْكِنْ مِنْ بَعْدِهِمْ إِلَّا قَلِيلًا ۝ وَكُنَّا نَحْنُ الْوَارِثُينَ وَمَا كَانَ رَبُّكَ مُهْلِكَ الْفُرْقَانِ حَتَّىٰ يَبْعَثَ فِي أُمَّهَا رَسُولًا يَنْذُرُ عَلَيْهِمْ آيَاتِنَا ۝ وَمَا كُنَّا مُهْلِكِي الْفُرْقَانِ إِلَّا وَأَهْلُهَا ظَالِمُونَ

28:58-59 And how many nations We had destroyed, which exulted in their life (of affluence)! Yonder are their dwellings, which have not been inhabited after them except for a short period. And We alone became the inheritors. Your Lord had not destroyed any country until He had sent to its centre an apostle reciting to them Our messages nor do We destroy a country except when its people are wrongdoers.

أَوْمَّ يَسِيرُوا فِي الْأَرْضِ فَيَنْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِهِمْ ۝ كَانُوا أَشَدَّ مِنْهُمْ فُؤَادًا ۝ وَأَنَّا نَزَّلْنَا الْأَرْضَ وَعَمَّرْنَاهَا أَكْثَرَ مِنَّا عَمَّرُوهَا وَجَاءَتِهِمْ رُسُلُنَا ۝ فَمَا كَانَ اللَّهُ يَظْلِمُهُمْ وَلَكِنْ كَانُوا أَنْفَسَهُمْ يَظْلِمُونَ

30:9 Have they not travelled through the earth and seen how was the end of those before them? They (i.e., the earlier people) were stronger than these (people) and they tilled the soil and developed it (the land) more than these people have done. And there came to them their apostles with clear signs (whom they rejected and that led to their destruction). It was not Allah who wronged them but they wronged themselves.

فُلْ سِيرُوا فِي الْأَرْضِ فَانْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِهِمْ ۝ كَانَ أَكْثَرُهُمْ مُشْرِكِينَ ۝

30:42 Say: Travel through the earth and see how was the end of those before (you). Most of them were *mushriks*.

فُلْ سِيرُوا فِي الْأَرْضِ ثُمَّ انْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الْمُكَذِّبِينَ ۝

6:11 Say: You travel through the earth and see what was the end of those who treated (the messages) as falsehood.

وَكُنْ أَهْلَكْنَا قَبَلَهُمْ مِنْ قَرْيَةٍ هَلْ تُحْسِنُ مِنْهُمْ مِنْ أَحَدٍ أَوْ تَسْمَعُ لَهُمْ بِرْكَةً ۝

19:98 But how many generations We had destroyed before them! Do you recognize any one of them (now) or hear (so much as) their whisper?

وَحَرَامٌ عَلَىٰ قَرْيَةٍ أَهْلَكْنَاهَا أَنَّهُمْ لَا يَرْجِعُونَ

21:95 And it is impossible for any nation, which We have destroyed, to revive.

وَلَقَدْ أَرْسَلْنَا إِلَيْ أُمَّمٍ مِّنْ قَبْلِكُمْ فَأَخْذَنَاهُمْ بِالْأَسْاءَ وَالصَّرَّاءِ لَعَلَّهُمْ يَتَنَزَّلُونَ

6:42 We had sent (apostles) to many nations before you and We afflicted them with suffering and adversity to make them humble.

إِنْ يَشَاءُ يُدْهِبُكُمْ أَيُّهَا النَّاسُ وَيَأْتِ بِآخَرِينَ ۝ وَكَانَ اللَّهُ عَلَىٰ ذَلِكَ قَدِيرًا

4:133 If He wills, O people, He would remove you and bring others (in your place). And He has power to do that.

أَفَلَمْ يَهْدِ لَهُمْ كُمْ أَهْلَكْنَا قَبْلَهُمْ مِّنَ الْفُرْقَانِ يَمْشُونَ فِي مَسَاكِنِهِمْ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ
لِّأُولَئِكَ الَّذِينَ

20:128 Is not the destruction of so many earlier generations by Us a guiding factor to them? They are (in fact) walking through the (ruins) of their settlements. Verily, in this are signs for intelligent people.

The Quran clearly informs us that there were peoples or nations Allah created in different regions and at different times for testing their obedience to Him. Allah had sent prophets to convey the divine messages as guidance to them. But they did not believe in the one God and His messages. They associated partners with Him instead without believing in His omnipotence and absolute dominion. Therefore Allah sent calamities to destroy them. Following the destruction of a nation, Allah raised another people in its place. Their story was also not different from their predecessor and Allah punished them too for the same reason. All those civilizations are gone forever. They will not revive. Allah warns us that if we also do not believe in His message, the Quran, we will also meet with the same fate as that of our predecessors and He can bring another people in our place. Allah also asks us to travel to

those places of ancient civilizations, convince ourselves of the ruins and learn a lesson from history.

Even though destruction of cities and early nations was mentioned in the Bible and the Quran, archaeological investigations to understand the early history of man were made only recently. An examination of the archaeological finds belonging to the early civilizations of Egypt, India and others would reveal that they all came up near the river banks (Euphrates, Tigris, the Nile, the Indus, the Ganges, etc.) confirming the message given in the Quranic verse 6:6 quoted above. Secondly, the evidences indicate that these civilizations had been buried underneath. The destruction of the ancient cities is generally attributed to natural catastrophes. The cause of destruction of the early nations by God through natural calamities was their rejection of Faith in the one God. Their continued practice of worshipping gods, goddesses and idols ignoring the warnings given by the prophets led to their own destruction. The artefacts unearthed from the sites of ancient civilisations had provided ample testimony to the kind of worship prevailed in those days. The archaeological finds thus confirm the reason given in the Quran for their destruction.

n) Preservation of Pharaoh's body for posterity

The Quran reveals that the body of Pharaoh, the king of Egypt during the time of Prophet Moses, is preserved as divine sign for posterity.

ثُمَّ بَعْثَنَا مِنْ بَعْدِهِمْ مُوسَىٰ وَهَارُونَ إِلَيْ فِرْعَوْنَ وَمَلِئِهِ بِآيَاتِنَا فَاسْتَكْبَرُوا وَكَانُوا قَوْمًا مُجْرِمِينَ

10:75 Then after them We sent Moses and Aaron to Pharaoh and his bigwigs with Our signs. But they were arrogant and they were a sinning people.

قَالَ فَمَنْ رَبُّكُمَا يَا مُوسَىٰ قَالَ رَبُّنَا الَّذِي أَعْطَنَا كُلَّ شَيْءٍ هُنَّ مَدْرَى

20:49-50 (When this message was delivered), Pharaoh said: Who then is the Lord of you both, O Moses? Moses said: Our

Lord is He who gave everything its character and then guidance.

وَقَالَ الْمَلَأُ مِنْ قَوْمٍ فِرْعَوْنَ أَتَدْرُ مُوسَى وَقَوْمَهُ لِيُعْسِدُوا فِي الْأَرْضِ وَبَدَرَكَ وَأَهْلَكَ ۝ قَالَ سُنْقَتْلُ أَبْنَاءَهُمْ وَأَسْتَحْيِي نِسَاءَهُمْ وَإِنَا فَوْقُهُمْ فَاهْرُونَ

7:127 The bigwigs among Pharaoh's people asked (Pharaoh): Are you letting Moses and his people to create trouble on the earth and to forsake you and your gods? He said: We will kill their sons and we will let (only) their daughters live. Indeed, we have full authority over them.

وَقَالَ مُوسَى يَا فِرْعَوْنُ إِنِّي رَسُولٌ مِّنْ رَبِّ الْعَالَمِينَ حَقِيقٌ عَلَى أَنْ لَا أُقْوَى عَلَى اللَّهِ إِلَّا الحَقُّ ۝ قَدْ جِئْتُكُمْ بِيَبْيَانٍ مِّنْ رَبِّكُمْ فَأَرْسِلْنَاهُ مَعِيَّ بَنِي إِسْرَائِيلَ

7:104-105 Moses said: O Pharaoh! I am an apostle from the Lord of the worlds. It is binding on me not to say anything but truth about Allah. I have come to you with clear proof from your Lord. So send the Children of Israel with me.

وَقَالَ مُوسَى رَبَّنَا إِنَّكَ آتَيْتَ فِرْعَوْنَ وَمَلَأَهُ زِينَةً وَأَمْوَالًا فِي الْحَيَاةِ الدُّنْيَا رَبَّنَا لِيُضْلِلُوا عَنْ سَبِيلِكَ ۝ رَبَّنَا اطْمِسْنَا عَلَى أَمْوَالِهِمْ وَاشْدُدْ عَلَى قُلُوبِهِمْ فَلَا يُؤْمِنُوا حَتَّىٰ يَرَوُا الْعَذَابَ الْأَلِيمَ قَالَ قَدْ أُجِيَّتْ دَعْوَتُكُمَا فَاسْتَقِيمَا وَلَا تَتَبَعَّنَ سَبِيلَ الَّذِينَ لَا يَعْلَمُونَ وَجَاؤُوكُمْ بَنِي إِسْرَائِيلَ الْبَحْرَ فَأَتَبْعَثُهُمْ فِرْعَوْنُ وَجُنُودُهُ بَعْيًا وَعَدْلًا ۝ حَتَّىٰ إِذَا أَرْكَبَ الْعَرْقَ قَالَ أَمْنِثُ أَنَّهُ لَا إِلَهَ إِلَّا الَّذِي آمَنْتُ بِهِ بَنُو إِسْرَائِيلَ وَأَنَا مِنَ الْمُسْلِمِينَ آلَآنَ وَقَدْ عَصَيْتَ قَبْلُ وَكُنْتَ مِنَ الْمُفْسِدِينَ فَالْيَوْمَ لَسْجِلَكَ بِيَدِنِكَ لِتَكُونَ لِمَنْ خَلَقَكَ آيَةً ۝ وَإِنَّ كَثِيرًا مِّنَ النَّاسِ عَنْ آيَاتِنَا لَغَافِلُونَ

10:88-92 Moses said: Our Lord! You have indeed given Pharaoh and his bigwigs luxury and wealth in the life of this world; our Lord! They (utilize that) to mislead (people) from Your path. Our Lord! Wipe out their wealth and harden their minds so that they will not believe until they see the grievous penalty. Allah said: The prayers of both of you are granted. So both of you stand on the straight (path) and do not follow the

path of the ignorant. We made the Children of Israel cross the sea. Pharaoh and his armies followed them insolently and spitefully. Thus when he faced (the inevitable) drowning, he said: I believe that there is no God except Him whom the Children of Israel believe in and I am one among Muslims. (It was said to him): Ah now! But you disobeyed before and you were one of the troublemakers. So today We save your (dead) body to be a sign for posterity. But verily, many of the people are heedless of Our signs!

The story of Prophet Moses is given in great detail in the Quran. However, the verses relevant to the preservation of the body of Pharaoh, who was drowned by Allah 3000 years ago during the time of Prophet Moses, alone are presented above. In the olden days Egyptian rulers were known as Pharaohs. Although there is some confusion as to who the Pharaoh was during Prophet Moses's time, whether it was Ramesses II or his son Merneptah, the general consensus is that it was Ramesses II. Dr. Maurice Bucaille provides sufficient evidence to this in his book, *The Bible, the Quran and Science*. It may be noted that about 1500 years have elapsed when Allah revealed the preservation of the dead body to Prophet Muhammad in the Quran. The mummified body of Ramesses II was discovered in 1881 (Fig. 4.5).

Microscopic examination of the mummy revealed that the body was mummified at some place near the river Nile. He was 1.7 m tall and about 90 years old when died. His mummy was given a royal reception in Paris when it was sent there in 1974 for examination. When the mummy was returned to Egypt, it was visited by Anwar Sadat, the then-President of Egypt, and his wife. The mummy of Ramesses II (and also the mummy of his son Merneptah) is now kept in Cairo museum in full view of thousands of daily visitors [22]. Thus the Quranic revelation of the preservation of the dead body of Pharaoh has been confirmed 1200 years after the death of Prophet Muhammad.



Fig. 4.5. Mummy of Pharaoh Ramesses II

Source:<https://www.alislam.org/egazette/.../Pharaoh-of-Moses-201005.pdf>.
Accessed July 9, 2012.

o) Preservation of Noah's Ark for posterity

The Quran reveals that Prophet Noah's people were destroyed because they rejected Allah's messenger and His guidance. Allah created flood to destroy them. Prophet Noah and his companions were rescued in a ship, Noah's Ark. According to the Quran, Noah's Ark ultimately rested on the

Mt. Judi. Like Pharaoh's body, Allah preserved Noah's Ark also as a sign for the future generations of mankind.

وَلَقَدْ أَرْسَلْنَا نُوحًا إِلَى قَوْمِهِ إِنِّي لَكُمْ نَذِيرٌ مُبِينٌ أَنْ لَا تَعْبُدُوا إِلَّا اللَّهُ ۖ إِنِّي أَخَافُ عَلَيْكُمْ عَذَابًا يَوْمَ الْيَمِّ فَعَالَ الْمَالُ الَّذِينَ كَفَرُوا مِنْ قَوْمِهِ مَا تَرَكَ إِلَّا بَشَرًا مِثْنَا وَمَا تَرَكَ اتَّبَعَكَ إِلَّا الَّذِينَ هُمْ أَرَادُنَا بِإِدِي الرَّأْيِ وَمَا تَرَى لَكُمْ عَلَيْنَا مِنْ فَصْلٍ بَلْ نَظَنَّكُمْ كَاذِبِينَ قَالَ يَا قَوْمَ أَرَأَيْتُمْ إِنْ كُنْتُ عَلَى بَيِّنَةٍ مِنْ رَبِّي وَآتَانِي رَحْمَةً مِنْ عِنْدِهِ فَعَمِّيْتُ عَلَيْكُمْ أَنْلِمُكُمُوهَا وَأَنْتُمْ لَهَا كَارِهُونَ وَيَا قَوْمَ لَا أَسْأَلُكُمْ عَلَيْهِ مَالًا ۖ إِنْ أَجْرِيَ إِلَّا عَلَى اللَّهِ ۖ وَمَا أَنَا بِطَارِدِ الَّذِينَ آمَنُوا ۖ إِنَّهُمْ مُلَاقُو رَبِّهِمْ وَلَكُنِي أَرَأَكُمْ قَوْمًا تَجْهَلُونَ وَيَا قَوْمَ مَنْ يَنْصُرُنِي مِنَ اللَّهِ إِنْ طَرَدْنُمْ ۖ أَفَلَا تَدْكُرُونَ وَلَا أُفُولُ لَكُمْ عِنْدِي خَرَائِنُ اللَّهِ وَلَا أَعْلَمُ الْعَيْبَ وَلَا أُفُولُ إِنِّي مَلِكٌ وَلَا أُفُولُ لِلَّذِينَ تَزَرَّرَتْ أَعْيُنُكُمْ لَنْ يُؤْتِهِمُ اللَّهُ حِيَّا ۖ اللَّهُ أَعْلَمُ بِمَا فِي أَنْفُسِهِمْ ۖ إِنِّي إِذَا لَمَنَ الظَّالِمِينَ قَالُوا يَا نُوحٍ قَدْ جَاهَدْنَا فَأَكْتَرْتَ جِدَانَا فَأَتَنَا إِنَّمَا تَعْدُنَا إِنْ كُنْتَ مِنَ الصَّادِقِينَ قَالَ إِنَّمَا يَأْتِيْكُمْ بِهِ اللَّهُ إِنْ شَاءَ وَمَا أَنْتُمْ بِمُعْجِزِينَ وَلَا يَنْفَعُكُمْ نُصْحِي إِنْ أَرْدَثْتَ أَنْ أَنْصَحَ لَكُمْ إِنْ كَانَ اللَّهُ يُرِيدُ أَنْ يُعَوِّيْكُمْ هُوَ رَبُّكُمْ وَإِلَيْهِ تُرْجَحُونَ أَمْ يَقُولُونَ افْتَرَاهُ ۖ فُلْ إِنْ افْتَرَتْهُ فَعَلَيْهِ إِجْرَامِي وَأَنَا بَرِيءٌ مِمَّا يُعَذِّبُ مُؤْمِنُونَ وَأَوْحِيَ إِلَى نُوحٍ أَنَّهُ لَنْ يُؤْمِنَ مِنْ قَوْمِكَ إِلَّا مَنْ قَدْ آمَنَ فَلَا تَبْيَسْنِ بِمَا كَانُوا يَعْمَلُونَ وَاصْنَعْ الْفُلْكَ وَكُلَّمَا مَرَ عَلَيْهِ مَالًا مِنْ قَوْمِهِ سَخْرُوا مِنْهُ ۖ قَالَ إِنْ تَسْخِرُوا مِنَّا فَإِنَّا وَيَصْنَعْ الْفُلْكَ وَكُلَّمَا مَرَ عَلَيْهِ مَالًا مِنْ قَوْمِهِ سَخْرُوا مِنْهُ ۖ قَالَ إِنْ تَسْخِرُوا مِنَّا فَإِنَّا نَسْخِرُ مِنْكُمْ كَمَا تَسْخِرُونَ فَسَوْفَ تَعْلَمُونَ مِنْ يَأْتِيهِ عَذَابٍ يُخْرِيْهُ وَيَجْلِ عَلَيْهِ عَذَابٌ مُقِيمٌ حَتَّىٰ إِذَا جَاءَ أَمْرُنَا وَفَارَ السَّنُورُ فُلِنَا الْحِمْلُ فِيهَا مِنْ كُلِّ رَوْحَجِنْ أَثْنَيْنِ وَهَلْكَ إِلَّا مِنْ سَبَقَ عَلَيْهِ الْقَوْلُ وَمَنْ آمَنَ ۖ وَمَا آمَنَ مَعْنَهُ إِلَّا قَلِيلٌ وَقَالَ ارْكَبُوا فِيهَا بِسْمِ اللَّهِ بَحْرَاهَا وَمُرْسَاهَا ۖ إِنَّ رَبِّي لَغَوْرُ رَحِيمٌ وَهِيَ بَحْرِي بِهِمْ فِي مَوْجِ كَالْجِبَالِ وَتَادِي نُوحُ ابْنَهُ وَكَانَ فِي مَعْرِلِ يَا بُيَّ ارْكَبْ مَعَنَا وَلَا تَكُنْ مَعَ الْكَافِرِينَ قَالَ سَآوِي إِلَى جَبَلٍ يَعْصِيْنِي مِنَ الْمَاءِ ۖ قَالَ لَا عَاصِمَ الْيَوْمِ مِنْ أَمْرِ اللَّهِ إِلَّا مَنْ رَحِمَ ۖ وَحَالَ بَيْنَهُمَا الْمَوْجُ فَكَانَ مِنَ الْمُعْرِقِينَ وَقَبِيلَ يَا أَرْضُ الْبَاعِيْ مَاءِكَ وَيَا سَمَاءَ أَقْبِيْ عِيْ وَغَيْضَ الْمَاءِ وَقُضِيَ الْأَمْرُ وَاسْتَوْتَ

عَلَى الْجُودِيِّ ۖ وَقَيلَ بُعْدًا لِلْقَوْمِ الظَّالِمِينَ وَنَادَى نُوحٌ رَبَّهُ فَقَالَ رَبِّ إِنْ أَنِّي مِنْ أَهْلِي
وَإِنْ وَعْدَكَ الْحُقُّ وَأَنْتَ أَحْكَمُ الْحَاكِمِينَ قَالَ يَا نُوحُ إِنَّهُ لَيْسَ مِنْ أَهْلِكَ ۖ إِنَّهُ عَمَلٌ غَيْرُ
صَالِحٍ ۖ فَلَا تَسْأَلْنِ مَا لَيْسَ لَكَ بِهِ عِلْمٌ ۖ إِنِّي أَعْظُلُكَ أَنْ تَكُونَ مِنَ الْجَاهِلِينَ قَالَ رَبِّ
إِنِّي أَغْوُدُ بِكَ أَنْ أَسْأَلَكَ مَا لَيْسَ لِي بِهِ عِلْمٌ ۖ وَإِلَّا تَعْفُرْ لِي وَتَرْهَمْنِي أَكْنُ مِنَ الْخَاسِرِينَ
قَيْلَ يَا نُوحُ اهْبِطْ بِسَلَامٍ مِنَ وَرَبَّكَاتِ عَيْنِكَ وَعَلَى أُمِّ مِنْ مَعَكَ ۖ وَأُمُّ سُنْتَعُهُمْ ثُمَّ
يَمْسُهُمْ مِنَ عَذَابِ أَلِيمٍ

11:25-48 We sent Noah to his people. (He said:) Indeed I am a clear warner to you. You should not worship anyone except Allah. Verily, I am afraid of punishment for you on a painful day. Then the big shots of the unbelievers among his people said: We do not see you except as a man like ourselves. And we do not see any of your followers other than the lowest among us (who are) immature in judgment. And we do not see you have any dignity above us. We consider you as liars. Noah said: O my people! Did you see that although I am with a clear sign from my Lord and He has granted me mercy from Him, it has been made invisible to you. Can we compel you to accept it when you hate it? O my people! I do not ask you any reward for that. My reward is with Allah alone. I will not drive away (in contempt) those who believed. Verily they are to meet their Lord and I see you as ignorant people. O my people! Who will help me against Allah if I drove them away? Will you not then think over? I do not tell you that the treasures of Allah are with me nor do I know what is hidden. And I do not tell you that I am an angel. I do not speak of those whom your eyes belittle that Allah will not grant them anything good. Allah knows well what is in their selves. (If I speak about them so), I will indeed be one of the wrongdoers. They said: O Noah! You have argued with us; then you have increased the argument with us so much. So now you bring to us what you promise us (i.e., the punishment) if you are telling truth. Noah said: Truly, Allah will bring it on you if He wills and you cannot overpower Him. Even if I want to advise you, my advice will not benefit you if

Allah wants to leave you astray. He is your Lord and to Him you will return. Or do they say, "Noah has fabricated it (i.e., the revelation)?" Say: If I had fabricated it, my sin is on me and I am free from the guilt of the sins you commit. It was conveyed to Noah: "None of your people will believe except those believed already. So do not grieve over what they were doing. And you construct an Ark before Our eyes in accordance with Our communication (to you) and do not speak to Me regarding the wrongdoers. Indeed, they are going to be drowned." So he (started) constructing the Ark. Every time the bigwigs among his people passed by him, they laughed at him. He said: If you ridicule us, then we will also ridicule you as you ridicule us. You will know afterwards who will get shameful penalty and on whom the lasting punishment will descend. Thus when Our command came and the fountains of the earth gushed forth, We said: "Embark therein, of each kind two, male and female, and your family except those (among your family) against whom the word has already gone forth, and the believers. And there were only a few believers with him. So he (Noah) said: "You board the Ark. It moves and stops in the name of Allah. Verily, my Lord is Oft-Forgiving, Most Merciful." So the Ark was sailing with them through the waves (towering) like mountains. And Noah called out to his son who was standing away in isolation: O my son! Board with us and do not be with the unbelievers. The son replied: I will move over to some mountain that will save me from the water. Noah said: "Today nothing can save any from Allah's command except whom He favoured." And the waves came between them and the son was among the drowned. Then the word went forth: "O earth! Swallow up your water, and O sky! Withhold (your rain). And the water receded and the matter ended. The Ark rested on Mount Judi, and the word went forth: "Curse to the wrongdoers!" And Noah called upon his Lord and said: O my Lord! Surely my son is of my family and Your promise is true. And You are the best of judges. He (i.e., Allah) said: O Noah! He is not of your family; verily his deeds are not

good. So do not ask Me of which you have no knowledge. I do advise you as you might become one of the ignorant. Noah said: O my Lord! I seek refuge with You from asking You of which I have no knowledge. And unless You forgive me and have mercy on me, I will be among the losers. The word came: "O Noah! Get down (from the Ark) with peace from Us and blessing on you and on the communities with you. And there are some communities to whom We shall grant pleasures (for a time) but later they will get a grievous penalty from Us."

كَذَّبُثْ قَبْلَهُمْ قَوْمٌ نُوحٌ فَكَذَّبُوا عَبْدَنَا وَقَالُوا مَجْنُونٌ وَأَزْدَجَرَ فَدَعَا رَبَّهُ أَيْ مَغْلُوبٌ فَانْتَصَرَ
فَفَتَحْنَا أَبْوَابَ السَّمَاءِ بِمَا يَمْهِرُ وَفَخَرَّنَا الْأَرْضَ عَيْنُونَا فَالْتَّقَى الْمَاءُ عَلَى أَمْرٍ قَدْ قُرِيرَ
وَحَمَلْنَاهُ عَلَى ذَاتِ الْوَاحِدِ وَدُسْرٍ تَحْرِي بِأَعْيُنِنَا جَزَاءً لِمَنْ كَانَ كُفَّارٌ وَلَقَدْ تَرْكَنَاهَا آئِهَ فَهَلْ
مِنْ مُذَكَّرٍ فَكَيْفَ كَانَ عَذَابِي وَثُدُرٌ

54:9-16 Before them, the people of Noah rejected (their apostle). They rejected Our servant calling him mad and he was driven out. Then Noah prayed to his Lord: I have failed; so You help (me). Then We opened the gates of the sky for pouring down water. And We caused the earth to gush forth with springs. Subsequently, (all) the water collected together for an already decided matter. And We put Noah on an (Ark) of planks and nails sailing before Our eyes. It was recompense to the rejected one (i.e., Noah)! And We have preserved it as a sign (for posterity). But is there any who remembers? Then how (terrible) were My penalty and warning!

There have been some reports of discovery of the relic of the Noah's Ark. The report supposed to be the most reliable was that of the US team led by archaeologist Ron Wyatt, which in 1987 discovered a boat-shaped object resting on a mountain in Eastern Turkey. The relic was found to compare well with the Biblical description of Noah's Ark. The Turkish government officially recognized the site of Noah's Ark as National Park and later upgraded it to the status of National Treasure [23]. According to the Bible, Noah's Ark rested on

Mt. Ararat while the Quran reveals that Noah's Ark rested on Mt. Judi following the great flood. There is confusion about the ancient names of the locations given in the Scriptures.

p) Meeting of sweet water sea and saline sea without mixing

The Quran mentions about merging of two seas namely, one pure and drinkable water and the other saline water, without mixing.

وَهُوَ الَّذِي مَرَجَ الْبَحْرَيْنِ هَذَا عَذْبٌ فُرَاتٌ وَهُذَا مِلْخٌ أَحَاجٌ وَجَعَلَ بَيْنَهُمَا بَرْزَخًا وَحِجْرًا
مَحْجُورًا

25:53 It is He who holds the two oceans together; one very pure (i.e., potable) and the other saline and bitter. And He made between them a veil and an inviolable barrier.

مَرَجَ الْبَحْرَيْنِ يَلْتَقِيَانِ بَيْنَهُمَا بَرْزَخٌ لَا يَبْغِيَانِ

55:19-20 He has let free the two seas to meet together. Between them is a barrier. They cannot trespass.

أَفَنْ جَعَلَ الْأَرْضَ قَرَارًا وَجَعَلَ حِلَالَهَا أَنْهَارًا وَجَعَلَ لَهَا رَوَاسِيَ وَجَعَلَ بَيْنَ الْبَحْرَيْنِ حَاجِرًا ۝ إِنَّ اللَّهَ مَعَ اللَّهِ
بَلْ أَكْثَرُهُمْ لَا يَعْلَمُونَ ۝

27:61 Or (the One) who made the earth a habitat, made rivers through it, set thereon nails (i.e., mountains) and made a barrier between two seas? Is there (another) God along with Allah? Nay, most of them do not realize.

These verses refer to particular scenario of meeting of freshwater body like river and stream with saline sea. Such situations can be seen near sea coasts where fresh water rivers flow into the sea. Estuary is formed as a result of this. What is so special and surprising about it is despite the meeting of fresh water river with saline sea, the quality of the river water does not change. A vertical partition zone with respect to salinity level develops between the freshwater river and sea at the meeting point (Fig. 4.6).



Fig. 4.6. Meeting of fresh water river with saline sea

This transition zone serves as the barrier between the two water bodies. Photographer Kent Smith posted at Flickr a photo of meeting of saline and fresh water bodies taken while on an Alaskan cruise [24]. The photo showed the two seas met at a point and remained distinctly separated from each other by the foam formed at the junction. The place is just off shore where the eastern part of Alaska descends down below the Yukon Territory. Smith indicated that the picture showed the result of meeting of two bodies of water with different densities – the melting glaciers, which is fresh water, and the ocean with high percentage of salt. This natural reality proves the Quranic revelation of the barrier between fresh water body and saline sea when the two meet.

The Quranic revelations requiring scientific explanation

There are also messages in the Quran that cannot be adequately supported by currently available scientific information. More information is required to explain those messages convincingly on scientific basis. All such revelations relate to the fundamental aspects of the universal system. The following are some of them.

a) Creation in pairs

A few verses inform us that Allah created everything in pairs. Allah also urges us to think over it.

وَمِنْ كُلِّ شَيْءٍ خَلَقْنَا زَوْجَيْنِ لَعَلَّكُمْ تَذَكَّرُونَ

51:49 And of everything We created pairs so that you may think (and understand).

سُبْحَانَ اللَّهِي خَلَقَ الْأَرْوَاحَ كُلَّهَا بِمَا تُنْبِثُ الْأَرْضُ وَمِنْ أَنفُسِهِمْ وَمِمَّا لَا يَعْلَمُونَ

36:36 Glory to Allah who created in pairs all things that the earth produces as well as their own (human) kind and (other) things of which they have no knowledge.

وَهُوَ الَّذِي مَدَ الْأَرْضَ وَجَعَلَ فِيهَا رَوَاسِيَ وَأَنْهَارًا ۖ وَمِنْ كُلِّ الشَّمَرَاتِ جَعَلَ فِيهَا زَوْجَيْنِ
أَنْنَيْنِ ۖ يُعْشِي الظَّلَالَ النَّهَارَ ۚ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

13:3 And it is He who spread out the earth and set thereon mountains standing firm and (flowing) rivers. And He made all kinds of fruits (plants) with partners in pairs. He draws the night as veil over the day. Verily in that are signs for those who think.

خَلَقَ السَّمَاوَاتِ بِغَيْرِ عَمَدٍ تَرْوَنُهَا ۖ وَالْقَيْ في الْأَرْضِ رَوَاسِيَ أَنْ تَمِيدَ بِكُمْ وَتَثْ فِيهَا
مِنْ كُلِّ دَائِيَةٍ ۖ وَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً فَأَنْبَثْنَا فِيهَا مِنْ كُلِّ زَوْجٍ كَيْ

31:10 He created the skies without any visible pillar and He fixed on the earth nails (mountains), lest it would tilt with you. And He dispersed therein (i.e., on the earth) all kinds of organisms. We sent down the rain from the sky and produced therein (i.e., on the earth) all kinds of ideal pairs.

‘Pairs’ indicated for plant species in verses 13:3 and 31:10 is generally understood as partners in sexual reproduction. In the case of sexually reproducing plants we find variation in the mechanism involved. There are plant species, which are dioecious. That is, the male and female organs are found on separate plants. There are also monoecious species in which

both male and female organs are found on the same plant. Although most plants are sexually reproducing there are also species that reproduce by asexual means. For example, moss and ferns reproduce through spores. Therefore the Quranic revelation of creation of plants in pairs does not indicate the sexual pairs. Further the implication of the Quranic revelation is not limited to plants alone; it covers everything Allah created. Verses 51:49 and 36:36 indicate that. Accordingly, existence of ‘pairs’ like matter-antimatter, particle-antiparticle, neutrino-antineutrino, electron-positron, etc. is also generally interpreted that way as can be seen in Islamic literature and at certain websites. However we need more scientific information to clearly understand the implications of the revelation of creation in pairs. Perhaps further advancement of science may give the answer in future.

b) Earth – the first to be created

The Creator reveals to us that the earth was the first component of the universe to be created. The rest of the universe was created subsequently.

فَلْمَنِكُمْ لَتَكُفُّرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَجَعَلُوكُمْ لَهُ أَنْدَادًا ۝ ذَلِكَ رَبُّ
الْعَالَمَيْنِ وَجَعَلَ فِيهَا رَوَاسِيَ مِنْ فَوْتَهَا وَبَارَكَ فِيهَا وَقَدَرَ فِيهَا أَفْوَاتَهَا فِي أَزْنَعَةٍ أَيَّامٍ سَوَاءَ
لِلْسَّائِلَيْنِ ثُمَّ اسْتَوَى إِلَى السَّمَاءِ وَهِيَ دُخَانٌ فَعَالَ لَهَا وَلِلْأَرْضِ أَثْنَيْنِ طُوعًا أَوْ كَرْهًا قَالَتَا
أَتَيْنَا طَائِعَيْنِ فَقَضَاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَى فِي كُلِّ سَمَاءٍ أَمْرَهُنَّ ۝ وَزَيَّنَا السَّمَاءَ
الدُّنْيَا بِمَصَابِيحٍ وَحَفَظًا ۝ ذَلِكَ تَعْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:9-12 Say: "Do you deny the One (Allah) who created the earth in two Days and (also) invent equals to Him? He is the Lord of the worlds. He set on the (earth) firm mountains high above it, and bestowed blessings on the earth, and fixed therein its nourishment in four Days in accordance with (the needs of) those who seek (sustenance). Then He turned to the sky and it was smoke. He said to it and to the earth: "You both come together willingly or as from compulsion. They said: "We do

come (together) obediently.” So He completed them as seven skies in two Days and He assigned to each sky its command. And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

هُوَ الَّذِي خَلَقَ لَكُمْ مَا فِي الْأَرْضِ جَمِيعًا ثُمَّ أَسْتَوَى إِلَى السَّمَاءِ فَسَوَّاهُنَّ سَبَعَ سَمَاوَاتٍ ۝
وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

2: 29 It is He who created for you all things that are on earth. Then He turned to the sky and He perfected it as seven skies. And of all things He has complete knowledge.

The Quranic message is very clear that Earth was the first to be created. This revelation contradicts the current scientific belief that the earth was the last to evolve following the evolution of the galaxies.

The universe is believed to have originated about 13.7 billion years ago. The components began to form much later. The following sequence has been proposed for the formation of various components. The first component to form were quasars. These are thought to be bright early active galaxies and population III stars. From this, population II stars and subsequently population I stars formed. Our solar system is about 5 billion years old; that is roughly 8 to 9 billion years after the big bang. Earth formed around 4.54 billion years ago by accretion from the solar nebula.

The Quranic revelation calls for re-examination of the current views about the structural evolution of the universe. Here again application of the Quran to science is required to correct the hypothesis of the formation of the universal components.

c) Organization of cosmic space as seven skies

In the Quran the universe is always referred to as ‘the skies and the earth’. This description of the universe giving emphasis to Earth, although it is just a speck in the whole

system, must be seen from the teleological point of view (discussed in chapter 13).

بَدِيعُ السَّمَاوَاتِ وَالْأَرْضِ ۖ وَإِذَا قَضَىٰ أَمْرًا فَإِنَّمَا يَقُولُ لَهُ كُنْ فَيَكُونُ

2:117 To Him is due the primal origin of the skies and the earth. When He decides a matter, He says to it, “Be”; then it comes into being.

الْحَمْدُ لِلَّهِ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ وَجَعَلَ الظُّلُمَاتِ وَالنُّورَ ۗ إِنَّمَا كَفَرُوا بِرَبِّهِمْ
يَعْدِلُونَ

6:1 Praise be to Allah who created the skies and the earth, and made the darkness and the light. Yet those who reject Faith equate others with their Guardian-Lord.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ يُعِيشِي
اللَّيْلَنَ النَّهَارَ يَطْلُبُهُ خَيْرًا وَالشَّمْسَ وَالقَمَرَ وَالنُّجُومَ مُسَخَّرَاتٍ بِأَمْرِهِ ۚ أَلَا لَهُ الْحَلْقُ
وَالْأَمْرُ ۖ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ

7:54 Your Lord is Allah who created the skies and the earth in six days, and then was seated on the Throne (of Authority). He draws the night as veil over the day each seeking the other in rapid succession. He created the sun, the moon and the stars (all) obeying His command. Are not the creation and command His? Blessed be Allah, Lord of the worlds!

اللَّهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِعِنْدِ عَمَدٍ تَرَوْنَهَا ۖ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ ۖ وَسَحَرَ الشَّمْسَ
وَالْقَمَرَ ۖ كُلُّ شَيْءٍ لِأَجْلٍ مُسَمَّىٌ ۖ يُدَبِّرُ الْأَمْرَ يُفَصِّلُ الْآيَاتِ لَعَلَّكُمْ بِإِلَقاءِ رَبِّكُمْ
ثُورَقُونَ

13:2 It is Allah who raised the skies without any visible pillars. He then established (Himself) on the Throne. He subjected the sun and the moon (to His law), all moving for a prescribed term. He regulates all affairs. He explains the signs in detail so that you firmly believe in the meeting with your Lord.

خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحُقُّ ۝ تَعَالَى عَمَّا يُشْرِكُونَ

16:3 He created the skies and the earth with just purpose. Far is He above the partners they ascribe to Him!

Further Allah informs us that the cosmic space surrounding the earth has been organized into seven skies one above the other.

هُوَ الَّذِي خَلَقَ لَكُمْ مَا فِي الْأَرْضِ جَبِيعًا ثُمَّ اسْتَوَى إِلَى السَّمَاءِ فَسَوَّاهُنَّ سَبْعَ سَمَاوَاتٍ ۝
وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

2: 29 It is He who created for you all things that are on earth. Then He turned to the sky and He perfected it as seven skies. And of all things He has complete knowledge.

فَقَضَاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَىٰ فِي كُلِّ سَمَاءٍ أَمْرَهُمَا ۝ وَرَبَّنَا السَّمَاءَ الدُّنْيَا
بِعَصَابَيْحٍ وَحَفَظَأً ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:12 So He completed them as seven skies in two Days and He assigned to each sky its command. And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَاقًا ۝ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِنْ تَفَاقُوتٍ ۝ فَارْجِعِ الْبَصَرَ
هَلْ مَرَأَتِ الْأَنْعَمُونَ مِنْ قُطُورٍ

67:3 (He) who created the seven skies one above the other. You will not find any imperfection in the creations of (Allah) the Most Merciful. Then you look (at them). Do you see any fissure?

اللَّهُ الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ وَمِنَ الْأَرْضِ مِثْلَهُنَّ يَتَنَزَّلُ الْأَمْرُ بَيْنَهُنَّ لِتَعْلَمُوا أَنَّ اللَّهَ
عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ وَأَنَّ اللَّهَ قَدْ أَخْاطَ بِكُلِّ شَيْءٍ عِلْمًا

65:12 (It is) Allah who created seven skies and similarly from the earth. (Allah's) command descends into their midst to make it known to you that Allah has power over all things and that Allah indeed encompasses all things in (His) knowledge.

أَمْ تَرَوْا كَيْفَ خَلَقَ اللَّهُ سَبْعَ سَمَاوَاتٍ طِبَابًا وَجَعَلَ الْقَمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ
سِرَاجًا

71:15-16 Do you not see how Allah has created seven skies one above another, and made the moon a light in their midst and made the sun a lamp?

The revelation of seven skies has been rather misunderstood. Many scholars interpret it as the stratification of Earth's atmosphere. Earth's atmosphere is also found to have been layered. The principal five layers from the surface of the earth upwards are troposphere, stratosphere, mesosphere, thermosphere and exosphere (above 350-800 km depending on the solar activity). There are also other layers within the principal layers suggested based on certain properties. Ozone layer, ionosphere, etc., are examples.

The Quranic revelation of seven skies denotes stratification of the entire cosmic space surrounding the earth. It is that space which is mentioned as the sky in verses 41:9-12 and 2:29 quoted above. It is that space, which is organized into seven layers or strata one above the other (see Fig. 4.3) and not the Earth's atmosphere. The revelation of stratification of cosmic space into seven layers provides the organizational design of the whole universe. The subject has not been studied scientifically in the light of the Quranic revelation. This is another area requiring the attention of astrophysicists.

d) Extraterrestrial distribution of organisms

Allah informs us about the creation and distribution of organisms not only on the earth but also in other regions of the universe.

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَمَا بَثَّ فِيهِنَّ مِنْ ذَائِقَةٍ ۚ وَهُوَ عَلَىٰ جَمْعِهِنْ إِذَا
يَشَاءُ قَدِيرٌ

42:29 And among His signs is the creation of the skies and the earth and the organisms He distributed in both of them. And He has power to gather them together when He feels so.

A lot of work is now being conducted to find out whether life exists anywhere in the outer space. As of today no evidence has been found to suggest there is life on any planet other than Earth.

e) Appearance of a special organism on Earth

The Quran informs us of the lack of belief of the people in the Quran and that Allah has ordained to produce an organism that will remind mankind of this fact.

وَمَا أَنْتَ بِحَادِي الْعُنْيِ عَنْ ضَلَالِهِمْ ۖ إِنْ تُسْمِعَ إِلَّا مَنْ يُؤْمِنُ بِآيَاتِنَا فَهُمْ مُسْلِمُونَ
وَإِذَا وَقَعَ الْفَوْلُ عَلَيْهِمْ أَخْرِجْنَا لَهُمْ ذَابِةً مِنَ الْأَرْضِ تُكَلِّمُهُمْ أَنَّ النَّاسَ كَانُوا بِآيَاتِنَا لَا
يُرِيقُونَ

27:81-82 And you (Prophet Muhammad) cannot guide the blind out of their straying. You can make listen only those who believe in Our verses (the Quran) submitting themselves (to Allah). And when that word comes to pass against them (i.e., the rejecters), we shall produce from the earth an organism to (face) them. It will tell them that man does not believe firmly in Our verses (the Quran).

Allah willing, with further advancement of science, the implications of these verses will also become clear.

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5. THE DIVINE MISSION WITH MAN AND UNIVERSE

What was the scenario before the creation of the universe? For what purpose Allah created the universe and man? The Quran gives answers to all these and more. Prior to the initiation of creation, Allah alone was there. He is the living, the eternal with no beginning and no end. He is the Creator with supreme unique attributes and abilities (see chapter 2). From the Quran we understand that Allah created first the angels. The creation sequence that can be deduced from the Quranic verses 2:30, 41:10-12 and 15:26-27 is: angels followed by Earth, the skies, *jinn* and lastly man.

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً ۖ قَالُوا أَجْعَلُ فِيهَا مَنْ يُفْسِدُ فِيهَا
وَيَسْفِكُ الدَّمَاءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۖ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ

2:30 Behold! Your Lord said to the angels: I am about to create a vicegerent on earth." They said: Will You place therein one who will make mischief therein and shed blood while we do chant Your praises and glorify Your holiness? He (Allah) said: I know what you do not know.

وَجَعَلَ فِيهَا رَوَاسِيَّ مِنْ فَوْقِهَا وَبَارَكَ فِيهَا وَقَدَرَ فِيهَا أَقْوَاتَهَا فِي أَرْبَعَةِ أَيَّامٍ سَوَاءٌ لِلسَّائِلِينَ
ثُمَّ اسْتَوَى إِلَى السَّمَاءِ وَهِيَ دُخَانٌ فَقَالَ لَهَا وَلِلْأَرْضِ ائْتِيَا طَوْعاً أَوْ كَرْهًا قَاتَنَا أَتَيْنَا
طَائِعِينَ فَقَضَاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَى فِي كُلِّ سَمَاءٍ أَمْرَهَا ۚ وَزَيَّنَ السَّمَاءَ
الدُّنْيَا بِمَصَابِيحٍ وَحْفَظًا ۚ ذُلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:10-12 He set on the (earth) firm mountains high above it, and bestowed blessings on the earth, and fixed therein its nourishment in four Days in accordance with (the needs of) those who seek (sustenance). Then He turned to the sky and it was smoke. He said to it and to the earth: You both come together willingly or as from compulsion. They said: We do come (together) obediently. So He completed them as seven skies in two Days and He assigned to each sky its command.

And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ صَلْصَالٍ مِّنْ حَمِيرٍ مَّسْنُونٍ وَالْجَنَّانَ خَلَقْنَاهُ مِنْ قَبْلٍ مِّنْ نَارٍ
السموم

15:26-27 Indeed We created man from sounding clay of sticky mud. And the *jinn* race We created before from the scorching fire.

Knowledge of the purpose of an object is a pre-requisite to understand it holistically in the right perspective. The understanding of the object will be imperfect and erroneous if the purpose is not known. This is true for the universe also. The knowledgebase we generate about the universe and human life in science is not only incomplete but is also misleading as it lacks information on the purpose of creation. We will be able to develop true knowledge of the universe and man only if we know the purpose of creation. We cannot arrive at the purpose of the universe through speculation and scientific experimentation. The knowledge of the purpose is with the Creator alone. He alone can provide that information. Allah reveals that information not through science but through His Book – the Quran. The Quran is the only source that reveals to us the divine purpose of creation. The atheist scientific community however argues that the universe was not created but it originated by chance with no purpose to serve. It may be reminded here that this notion is entertained by the scientific community against scientific facts (see chapter 3). The Creator addresses the atheists and unbelievers in clear harsh terms.

وَمَا خَلَقْنَا السَّمَاءَ وَالْأَرْضَ وَمَا بَيْنَهُمَا بَاطِلًا ۝ ذَلِكَ ظُنُونُ الَّذِينَ كَفَرُوا ۝ فَوَيْلٌ لِلَّذِينَ
كَفَرُوا مِنَ النَّارِ

38:27 Not without purpose did We create the sky, the earth and all in between! That is the impression of the unbelievers. So woe to the unbelievers from the (punishment of) Fire!

وَمَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا لَا عِيْنَ لَوْ أَرْدَنَا أَنْ تَنْجِدَهُوْ لَا تَنْجِدُنَا هُوَ لَا تَنْجِدُنَا هُوَ مِنْ لَدُنَنَا إِنْ كُنَّا فَاعِلِينَ

21:16-17 Not for fun did We create the skies and the earth and all that is in between! If We had intended to make a pastime, We would have made it from Ourselves; (but) by no means would We do (it)!

يَعْلَمُونَ ظَاهِرًا مِنَ الْحَيَاةِ الدُّنْيَا وَهُمْ عَنِ الْآخِرَةِ هُمْ غَافِلُونَ أَوْمَ يَتَفَكَّرُوا فِي أَنفُسِهِمْ مَا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَجْلٍ مُسَمًّى وَإِنَّ كَثِيرًا مِنَ النَّاسِ يُلْقَاءُ رَحْمَنَ لَكَافِرُوْنَ

30:7-8 They (only) know the exterior of the life of this world. And they are heedless of the Hereafter. Do they not think about themselves? Allah did not create the skies and the earth, and all in between except with truth (i.e., with purpose) for a fixed term. Yet there are many among people who deny meeting with their Lord!

وَمَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا لَا عِيْنَ مَا خَلَقْنَا هُمْ إِلَّا بِالْحَقِّ وَلَكِنَّ أَكْثَرَهُمْ لَا يَعْلَمُونَ

44:38-39 We had not created the skies, the earth and all in between as (idle) sport. We created them in truth (with purpose). But most of them do not understand.

وَمَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَإِنَّ السَّاعَةَ لَآتِيَةٌ فَاصْبَحْ الصَّقْعُ الْجَمِيلُ

15:85 We had not created the skies, the earth and all between them except for just ends. And the Hour will surely come. So you excuse (their faults) beautifully (O Prophet!).

مَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَجْلٍ مُسَمًّى وَالَّذِينَ كَفَرُوا عَمَّا أَنْذَرُوا مُعْرِضُوْنَ

46:3 We created the skies and the earth and all in between in truth (i.e., with purpose) and for a fixed term. But those who reject Faith turn away from what they are warned of.

خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحُكْمِ ۝ تَعَالَىٰ عَمَّا يُشَرِّكُونَ

16:3 He created the skies and the earth with just purpose. Far is He above the partners they ascribe to Him!

خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ بِالْحُكْمِ ۝ إِنَّ فِي ذَلِكَ لَآيَةً لِلْمُفْتَمِنِينَ

29:44 Allah created the skies and the earth with truth (i.e., with purpose). Verily in that is a sign for the believers.

Purpose of creation

Allah conveys the purpose of creating man and the universe through the following verses.

وَمَا خَلَقْتُ الْجِنَّ وَالْإِنْسَنَ إِلَّا لِيَعْبُدُونَ

51:56 I have created *jinn* and man only to serve Me.

The purpose of creating man and *jinn* by Allah is to serve Him. Allah uses the word *abd* to describe *jinn* and man. *Abd* in Arabic means servant. In computer parlance the word *abd* means robot. Way back in 1920, Karel Capek, Czech playwright, portrayed human workers as ‘robots’ (‘roboata’ in Czechoslovakian means servitude) in his play ‘Rossum’s Universal Roboters’. It is from this word, man’s latest technological marvel, robot, derives its name. Verse 51:56 reveals that man is created by Allah as His servant (*abd*). Therefore, the Arabic word *abd* technically means robot. Human beings endowed with intelligence, consciousness and freewill (freedom to take decision) are created to serve Allah as His vicegerents on planet Earth (Q. 2:30 quoted above).

The earth mentioned in verse 2:30 refers to the earth of the next permanent universe (Q. 14:48, 21:104-105) where human robots are intended to serve Allah forever. It is that earth (and not the present earth) which is described in the

Quran as the Garden (or Heaven) that will be inherited by Allah's selected human robots. See the following verses:

يَوْمَ تُبَدِّلُ الْأَرْضُ عَيْرَ الْأَرْضِ وَالسَّمَاوَاتِ ۖ وَبَرَزُوا لِلَّهِ الْوَاحِدِ الْفَهَارِ

14:48 The Day the earth will be changed to a different earth and so will be the skies, and they (human robots) will appear before Allah, the One, the Irresistible.

يَوْمَ نَطْوي السَّمَاءَ كَطَافِ السِّجْلِ لِلْكُتُبِ ۗ كَمَا بَدَأْنَا أَوَّلَ خَلْقٍ تُعِدُهُ ۗ وَعَدْنَا عَلَيْنَا
إِنَّا كُنَّا فَاعِلِينَ وَلَقَدْ كَتَبْنَا فِي الزَّئُورِ مِنْ بَعْدِ الدُّكْرِ أَنَّ الْأَرْضَ يَرِثُهَا عِبَادِي الصَّالِحِينَ

21:104-105 The Day We roll up the sky like a scroll rolled up for books! As We originated the first creation, so shall We repeat it – a promise binding on Us. Truly shall We fulfill it. Before this, We wrote in the *Zaboor* (the Book given to Prophet David) after the Reminder (*Taurat* given to Moses) that My righteous servants will inherit the earth (Heaven).

Not all human robots are going to be deployed by Allah as vicegerents on the next Earth (i.e., Heaven), but only the selected righteous human robots (Q. 21:105) will be admitted to Heaven. Since man is bestowed with freewill, he has discretionary freedom. He is at liberty to take decision himself. He can either accept Allah as his Master and obey His instructions or reject Him and His directions. This necessitates testing of human robots for their obedience to Allah prior to their deployment as His robots or servants. It is to test the human robots the present temporary universe was created by Allah.

وَهُوَ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ وَكَانَ عَرْشُهُ عَلَى الْمَاءِ لِيَسْلُوكُمْ أَيُّكُمْ
أَحْسَنُ عَمَلاً ۖ وَلَئِنْ قُلْتَ إِنَّكُمْ مُبْعُوثُونَ مِنْ بَعْدِ الْمَوْتِ لَيَقُولُنَّ الَّذِينَ كَفَرُوا إِنْ هُدَا
إِلَّا سِحْرٌ مُبِينٌ

11:7 It is He who created the skies and the earth in six days. And His Throne was over water – in order to test which of you are best in conduct. But if you tell them you will indeed be

raised up after death, the unbelievers will surely say this is nothing but obvious sorcery.

إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْشاجٍ نَبْتَلِيهُ فَجَعَلْنَاهُ سَيِّعًا بَصِيرًا

76:2 Verily We created man from a mixed drop in order to test him. So We gave him faculties of hearing and sight.

وَخَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ وَلَتُجْزَى كُلُّ نَفْسٍ بِمَا كَسَبَتْ وَهُنْ لَا يُظْلَمُونَ

45:22 Allah created the skies and the earth with truth in order to recompense every soul what it has earned. And they will not be treated unjustly.

This temporary universe serves as the infrastructure facility for conducting the human robot testing. This universe will end on completion of the test programme and a new universe will be created. The present Earth, the habitat of human beings, serves as the human robot testing laboratory. It is on Earth Allah has provided all the necessary resources and means of livelihood for a fixed term, the test period. This was revealed to Adam and Eve while they were sent to this earth following their failure in the first test in Heaven.

قَالَ اهْبِطُوا بَعْضُكُمْ لِيَعْضِ عَدُوٌ ۖ وَلَكُمْ فِي الْأَرْضِ مُسْتَقْرٌ وَمَتَاعٌ إِلَى حِينٍ قَالَ فِيهَا تَحْيَيُونَ وَفِيهَا تَمُوتُونَ وَمِنْهَا تُخْرَجُونَ

7:24-25 He (Allah) said: "You (Adam and Eve) get down with mutual enmity among yourselves. And on the earth is your dwelling place and means of livelihood for a term (fixed). He (Allah) said: "Therein shall you live and therein shall you die and from there shall you be brought out (i.e., resurrection).

وَاللَّهُ أَنْبَتَكُمْ مِنَ الْأَرْضِ نَبَاتًا ثُمَّ يُعِدُّكُمْ فِيهَا وَيُخْرِجُكُمْ إِخْرَاجًا

71:17-18 And Allah produced you from the earth in large numbers. Subsequently He returns you into it (the earth) and gets you out (from it again on the Day of Resurrection).

The present life on Earth is therefore test life for man. Allah has given this life to man as an opportunity to prove one's voluntary submission to Him by living this life in accordance with His commandments. So, it is up to the individual to live accordingly and make his test life successful. This is made amply clear in the following verse.

وَهُمْ يَصْنَعُونَ فِيهَا رَبَّنَا أَخْرِخْنَا نَعْمَلْ صَالِحًا عَيْرَ الَّذِي كُنَّا نَعْمَلْ ۝ أَوْلَمْ نُعَمِّرُكُمْ مَا يَتَدَكَّرُ فِيهِ مَنْ تَدَكَّرَ وَجَاءَكُمُ النَّذِيرُ ۝ فَلَوْفُوا فَمَا لِلظَّالِمِينَ مِنْ نَصِيرٍ

35:37 Therein (Hell) they will cry aloud (for assistance): "Our Lord! Get us out. We will do good deeds (and) not the (deeds) we were doing." (Allah will reply:) "Had We not given you long enough life to think during that (period)?" And the warner (also) came to you. So you taste (the fruit of your deeds). There is no helper for the wrongdoers.

Death marks the end of the test life of an individual. After death we will be resurrected. Everything one does during the test life is being recorded in real time. That record forms the dossier of performance of an individual. This record will be handed over to the individual on the Day of Judgement following resurrection based on which Heaven or Hell will be awarded to him.

وَكُلَّ إِنْسَانٍ أَلْرَبَّنَاهُ طَائِرٌ فِي عُنْقِهِ ۝ وَخُرُجَ لَهُ يَوْمَ الْقِيَامَةِ كِتَابًا يَلْقَاهُ مَنْشُورًا اقْرَأْ كِتَابَكَ كَفَى بِنَفْسِكَ الْيَوْمَ عَلَيْكَ حَسِيبًا

17:13-14 Every man's fate We have fastened on his own neck. On the Day of Judgment We will bring out for him a book (i.e., record or dossier), which he will find wide open. (He will be told): "You read your record; sufficient are you today to assess your account."

The earth of the next universe is the Heaven (or Garden) which Allah promised to His sincere devotees (who are successful in the test) where they will live forever.

وَقَالُوا الْحَمْدُ لِلّٰهِ الَّذِي صَدَقَنَا وَعْدَهُ وَأَوْرَثَنَا الْأَرْضَ تَبَوًءًا مِّنْ أَجْنَاحِهِ حَيْثُ شَاءُ ۖ فَقِنْعَمْ
أَجْزُءُ الْعَالَمِيْنَ

39:74 They (the successful human robots) will say: “All praises to Allah who fulfilled His promise to us and made us the inheritors of the earth (i.e., Heaven, which is the re-created earth) to dwell anywhere we like in this Garden.” How superb the reward of the (good) doers is!

In the light of these revelations, Allah’s mission may be summarized as follows. Allah created a conscious, intelligent and free-willed robot to serve Him as His vicegerent on the earth of a giant eternal universe. This free-willed robot is man. The creation of a robot system with freewill and consciousness is indicative of Allah’s intention to have a workforce that voluntarily accepts Him as the Master and submits to Him in all humility. Since man is endowed with freewill he can either accept Allah as his Master or reject Him. This necessitates testing of human beings for their voluntary submission to the will of God. Only those human robots who voluntarily accept Him as their only Master and obey His orders during the test will be selected to serve Him. The present temporary universe was therefore created by God to provide the facility for testing human robots. The present Earth is the laboratory, a simulated environment representing, in a limited sense, Heaven – the final abode promised by Allah to the successful human robots. The life of human beings on this temporary earth is the test life. During the test life the performance of each individual will be recorded in real-time. At the end of the human robot testing programme, this universe will end and the next permanent universe will be created in continuation. The human robots will be judged individually by Allah based on their test records and the successful robots will be selected to serve Him forever in Heaven (the Earth of the next universe) as His faithful vicegerents. The others will get punishment in Hell. This is briefly the divine mission.

A hypothetical example of humanoid robot testing

Man is created by Allah as His robot (servant). A robot is a programmed machine designed to perform tasks desired by its master. It is essentially a computer with three additional features namely, sensors (which receive data from the environment), microprocessors (which transform data into information) and actuators (or muscles, which control the energy requirement). Much progress has been made in the field of robotics. Humanoid robot capable of walking, running, playing, climbing, etc. has been developed (Fig. 5.1).



Fig. 5.1 Honda Asimo robot

Source: <http://en.wikipedia.org/wiki/ASIMO> Accessed August 5, 2012.

The robots are programmed dedicated systems that can be put to work not only in factories and other places of interest

but also in hostile environments where man dreads to tread. The so-called humanoid robot, an artificial biosystem, which can move, sense and work based on a software is nowhere near the human biosystem in features and capabilities. The man-made robot system is comparable with an animal biosystem. Human biosystem is far beyond this level of sophistication. An artificial biosystem like robot can mimic man if it can learn (converting data into information consciously), speak, feel (emotions, pain, etc.) and most of all, take decisions and act on its own. As of today, man has not met his artificial counterpart.

Nevertheless, consider a hypothetical situation wherein man did succeed (God willing) in developing a humanoid robot system. Let us say, the system was developed to work in certain special environments like hospital, planet, etc. Since the system is provided with freewill, it is imperative that man tests not only its electronic and mechanical efficiencies but also its preparedness to obey its master and act willingly in the interest of its master. Needless to say, the obedience of the system to its master (man) and its wilful submission to him during the test period form the most crucial criteria for judging its worth and acceptability. This would necessitate real-time logging of the activities of the robot during its test period for evaluation later.

A genuine question may be asked in this context. That is, if the robots are programmed to obey their master, they would have functioned as slaves and thus obviated the need of testing. The question is justifiable only in human context because man is a created system and not creator. Creator is one who is not created but creates everything. The Creator alone can have ego and not the created. Any programmed system without freewill can act only as it is programmed. The entire universe with all its nonliving and living components excepting man is such a system. A ‘programmed obedience’ is quite different from the wilful voluntary obedience because in the latter case, the system is consciously admitting the authority and power of its master thereby satisfying the master’s ego. To

that end Allah created the intelligent, conscious and free-willed human robot system. *Jinn* (Q. 15:26-27, 51:56 quoted above) is another. Being the Creator, Omniscient and Omnipotent (see chapter 2), Allah creates anything of His choice. That is Creator's prerogative, which is amply made clear in the following verses.

لِلَّهِ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ ۝ يَخْلُقُ مَا يَشَاءُ ۝ يَهْبُطُ لِمَنْ يَشَاءُ إِنَّا نَوَيْهَبُ لِمَنْ يَشَاءُ الدُّجُورَ

42:49 “To Allah belongs the dominion of the skies and the earth. He creates what He likes...”

وَرُبُّكَ يَخْلُقُ مَا يَشَاءُ وَيَخْتَارُ ۝ مَا كَانَ لَهُمُ الْحِيْرَةُ ۝ سُبْحَانَ اللَّهِ وَتَعَالَىٰ عَمَّا يُشْرِكُونَ

28:68 Your Lord creates what He pleases and He chooses. They (i.e., the created) have no choice (in any matter). Glory to Allah and so elevated is He above the partners they ascribe (to Him)!

Coming back to the hypothetical humanoid robot testing by man, ideally the humanoid robots should be tested in a simulated environment corresponding to that of their future place of work where they will be deployed. For instance, if the humanoid robot is intended for use in underground mines, the robot should be designed to suit that environment, and the test laboratory should be similar to the mine environment. Further, the laboratory should provide all the necessary amenities and facilities for the sustenance of the robots during the entire test period. It is also important to convey to them by man the objectives of the test and what man expects from them. Man should also formulate for them rules and code of conduct for maintaining social harmony, justice and peace during the test period. The instructions and rules formulated by man as guidance to his test subjects during the test period are essentially what constitute their religion. The most efficient and effective method of conveying the religious messages

would be through representatives selected from among the robots themselves.

Besides, man should also teach the robots how to use the facilities provided in the laboratory, how to utilise the raw materials available there for making things useful to them, how to repair the components and gadgets provided in the laboratory as well as their own repair. This knowledge would constitute their science and technology. The scientific and technological knowledge can also be transmitted to them through selected robots (i.e., scientists).

During the test period, man will be evaluating the performance of the robots on individual basis. Besides monitoring the activities of the robots, the activities of each robot can also be recorded in its memory. The memory storage thus forms the record of its performance during the test period which can be evaluated later by man. Only those who are found to have obeyed his instructions will be selected for serving him. This example of testing a hypothetical free-willed humanoid robots by man will help understand the mission of Allah with man and the universe He created.

Islam, Muslim and test of man

In this context, every individual should know what is Islam, who is Muslim, and why man alone is tested by Allah and not any other of His creations? These are some of the fundamental questions pertaining to Allah's religion and human life on this earth. All these issues have been explained in the Quran, which can be convincingly understood with the help of science.

Allah's creations are systems that function in accordance with His instructions or more correctly, divine programs.

فَقَضَاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَىٰ فِي كُلِّ سَمَاءٍ أَمْرَهَا ۝ وَرَبَّنَا السَّمَاءَ
الَّذِيَا مِصَابِيحَ وَحْفَظًا ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:12 So He completed them as seven skies in two Days and He assigned to each sky its command (program). And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

It can be inferred from the verse that both nonliving and living components of the universe work as per the divine instructions carried in them. Scientifically, we may explain these instructions as chemical information encoded by the chemical structures of nonliving things, and biological information (biological program) stored on the cell chromosomes of the living beings. The subject is discussed in detail in chapters 7 and 9.

Let us now consider the Quranic verses relating to universal components other than man (Q. 16:48-50; 30:26, 7:54, 13:15, 28:68).

أَوْمَّ يَرْبُوا إِلَىٰ مَا خَلَقَ اللَّهُ مِنْ شَيْءٍ يَسْتَغْيِلُ ظَلَالَهُ عَنِ الْيَمِينِ وَالشَّمَائِلِ سُجَّدًا
لِلَّهِ وَهُمْ دَاخِرُونَ وَلِلَّهِ يَسْجُدُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مِنْ ذَائِبٍ وَالْمَلَائِكَةُ وَهُمْ لَا
يَسْتَكِبُرُونَ يَخَافُونَ رَبَّهُمْ مِنْ فَوْقِهِمْ وَيَعْلَمُونَ مَا يُؤْمِنُونَ

16:48-50 Do they not look at things Allah created? Their shadows tilt towards right and left prostrating to Allah in humility. And to Allah prostrate all living things in the skies and in earth, and the angels. And they are not arrogant. They all fear their Lord above them and they function as they are instructed (i.e., as programmed).

وَلَهُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ ۝ كُلُّهُ لَهُ قَانِتُونَ

30:26 To Him belongs every being that is in the skies and the earth. All are subservient (i.e., functioning as programmed) to Him.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ يُعْشِي
اللَّيْلَ النَّهَارَ يَطْلُبُهُ حَيْثُنَا وَالشَّمْسَ وَالْقَمَرَ وَالنُّجُومَ مُسَحَّرَاتٍ بِأَمْرِهِ ۝ أَلَا لَهُ الْخَلْقُ
وَالْأَمْرُ ۝ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ

7:54 Your Lord is Allah who created the skies and the earth in six days, and then was seated on the Throne (of Authority). He draws the night as veil over the day each seeking the other in rapid succession. He created the sun, the moon and the stars (all) obeying His command (instructions or programs). Are not the creation and command His? Blessed be Allah, Lord of the worlds!

وَلَلَّهِ يَسْجُدُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ طَوْعًا وَكَرْهًا وَظِلَالُهُمْ بِالْعَدْوِ وَالْأَصَابِ

13:15 To Allah prostrate whoever there is in the skies and in the earth obediently and compulsorily (i.e., programmed behaviour) and (so do) their shadows in the mornings and evenings.

وَرُولُكَ يَخْلُقُ مَا يَشَاءُ وَخَتَارٌ ۝ مَا كَانَ لَهُمُ الْخِيَرَةُ ۝ سُبْحَانَ اللَّهِ وَتَعَالَىٰ عَمَّا يُشَرِّكُو

28:68 Your Lord creates what He pleases and He chooses. They (i.e., the created) have no choice (in any matter). Glory to Allah and so elevated is He above the partners they ascribe (to Him)!

These revelations indicate that every component of the universe including living species other than man was created by Allah as fully subservient system with absolutely no freedom to act on their own. They in fact form part and parcel of the infrastructure facility and resources created for testing man (discussed in detail in chapter 13). They are totally programmed dedicated systems like our current breed of robots. They all function as programmed by Allah.

أَفَعَيْرُ دِينَ اللَّهِ يَبْعُونَ وَلَهُ أَسْلَمَ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ طَوْعًا وَكَرْهًا وَإِلَيْهِ يُرْجَعُونَ

3:83 Do they seek (a religion) other than the religion of Allah while all creatures in the skies and the earth have

obediently and compulsorily submitted to His Will and they all shall be brought back to Him?

Verse 3:83 declares that Allah's religion Islam means Allah's instructions, which every creature obeys. Therefore, Islam can be defined as Allah's instructions for His creations. Muslim can be defined as the one who obeys Allah's instructions. Accordingly, we find all the living and nonliving components of the universe as indicated in the verses quoted above are Muslims. Islam is thus the natural religion for the created. In other words, they all follow Allah's religion Islam meaning they all function in accordance with His instructions submitting to Allah. This indicates they are totally programmed systems. They cannot disobey Allah because they are not endowed with freedom to act on their own. In contrast to that, man is bestowed with freedom to take decision and act. And hence, not all human beings obey His instructions (given in the Scriptures prescribed for the people of different times. For us it is the Quran) and submit to Him. This is made clear in the following verse.

أَمْ تَرَ أَنَّ اللَّهَ يَسْجُدُ لَهُ مَنْ فِي السَّمَاوَاتِ وَمَنْ فِي الْأَرْضِ وَالشَّمْسُ وَالْقَمَرُ وَالثُّجُودُ
وَالجِبَالُ وَالشَّجَرُ وَالدَّوَابُ وَكَثِيرٌ مِّنَ النَّاسِ ۝ وَكَثِيرٌ حَقٌّ عَلَيْهِ الْعَذَابُ ۝ وَمَنْ يُهِنَّ اللَّهُ
فَمَا لَهُ مِنْ مُكْرِيمٍ ۝ إِنَّ اللَّهَ يَفْعَلُ مَا يَشَاءُ

22:18 Did you not see that whoever in the skies and whoever in the earth, the sun, the moon, the stars, the mountains, the trees, the animals and a large number of human beings prostrate to Him? But a large number (of men also) deserve punishment. Whoever Allah disgraces, none will be there to honour him. Allah does what He intends.

This verse indicates that man alone is given freewill and no other component of the universe. Therefore he can either choose to obey Allah or ignore Him. It is this fact that Allah points out in the verse. Not all human beings are obedient and subservient to Him but only some of them. This in fact

necessitates testing of human beings. The part of human biosystem that is bestowed with discretionary freedom or freewill is *qalb* (see chapter 11). What Allah expects from human beings is that they should all become Muslims (subservient to Allah) voluntarily by obeying His instructions, the Quran.

We find every message in the Quran is centred round this divine mission of human robot testing. The universe and the human biosystem have built-in programs and mechanisms to accomplish the divine mission automatically. The entire mission is carried out by Allah in a totally programmed manner. This aspect is very important to comprehend the Quranic revelations relating to the universe. The universe is natural computer system designed, programmed and created by Allah to meet the divine purpose of human robot testing. We will find the created systems match perfectly with the divine mission. This matching is another confirmatory evidence of the divinity of the Quran and existence of God. The physical universe and human life should be studied and understood from the divine perspective. That approach alone will yield true knowledge. It will be then will we find the pieces of the great puzzle – man and the universe – start falling in place.

6. ORIGIN OF ENERGY AND THE PROCESS OF CREATION

There are several phenomena that remain undefined and unexplained in science. These include energy, process of creation, self-propelled self-regulated functioning of the universe, phenomena of life and death, human mind, human memory, etc. All these phenomena can be understood and explained in the light of the Quranic revelations. Scientists have been trying to understand these phenomena over the past several decades but to no avail. The reason for their failure is that these phenomena cannot be understood by testing hypotheses through experiments. These can be understood only in conjunction with relevant Quranic revelations. Application of the Quran is necessary to understand these phenomena.

Energy

The universe may be described as a system in which energy in diverse matter and non-matter forms is distributed in space. No one knows the nature of this fundamental entity called ‘energy’. Matter is basically anything that has mass. Non-matter energy exists in various forms namely, heat (thermal), light (radian), mechanical, electrical, chemical, and nuclear. Energy is also categorized as stored (potential) energy and working (kinetic) energy. For example, the energy from the food we eat is stored in our body as chemical energy until we use it. Much of the energy we use for various purposes comes from non-renewable sources such as fossil fuels (coal, oil and gas). Renewable energy sources include solar power, wind power and hydroelectric power. From a holistic point of view, the universal system can be looked at as manifestations of energy in diverse forms. But the fundamental nature of energy remains unknown in science.

According to Richard Feynman (italics added), “It is important to realize that in physics today, we have *no knowledge of what energy is*. We do not have a picture that energy comes in little blobs of a definite amount.” [1]. David Rose states: “(It) is an abstract concept invented by physical scientists in the nineteenth century to describe quantitatively a wide variety of natural phenomena.” [2]. For practical purposes we define energy in terms of its manifested characteristics. A well-known definition of energy is that given by Dave Watson: “Energy is a property or characteristic (or trait or aspect?) of matter that makes things happen, or, in the case of stored or potential energy, has the “potential” to make things happen.” [1]. Obviously, it is not through science Allah reveals to us what energy is but through the Quran. The Quranic verses relating to the process of creation provide this information.

Allah – the Creator, the Programmer

Allah created everything in the universe from just one entity – energy. The process of creation has been long since perceived as “creation from nothing” (*creatio ex nihilo*). The “nothing” must be something that is intangible to us. At several places in the Quran Allah informs us that for creating a thing, Allah only has to say “Be to it” (Q. 2:117). It is this revelation that holds the key to understanding the process of creation.

بِدِينُ السَّمَاوَاتِ وَالْأَرْضِ ۖ وَإِذَا قَضَىٰ أَمْرًا فَإِنَّمَا يَقُولُ لَهُ مُنْ فَيَكُونُ

2:117 To Him is due the primal origin of the skies and the earth. When He decides a matter, He says to it, “Be”; then it comes into being.

It is pertinent to note here that Allah says “Be” to the thing He is going to create. This means that the thing Allah is going to create is already there with Him in a form intangible (*ghayb*) to man. This intangible (or invisible) entity may be considered as “energy”. The Quran also tells us what the energy is and how it originates.

إِذْ قَالَتِ الْمَلَائِكَةُ يَا مَرْيَمُ إِنَّ اللَّهَ يُبَشِّرُكِ بِكَلِمَةٍ مِّنْهُ أَسْمَهُ الْمَسِيحُ عِيسَى ابْنُ مَرْيَمَ وَجِيهًا فِي الدُّنْيَا وَالآخِرَةِ وَوَمِنَ الْمُقْرَبَينَ

3:45 Behold! The angels said: “O Mary! Allah gives you glad news of a Word (*kalimat*) from Him. His name will be Jesus Christ son of Mary, held in honour in this world and in the Hereafter and one of those nearest to Allah.

إِنَّمَا قَوْنَا لِشَيْءٍ إِذَا أَرْدَنَاهُ أَنْ تَقُولَ لَهُ كُنْ فَيَكُونُ

16:40 It is only Our Word (*qawlu*) for anything. When We intend anything, We only say to it “Be” and then it comes into being.

حَقَّى إِذَا جَاءَ أَمْرُنَا وَفَارَ الشُّعُورُ قُلْنَا احْمِلْنَاهُ فِيهَا مِنْ كُلِّ زَوْجَيْنِ اثْنَيْنِ وَأَهْلَكَ إِلَّا مَنْ سَبَقَ عَلَيْهِ الْقَوْلُ وَمَنْ آمَنَ حَقَّ وَمَا آمَنَ مَعَهُ إِلَّا قَبِيلٌ

11:40 Thus when Our command came and the fountains of the earth gushed forth, We said (to Prophet Noah): “Embark therein, of each kind two, male and female, and your family except those (among your family) against whom the Word has already gone forth, and the believers. And there were only a few believers with him.

وَقَبِيلٌ يَا أَرْضُ ابْلَعِي مَاءَكِ وَيَا سَكَاءَ أَفْلَاعِي وَغِيَضَ الْمَاءِ وَفُضِيَّ الْأَمْرِ وَاسْتَوَتْ عَلَى الْجَوْدِي ۖ وَقَبِيلٌ بُعْدًا لِلْقَوْمِ الظَّالِمِينَ

11:44 Then the Word went forth: “O earth! Swallow up your water, and O sky! Withhold (your rain). And the water receded and the matter ended. The Ark (Prophet Noah’s Ark) rested on Mount Judi, and the Word went forth: “Curse to the wrongdoers!”

قَبِيلٌ يَا نُوحُ اهْبِطْ سَلَامٌ مِنَّا وَبَرَكَاتٍ عَلَيْكَ وَعَلَى أُمِّهِ مِنْ مَعَكَ ۚ وَأُمُّهُمْ سُمْتَهُمْ ثُمَّ يَسْتَهُمْ مِنَّا عَذَابٌ أَلِيمٌ

11:48 The Word came: “O Noah! Get down (from the Ark) with peace from Us and blessing on you and on the communities with you. And there are some communities to

whom We shall grant pleasures (for a time) but later they will get a grievous penalty from Us.”

وَلَمَّا جَاءَ أَمْرُنَا بَخْسِيَّنَا هُوَدًا وَالَّذِينَ آمَنُوا مَعَهُ بِرَحْمَةٍ مِنَّا وَبَخْسِيَّنَاهُمْ مِنْ عَذَابٍ عَلَيْهِ

11:58 So when Our command came, We saved Hud and the believers with him by mercy from Us. We (Allah) saved them from a severe penalty.

فَلَمَّا جَاءَ أَمْرُنَا بَخْسِيَّنَا صَالِحًا وَالَّذِينَ آمَنُوا مَعَهُ بِرَحْمَةٍ مِنَّا وَمِنْ خَرْبِي يَوْمِ عِدَّةٍ إِنَّ رَبَّكَ هُوَ الْعَزِيزُ

11:66 When Our decree came, We saved Salih and the believers with him by mercy from Us and (We saved them) from the ignominy of that day. Indeed your Lord is Strong and Mighty.

فَلَمَّا جَاءَ أَمْرُنَا جَعَلْنَا عَالَيْهَا سَافِلَهَا وَأَمْطَرْنَا عَلَيْهَا حِجَارَةً مِنْ سِحْلٍ مُنْضُودٍ

11:82 Thus when Our decree came, We turned (the cities) upside down and rained down on them brimstones as hard as baked clay, spread, layer on layer –

وَلَمَّا جَاءَ أَمْرُنَا بَخْسِيَّنَا شَعَيْنَا وَالَّذِينَ آمَنُوا مَعَهُ بِرَحْمَةٍ مِنَّا وَأَخْدَتِ الَّذِينَ ظَلَمُوا الصَّيْحَةُ فَأَصْبَحُوكُمْ فِي دِيَارِهِمْ جَاثِيَّنَ

11:94 When Our decree came, We saved Shu'aib and the believers with him by mercy from Us and the (mighty) sound seized the wrongdoers. Thus by daybreak they lay with their faces down in their homes.

وَلَقَدْ أَتَيْنَا مُوسَى الْكِتَابَ فَاخْتَلَفَ فِيهِ ۝ وَلَوْلَا كَلِمَةً سَبَقَتْ مِنْ رَبِّكَ لَعَصَيْتِي بَيْنَهُمْ وَإِنَّهُمْ لَفِي شَكٍّ مِنْهُ مُرِيبٌ

11:110 We certainly gave the Book to Moses but differences arose therein. Had it not been for a Word that had gone forth before from your Lord, the matter would have been decided between them (then itself). And they are indeed in disquieting doubt about it.

وَلَوْلَا كَلِمَةً سَبَقَتْ مِنْ رَبِّكَ لَكَانَ لِرَأْمًا وَأَحَلَّ مُسَمًّى

20:129 Had it not been for a Word that went forth before from your Lord, (their punishment) would have become inevitable but there is a term fixed (for respite).

وَإِذَا وَقَعَ الْقَوْلُ عَلَيْهِمْ أَخْرَجْنَا لَهُمْ ذَابِثَةً مِنَ الْأَرْضِ ثُكَّلْمُهُمْ أَنَّ النَّاسَ كَانُوا بِآيَاتِنَا لَا يُرْقُبُونَ

27:82 And when that Word comes to pass against them (i.e., the rejecters), we shall produce from the earth an organism to (face) them. It will tell them that man did not believe firmly in Our signs (messages).

وَوَقَعَ الْقَوْلُ عَلَيْهِمْ بِمَا ظَلَمُوا فَهُمْ لَا يُنْظَفُونَ

27:85 And the Word will be fulfilled against them because of their wrongdoing and they will not be able to speak (i.e., plead) then.

وَلَقَدْ وَصَّلَنَا لَهُمُ الْقَوْلَ لَعَلَّهُمْ يَتَذَكَّرُونَ الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ مِنْ قَبْلِهِ هُمْ بِهِ يُؤْمِنُونَ
وَإِذَا يُشَ�ءُ عَلَيْهِمْ قَالُوا آمَنَّا بِهِ إِنَّهُ الْحَقُّ مِنْ رَبِّنَا إِنَّا كُنَّا مِنْ قَبْلِهِ مُسْلِمِينَ

28:51-53 And certainly We have made the Word reach them so that they remember. Those to whom We sent the Book before this, they will believe in this (i.e., the Quran). And when it (i.e., the Quran) is recited to them, they will say: “We believe in that. Indeed it is the truth from our Lord. Verily we have been Muslims even before this.

These verses reveal that it is Allah’s Word that creates everything (both living and nonliving) and every phenomenon. Allah’s Word can be therefore considered as the intangible or the *ghayb* form of energy that carries His instructions. In computer parlance instructions in the right sequence describe a program or software. Therefore Allah’s Word signifies intangible (*ghayb*) program. This is evident from verse 3:45, which tells us that Jesus Christ was created from Allah’s Word.

That means Allah's Word formed the biosoftware of Jesus Christ (see chapters 9 and 10).

The Quranic revelation that for creating a thing Allah only has to say "Be to it" (Q. 2:117; 16:40) therefore implies that divine programs (Allah's Words) for creating anything are kept with Him. A couple of verses also indicate that.

فُلَّوْ كَانَ الْبَحْرُ مِدَادًا لِكَلِمَاتٍ رَبِّيْ لَكَفِدَ الْبَحْرُ قَبْلَ أَنْ تَنْقَدَ كَلِمَاتٍ رَبِّيْ وَلَوْ جِئْنَا^{بِمِثْلِهِ مَذَادًا}

18:109 Say: If the ocean were (used as) ink (to write) the Words of my Lord, the ocean would have been exhausted before the Words of my Lord are completed, even if We bring another ocean like it as support.

وَلَوْ أَنَّمَا فِي الْأَرْضِ مِنْ شَجَرَةٍ أَقْلَامٌ وَالْبَحْرُ يَمْدُدُ مِنْ بَعْدِهِ سَبْعَةُ أَخْرٍ مَا نَفَدَتْ كَلِمَاتُ
اللَّهِ ۝ إِنَّ اللَّهَ عَزِيزٌ حَكِيمٌ

31:27 And if all the trees on earth were pens and the ocean (were ink), with seven (more) oceans behind it to add (to its supply), yet the Words of Allah will not be exhausted (in writing). Verily Allah is Mighty, Wise.

These verses reveal the existence of an infinitely large collection of Allah's Words or what can be considered as divine software base. If these verses are examined in conjunction with verse 2:117 or 16:40, it will be evident that Allah only has to give a command "Be" to the program concerned in the software base and it comes into being.

Energy may be therefore defined as Allah's Word – the entity that carries Allah's instructions. In scientific terms, energy is divine information or divine software, which has the ability to self-operate as per the divine instructions carried in it.

Energy = Allah's Word = Allah's instructions = intangible software

Allah's promise is also His Word, which will be fulfilled without fail. Allah also informs there is none or nothing that can change His Word.

وَالَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ سَنُنْدِخُهُمْ جَنَّاتٍ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا
أَبَدًا ۖ وَعَدَ اللَّهُ حَقًّا ۝ وَمَنْ أَصْدَقُ مِنَ اللَّهِ قِيَامًا

4:122 But those who believe and do good deeds, we shall admit them to Gardens with rivers flowing beneath to dwell therein forever. Allah's promise is truth. And whose word can be truer than Allah's?

لَهُمُ الْبُشْرَىٰ فِي الْحَيَاةِ الدُّنْيَا وَفِي الْآخِرَةِ ۝ لَا تَبْدِيلٌ لِكَلِمَاتِ اللَّهِ ۝ ذَلِكَ هُوَ الْفَوْزُ
الْعَظِيمُ

10:64 They have glad tidings in the life of this world and in the Hereafter. No change occurs to the Words of Allah. That is the great success.

وَلَوْ شِئْنَا لَآتَيْنَا كُلَّ نَفْسٍ هُدًاهَا وَلَكِنْ حَقَّ الْقَوْلُ مِنِّي لِأَمْلَأَنَّ جَهَنَّمَ مِنَ الْجِنَّةِ وَالنَّاسِ
أَجْمَعِينَ

32:13 If We had so willed, We would certainly have brought every soul its true guidance; but the Word from Me (that) I will fill Hell with *jinn* and man all together has come true.

فَحَقٌّ عَلَيْنَا قَوْلُ رَبِّنَا ۝ إِنَّا لَدَائِمُونَ

37:31 Then the Word of our Lord (about the Day of Judgement) proved true on us that we will indeed taste (the punishment).

وَلَقَدْ سَبَقْنَا كَلِمَتَنَا لِعِبَادَنَا الْمُرْسَلِينَ إِنَّهُمْ لَهُمُ الْمُنْصُرُونَ وَإِنَّ جُنْدَنَا لَهُمُ الْعَالَيُونَ

37:171-173 Already Our Word has gone to our messenger servants (i.e., prophets) before (this) – that they will certainly be helped and certainly Our army will be the victors.

كَذَّبُتْ قَبْلَهُمْ قَوْمٌ بِنُوحٍ وَالْأَخْرَابُ مِنْ بَعْدِهِمْ ۖ وَهَمْتْ كُلُّ أُمَّةٍ بِرَسُولِهِمْ لِيَأْخُذُوهُ ۖ وَجَاءُوا بِالْبَاطِلِ لِيُدْحِصُوا إِلَيْهِ الْحَقَّ فَأَخْدَثُهُمْ ۖ فَكَيْفَ كَانَ عِقَابٌ وَكَذِيلَ حَتَّىٰ
كَلِمَتُ رَبِّكَ عَلَى الَّذِينَ كَفَرُوا أَنَّهُمْ أَصْحَابُ النَّارِ

40:5-6 Before them, people of Noah and (several) Confederates after them (i.e., Noah's people) had denied (Allah's signs). And each people had tried to seize their apostle and disputed by fraudulent means to annihilate the truth (i.e., Allah's revelation). Then I (Allah) seized them. (See) how (terrible) My requital was! Thus the Word of your Lord is confirmed on the unbelievers that they are indeed the companions of Fire!

وَلَقَدْ آتَيْنَا مُوسَى الْكِتَابَ فَاخْتَلَفَ فِيهِ ۗ وَلَوْلَا كَلِمَةً سَبَقَتْ مِنْ رَبِّكَ لَعَظِيْبِي بَيْنَهُمْ ۚ
وَإِنَّهُمْ لَفِي شَكٍّ مِنْهُ مُرِيبٌ

41:45 We certainly gave the Book to Moses but differences arose therein. Had it not been for a Word that had gone forth before from your Lord, the matter would have been decided between them. And they are indeed in disquieting doubt about it.

وَمَا تَعْرَفُوا إِلَّا مِنْ بَعْدِ مَا جَاءَهُمُ الْعِلْمُ بَعْدًا بَيْنَهُمْ ۗ وَلَوْلَا كَلِمَةً سَبَقَتْ مِنْ رَبِّكَ إِلَى
أَجْلِ مُسَمَّى لَعَظِيْبِي بَيْنَهُمْ ۚ وَإِنَّ الَّذِينَ أُورِثُوا الْكِتَابَ مِنْ بَعْدِهِمْ لَفِي شَكٍّ مِنْهُ مُرِيبٌ

42:14 They divided only after knowledge reached them because of the enmity among themselves. Had it not been for a Word that went forth before from your Lord (allowing) for a fixed term (respite), the matter would have been settled among them. And those who inherited the Book after them are indeed disquietingly suspicious about it.

أَمْ هُمْ شُرَكَاءُ شَرَعُوا لَهُمْ مِنَ الدِّينِ مَا لَمْ يَأْذِنْ بِهِ اللَّهُ ۗ وَلَوْلَا كَلِمَةُ الْفُضْلِ لَعَظِيْبِي
بَيْنَهُمْ ۚ وَإِنَّ الظَّالِمِينَ كُلُّهُمْ عَذَابٌ أَلِيمٌ

42:21 Do they have partners (i.e., gods) who legalized for them what Allah has not permitted in the religion. Had it not

been for the Word of decision, the matter would have been settled between them (at once). Verily the wrongdoers have a painful penalty.

مَا يُبَدِّلُ الْقَوْلُ لَدَيْ وَمَا أَنَا بِظَلَامٍ لِلْعَبْدِ

50:29 My Word shall not be changed nor am I in the least unjust to (My) servants.

Divine process of creation

In the light of the above Quranic revelations, the process of creation can be explained in terms of *ghayb-shahadat* paradigm.

The Quran reveals existence of things in two forms from the point of view of human sensory perception. These are the intangible (*ghayb*) form that cannot be perceived by man and the manifest (*shahadat*) form that is perceptible to man. Allah alone knows both.

هُوَ اللَّهُ الَّذِي لَا إِلَهَ إِلَّا هُوَ ۖ عَالَمُ الْغَيْبِ وَالشَّهَادَةِ ۖ هُوَ الرَّحْمَنُ الرَّحِيمُ

59:22 He is Allah. There is no God but He, knower of the invisible (*ghayb*) and the manifest (*shahadat* or visible). He is the Beneficent, the Merciful.

وَهُوَ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ ۖ وَيَوْمَ يَقُولُ كُنْ فَيَكُونُ ۖ قَوْلُهُ الْحَقُّ ۖ
وَلَهُ الْمُلْكُ يَوْمَ يُنَفَّخُ فِي الصُّورِ ۖ عَالَمُ الْغَيْبِ وَالشَّهَادَةِ ۖ وَهُوَ الْحَكِيمُ الْحَمِيرُ

6:73 It is He who created the skies and the earth in truth. On the day He says “Be”, it comes into being. His Word is the truth. His will be the dominion on the Day the trumpet will be blown. He is the knower of the invisible and the visible. And He is the Wise, well acquainted (with all things).

وَقُلْ اعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ ۖ وَسَتُرَدُّونَ إِلَى عَالَمِ الْغَيْبِ
وَالشَّهَادَةِ فَيُبَيَّنُكُمْ إِمَّا كُنْتُمْ تَعْمَلُونَ

9:105 And say: You work. Allah, His messenger and the believers will observe your work. And you will be brought back to the Knower of the invisible and the visible. Then He will explain to you what you had been doing.

عَالِمُ الْغَيْبِ وَالشَّهَادَةِ الْكَبِيرُ الْمُتَعَالٌ

13:9 He knows the invisible and the visible. He is the Great, the Most High.

فَلَمَّا يَعْلَمُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ الْغَيْبِ إِلَّا اللَّهُ ۝ وَمَا يَشْعُرُونَ أَيَّانَ يُبَعْثُرُونَ

27:65 Say: None in the skies or in the earth knows the unseen except Allah nor do they know when they shall be raised up (for Judgment).

ذَلِكَ عَالِمُ الْغَيْبِ وَالشَّهَادَةِ الْغَيْبِ الرَّحِيمُ

32:6 He (alone) knows the hidden and the visible, the Mighty, the Merciful.

All things, whether created or not, exist with Allah in the form of intangible energy or programs (i.e., energy in *ghayb* form), which are nothing but His Words, in the divine software base. When Allah wants to create a thing, He gives the command “Be” to the software concerned and it transforms itself into *shahadat* form, which is tangible to human being. It is this transformation of the intangible (*ghayb*) form of energy into tangible (*shahadat*) form that can be construed as the process of creation. Thus the “it” in the statement “When He decides a matter, He says to *it*, “Be”, then *it* comes into being” given in several verses quoted above indicates the intangible software of the thing Allah wants to create. Allah only has to say “Be” to “it”; i.e., to the intangible software (which is nothing but Allah’s Word, the *ghayb* form of energy). Then that intangible energy (software) will transform itself into the form tangible (*shahadat*) to human beings.

The *ghayb-shahadat* dichotomy is relevant only in human context. God knows everything (*ghayb* and *shahadat*

forms). A form of energy can be considered tangible only if human mind can process it in accordance with the biosoftware (see the computer model of human biosystem discussed in chapter 11). Thus the tangibility of energy is human biosoftware-dependent. Allah created human biosoftware in such a way that man perceives the world the way Allah wants him to perceive.

The Quranic statement “Be and it is” is roughly the human version of “getting things done at the press of a key on the computer keyboard or by the click of a mouse”. When we click the mouse or press a key on the keyboard we are in effect activating a program for execution. For example, in the computer the print program is available. By clicking ‘print’ we are actuating the program to print a document. The computer produces the printout (hardcopy) of the document. The document was there in the computer memory in the form of intangible energy (*ghayb* or invisible form) but it was transformed into tangible form (i.e., hardcopy of the document) by the computer. This means that the hardcopy produced is in a form that is visible to man. This is an illustration of how intangible information is transformed into tangible material. This analogy can be further examined in the light of a possible future computer version. Human-computer interaction is a fast developing field wherein several kinds of interface between man and the machine are studied. It also includes development of human voice recognition software that will enable us to orally give instructions to a computer (or a robot) for performing a desired task. In the foreseeable future (Allah willing) we will be giving commands to our machines orally rather than through keyboard or mouse. Thus, when we orally give command to a voice-recognizing computer to print a message, the machine will perform the task using appropriate program and produce its hardcopy (*shahadat* form). That technology will be more or less the artificial counterpart of divine creation process conveyed through the Quran. The difference between Allah’s creation process and the artificial

creation illustrated in this example is that the latter requires a computer to do the transformation from the intangible to tangible. In the case of divine creation, Allah's Word has the innate ability to transform itself into the tangible form when Allah gives the command "Be" to it.

Teleportation is another phenomenon that illustrates the principle of creation process. It demonstrates how an object can be transported to a distant location as information, which then materializes into the object at the designated location. There is sufficient indication in the Quran that the *jinn* species is bestowed with the ability of teleportation. *Jinn* was created by Allah from the flame of fire (Q. 55:15) indicating that *jinn* is basically light or electromagnetic radiation.

وَخَلَقَ الْجِنَّاتِ مِنْ مَارِجِ مِنْ نَارٍ

55:15 And He created *jinn* from the flame of fire.

The Quran further indicates that *jinns* can appear themselves before man. This is very much evident from the revelations about appointing *jinns* by Allah as soldiers (Q. 27:17) and workers (Q. 34:12-13) to Prophet Solomon who was also a king.

وَحُشِرَ لِسُلَيْمَانَ جِنُودُهُ مِنْ الْجِنِّ وَالْإِنْسَ وَالظَّيْرِ فَهُمْ يُوزَعُونَ

27:17 And for Solomon, soldiers were gathered from *jinn* race, mankind and birds, and they were all kept under control.

وَلِسُلَيْمَانَ الرِّيحَ غُدُوْهَا شَهْرٌ وَرَوَاحُهَا شَهْرٌ وَأَسْلَنَا لَهُ عَيْنَ الْفَطْرِ وَمِنْ الْجِنِّ مَنْ يَعْمَلُ
بَيْنَ يَدَيْهِ بِإِذْنِ رَبِّهِ وَمَنْ يَغْرِي مِنْهُمْ عَنْ أَمْرِنَا ثُقُوفَةٌ مِنْ عَدَابِ السَّعِيرِ يَعْمَلُونَ لَهُ مَا يَشَاءُ
مِنْ مَحَارِبٍ وَمَأْنِيلٍ وَجَهَانِ كَالْجَوَابِ وَقُدُورٍ رَّاسِيَاتٍ اعْمَلُوا آلَ دَاؤُودَ شُكْرًا وَقَلِيلٌ مَنْ
عِبَادِي الشَّكُورُ

34:12-13 And (We gave) the wind to Solomon. Its morning course was a month's (journey) and its evening course was a month's (journey). And We made a fountain of molten copper to flow for him. And there were *jinns* who worked for him by

the command of his Lord and if any of them turned away from Our command, We would make him (the *jinn*) suffer the penalty of the Blazing Fire. They made for him what he wanted – arches, statues, basins as large as reservoirs, and sturdy vessels. (Allah ordered:) “O followers of David, be thankful.” But only a few of My servants are grateful!

When Prophet Solomon wanted to remove the throne of the queen of Saba from her palace and bring it to him (Q. 27:38), it was a *jinn* who told him that he would do it in a jiffy “before you get up from your position” (Q. 27:39) or “before your gaze returns to you” (Q. 27:40).

فَالَّذِي أَنْتَ مُحَمَّدٌ يَأْتِينِي بِعَرْشِهَا قَبْلَ أَنْ يَأْتُونِي مُسْلِمِينَ

27:38 He asked: “O chiefs! Who among you can bring me her (Saba queen’s) throne before they come to me as Muslims?”

فَالَّذِي عَفَرْتُ مِنَ الْجِنِّ أَنَا آتِيكَ بِهِ قَبْلَ أَنْ تَقُومَ مِنْ مَقَامِكَ وَإِنِّي عَلَيْهِ لَهُوَ أَمِينٌ

27:39 A brave from the *jinns* said: “I can bring it to you before you get up from your position. Indeed I have the power for that and (you can) trust me.”

فَالَّذِي عِنْدَهُ عِلْمٌ مِنَ الْكِتَابِ أَنَا آتِيكَ بِهِ قَبْلَ أَنْ يَرْتَدَ إِلَيْكَ طَرْفَكَ فَلَمَّا رَأَهُ مُسْتَقِرًا
عِنْدَهُ قَالَ هَذَا مِنْ فَضْلِ رَبِّي لَيْلَوْنِي أَشْكُرُ أَمْ أَكُفُّرُ وَمَنْ شَكَرَ فَإِنَّمَا يَشْكُرُ لِنَفْسِهِ وَمَنْ
كَفَرَ فَإِنَّ رَبِّي عَنِي كَرِيمٌ

27:40 One who had knowledge of the Scripture said: “I can bring it to you before your gaze returns to you.” Thus when Solomon saw it placed near him, he said: “This is from the mercy of my Lord to test me whether I am grateful or ungrateful. Whoever shows gratitude (to Allah), truly he is showing gratitude for himself. And whoever shows ingratitude, truly my Lord is free of all wants, Honourable!”

Evidently the *jinn* was able to do it at lightning speed because of their electromagnetic nature. This can be explained as follows. The *jinn* travels as information in the form of light

(intangible to man) and materializes at the destination to make his appearance (*shahadat*) before man. The whole episode can thus be interpreted as teleportation phenomenon. The phenomenon of teleportation is further discussed in the context of creation of Prophet Jesus Christ in the womb of Virgin Mary and also while explaining the origin of biological information on Earth (see chapters 9 and 10).

References

1. <http://www.ftexploring.com/energy/definition.html>
Accessed on February 2, 2007.
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7. THE UNIVERSE – DIVINE EXPERT SYSTEM

Physical, chemical and biological sciences at best explain to us and provide information on properties of various forms of energy and matter. There are, however, certain fundamental questions about the universe that remain unresolved. Some of these are: a) origin of chemical structures with specific properties, b) origin of rules and laws in the physical, chemical and biological segments of the universe, c) interconnectivity and coordination of the universal components to function as a single system, and d) origin of natural processes and mechanisms. These are some of the most difficult riddles to human intellect. Strictly speaking these issues are beyond the realms of science. Self-regulated functioning of natural systems, occurrence of natural cycles, and spontaneity of physical, chemical and biological reactions and processes do indicate the existence of a computerised set-up. It is possible to explain the various aspects of the universe considering it as a computer system. It also implies that whatever happens in this computer universe is pre-determined by Allah's program which rules out the element of chance. The 'chance' or 'accident' is merely a wishful thinking of the atheistic minds. It is in accordance with the divine program immanent in the universal components they function individually and as a whole like an expert system based on 'if-then' rules.

A computer model of the physical universe based on the Quran was proposed by me in 1998 in my book *The Divine Expert System* [1]. Its revised version *The Computer Universe: A Scientific Rendering of the Holy Quran* was published in 2006 [2]. The model describes the universe as giant computer designed, programmed and created by Allah to suit His mission. The computer model offers a new window to look at the universe and understand its self-propelled, self-sustained

and self-regulated functioning, deterministic mode of behaviour and how the components acquire their characteristic properties. A living organism is likewise treated as natural biocomputer or biorobot.

Konrad Zuse, the German scientist who built the first programmable computer was also the first to suggest in 1967 that the entire universe is being computed on a computer, possibly a cellular automaton. He referred to this as “Rechnender Raum” (“Computing Cosmos” or “Computing Space”) which in fact started the field of Digital Physics. In 2002 Prof. Seth Lloyd of Massachusetts Institute of Technology, USA, published a research paper entitled “Computational capacity of the universe” in the journal *Physical Review Letters* [3], and Stephen Wolfram of Wolfram Media, USA, published a book *A New Kind of Science* [4]. Lloyd published another book *Programming the Universe: A Quantum Computer Scientist Takes on the Cosmos* in 2006 [5]. A book entitled *Wetware: A Computer in Every Living Cell* written by Denis Bray suggesting that organism is a computer has also come out in 2009 [6]. More works on the subject are now available.

Seth Lloyd considers the universe as giant quantum computer. Quantum mechanics is weird. It treats waves as particles, and particles as waves. Things can be in two places at the same time. Quantum computers exploit “quantum weirdness” to perform tasks that are extremely complex for classical computers. Since a quantum bit or “qubit” can register both 0 and 1 at the same time unlike the classical bit (which can register only one or the other) a quantum computer can perform millions of computations simultaneously. Quantum computers process the information stored on individual atoms, electrons, and photons. According to him, all physical systems are basically quantum-mechanical and all physical systems register and process information [5].

According to John Archibald Wheeler (coiner of the term “black hole”) atoms are made up of bits of information. As he put it in a 1989 lecture, “Its are from bits.” He elaborated: “Every *it* – every particle, every field of force, even the space-time continuum itself – derives its function, its meaning, its very existence entirely from binary choices, *bits*. What we call reality arises in the last analysis from the posing of yes/no questions.” [7]. All these works based purely on science support the concept that the universe works like a computer. The computer concept of the universe is an emerging field and it is where science and the Quran are bound to meet for the simple reason the universe has to have a programmer – God.

The computer model of the universe developed in the light of the Quran is briefly discussed here. The basic change that the computer concept of the universe based on the Quran brings into our present knowledge of the universe and cosmology is that it is the divine instructions carried in energy, Allah’s Word, that represent the fundamental basis of reality.

Natural evidence supporting the concept of computer universe

The existence of natural laws and deterministic behavior of the universal components are clear evidence of a computerized set-up. The famous mathematician-physicist Pierre Simon Laplace’s doctrine of complete determinism is a tribute to the success of Galilean-Newtonian principles. According to him, the entire universe is like a clockwork mechanism – to a supremely intelligent mind with all-seeing eyes and unlimited calculating powers, the present would completely determine the future, and for that matter, the past as well [8]. Determinism became incorporated in modern science around the year 1500 A.D. with the establishment of the idea that cause-and-effect rules completely govern all motion and structure on the material level. According to the deterministic

model, the universe works like a perfect machine without deviation from the predetermined laws. It was the work of Sir Isaac Newton that firmly established determinism at the core of modern science. He demonstrated that the three laws of motion, which he advanced, could accurately predict in time the orbits of the planets around the sun, the shapes of the paths of projectiles on the earth, and the schedule of the ocean tides throughout the month and year. Newton's laws are completely deterministic because they imply that anything that happens at any future time is completely determined by what happens now, and everything that is happening now was completely determined by what happened at any time in the past. Determinism remains even today as the core philosophy and goal of physical science [9].

We cannot deny the fact that a programmed reality exists in nature. The countless number of celestial bodies of colossal size tracing their own paths in the cosmos without collision is indicative of a perfectly programmed behaviour. The gravitational forces responsible for this meticulous and amazing consistency in the peripheral motion and recurring relative positions of stars and planets do not operate in an arbitrary manner, but obey certain eternal laws prescribed by the Creator. It is because of this, we are able to formulate principles, which can reflect the natural order. What can be concluded from the success of the mathematical models and theories in the quantitative interpretation of natural phenomena is that the universe has built-in rules and regulations to enable it to function like a self-controlled and self-sustained system. Even an infinitesimal deviation from these rules will cause catastrophic effect. According to Stephen Hawking, if the electric charge of the electron had been slightly different, stars would not have been able to burn hydrogen and helium [10]. These rules and properties could not have come into existence accidentally. Instead the universe has an Authority who designed and perfected it the way it is. To quote again Stephen Hawking: "It would be very difficult to explain why the

universe should have begun in just this way, except as the act of a God who intended to create beings like us” [10]. (This statement is quoted here not to suggest his religious views).

Spontaneity is another evidence of programmed behaviour. Every natural process is a spontaneous phenomenon. Physical, chemical and biological processes are spontaneous phenomena as though the reacting species *know* how to react and what they should produce under different conditions. Their properties and mode of behaviour in diverse environments are all fixed. Evidently, divine programs are there latent in their structures.

We also find specific developmental sequence for each phenomenon. There is clear evidence of the existence of a biological (genetic) program in living organisms. This program is responsible for the development and moment-to-moment existence of a living organism. A plant develops from seed as specified in the bioprogram stored in its cells. An animal also develops similarly from the zygote. Every biological mechanism is suggestive of the sequential execution of the instructions contained in the biological program of the organism concerned.

Brains of animals are capable of storing and processing information. Human brain is the most advanced of them all. Plants also function like a computer. Leaves regulate their uptake and loss of gases by conducting simple calculations based on ‘distributed computation’ – a kind of information processing that involves communication between many interacting units. In distributed computation, signals exchanged between components of the system define the process for solving a problem [11].

The Quranic indicators of computer universe

Many verses in the Quran point to a computerized set-up of the universe. These include verses relating to the

structural components, natural mechanisms and functioning of the universe, monitoring and real-time recording of the goings-on, etc.

a) Universal components carry divine instructions

Allah tells us that the universal components have divine instructions built into their structures. That is how they function as programmed by Allah. They are therefore subservient and obedient to Allah.

فَقَصَّاصُهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَىٰ فِي كُلِّ سَمَاءٍ أَمْرَهَا ۝ وَرَبَّنَا السَّمَاءَ الدُّنْيَا
بِعَصَابِيحٍ وَحَفْظًا ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:12 So He completed them as seven skies in two Days and He assigned to each sky its command (program). And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سَتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ يُعْشِي
اللَّيْلَ النَّهَارَ يَطْلُبُهُ حَتَّىٰ وَالشَّمْسُ وَالْقَمَرُ وَالنُّجُومُ مُسَخَّرَاتٍ بِأَمْرِهِ ۝ أَلَا لَهُ الْخَلْقُ
وَالْأَمْرُ ۝ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ

7:54 Your Lord is Allah who created the skies and the earth in six days, and then was seated on the Throne (of Authority). He draws the night as veil over the day each seeking the other in rapid succession. He created the sun, the moon and the stars (all) obeying His command (instructions or programs). Are not the creation and command His? Blessed be Allah, Lord of the worlds!

اللَّهُ الَّذِي رَعَى السَّمَاوَاتِ بِغَيْرِ عَمَدٍ تَرْكَوْنَهَا ۝ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ ۝ وَسَحَرَ الشَّمْسَ
وَالْقَمَرَ ۝ كُلُّ شَجَرٍ لِأَجْلٍ مُسَمَّىٰ ۝ يُدَبِّرُ الْأَمْرَ يُفَصِّلُ الْآيَاتِ لَعَلَّكُمْ بِلِقَاءَ رَبِّكُمْ
تُرْقُونَ

13:2 It is Allah who raised the skies without any visible pillars. He then established (Himself) on the Throne. He

subjected the sun and the moon (to His law), all moving for a prescribed term. He regulates all affairs. He explains the signs in detail so that you firmly believe in the meeting with your Lord.

وَلِلَّهِ يَسْجُدُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ طَوْعًا وَكَيْنًا وَظَلَامُهُمْ بِالْمُنْدُو وَالْأَصَابِ

13:15 To Allah prostrate whoever there is in the skies and in the earth obediently and compulsorily (i.e., programmed behaviour) and (so do) their shadows in the mornings and evenings.

وَرُبُّكَ يَخْلُقُ مَا يَشَاءُ وَمَخْتَارٌ ۝ مَا كَانَ لَهُمُ الْحُرْبَةُ ۝ سُبْحَانَ اللَّهِ وَتَعَالَىٰ عَمَّا يُشَرِّكُونَ

28:68 Your Lord creates what He pleases and He chooses. They (i.e., the created) have no choice (in any matter). Glory to Allah and so elevated is He above the partners they ascribe (to Him)!

وَمَنْ آتَيْتَهُ أَنْ تَقْعُومَ السَّمَاوَاتِ وَالْأَرْضَ بِأَمْرِهِ ۝ ثُمَّ إِذَا دَعَاهُمْ دَعْوَةً مِنَ الْأَرْضِ إِذَا أَنْتُمْ
خَرْجُونَ وَلَهُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ ۝ كُلُّ لَهُ قَائِمُونَ

30:25-26 And among His signs is the existence of the skies and earth by His command (instructions or program). Then when He calls you by a single call (on the Day of Resurrection), behold you (all) come out of the earth! To Him belongs every being that is in the skies and the earth. All are subservient to Him (i.e., functioning as per His program).

وَالشَّمْسُ بَحْرٍ لِمُسْتَقَرٍ لَهَا ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ وَالْقَمَرُ قَدْرَتَاهُ مَنَازِلَ حَتَّىٰ عَادَ
كَالْغَرْجُونَ الْقَدِيمَ لَا الشَّمْسُ لَيَنْبَغِي لَهَا أَنْ تُدْرِكَ الْقَمَرَ وَلَا اللَّيْلُ سَابِقُ النَّهَارِ ۝ وَكُلُّ فِي
فَلَلِكَ يَسِيْرُونَ

36:38-40 And the sun moves on for a period determined for it. That is the decree of (Allah), the Mighty, the All-Knowing. And the moon – We prescribed for it mansions (i.e., orbits to traverse) till it returns like the old (and withered) inflorescence stalk of date palm. The sun cannot reach up to the moon and

the night cannot outstrip the day; each swims along (its own) orbit.

إِنَّ اللَّهَ يُمْسِكُ السَّمَاوَاتِ وَالْأَرْضَ أَنْ تَرْوَلَا ۝ وَلَيْنَ زَالَنَا إِنْ أَمْسَكَهُمَا مِنْ أَحَدٍ مِنْ
بَعْدِهِ ۝ إِنَّهُ كَانَ حَلِيمًا عَفُورًا

35:41 Indeed Allah holds the skies and the earth from moving away. And if they both move (away from their positions), there is none to hold them up thereafter. Verily He is Most Forbearing, Oft-Forgiving.

هُوَ الَّذِي يُصَوِّرُكُمْ فِي الْأَرْحَامِ كَيْفَ يَشَاءُ ۝ لَا إِلَهَ إِلَّا هُوَ الْعَزِيزُ الْحَكِيمُ

3:6 It is He who shapes you in the wombs as He likes. There is no God but He – the Mighty, the Wise.

اللَّهُ يَعْلَمُ مَا تَحْمِلُنَّ كُلُّ أُنْثَىٰ وَمَا تَغْيِضُ الْأَرْحَامُ وَمَا تَزَادُ ۝ وَكُلُّ شَيْءٍ عِنْدَهُ يُعْدَارٌ

13:8 Allah knows what every female (womb) bears, by how much the wombs fall short (in number) or exceed. Every thing is in accordance with a calculated measure (due proportion) with Him.

وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ ۝ كُلُّ فِلَكٍ يَسْبِحُونَ

21:33 It is He who created the night, the day, the sun and the moon. Every (celestial body) moves in its orbit.

تَبَارَكَ الَّذِي جَعَلَ فِي السَّمَاءِ بُرُوجًا وَجَعَلَ فِيهَا سِرَاجًا وَقَمَرًا مُنِيرًا

25:61 Blessed is He who made constellations in the skies and placed therein a lamp (i.e., the sun) and a shining moon.

يُولِجُ اللَّيْلَ فِي النَّهَارِ وَيُولِجُ النَّهَارَ فِي الْأَلَيْلِ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ كُلُّ يَجْرِي لِأَجْلٍ
مُسَمَّىً ۝ دِلِكُمُ اللَّهُ رَبُّكُمْ لَهُ الْمُلْكُ ۝ وَالَّذِينَ تَدْعُونَ مِنْ دُونِهِ مَا يَمْلُكُونَ مِنْ قِطْمَبِ

35:13 He merges night into the day and He merges day into the night. He has subjected the sun and the moon (to His Law), each running its course for a fixed term. That is Allah, your Lord. To Him belongs all dominion. And those whom you

invoke besides Him have not even the control over a date-stone skin.

سَبِّحْ اسْمَ رَبِّكَ الْأَعْلَى الَّذِي خَلَقَ فَسَوَّى وَالَّذِي قَرَّرَ فَهَدَى

87:1-3 Glorify the name of your Guardian Lord, most high, who created and further gave order and proportion, who ordained laws and granted guidance.

أَوْلَمْ يَرَوُا إِلَى مَا خَلَقَ اللَّهُ مِنْ شَيْءٍ يَتَفَقَّدُ طَلَالُهُ عَنِ الْيَمِينِ وَالشَّمَائِلِ سُجَّدًا لِلَّهِ وَهُمْ
دَاهِرُونَ وَلَلَّهِ يَسْجُدُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مِنْ ذَابِثٍ وَالْمَلَائِكَةُ وَهُمْ لَا
يَسْتَكْبِرُونَ يَخَافُونَ رَبَّهُمْ مِنْ فُوقِهِمْ وَيَعْلَمُونَ مَا يُؤْمِنُونَ

16:48-50 Do they not look at things Allah created? Their shadows tilt towards right and left prostrating to Allah in humility. And to Allah prostrate all living things in the skies and in earth, and the angels. And they are not arrogant. They all fear their Lord above them and they function as they are instructed (i.e., as programmed).

All these verses imply that Allah's instructions or programs are immanent in the universal components and it is according to that they function.

b) Flow of information between the universe and Allah's abode

يُدَبِّرُ الْأَمْرُ مِنَ السَّمَاءِ إِلَى الْأَرْضِ ثُمَّ يَعْجُزُ إِلَيْهِ فِي يَوْمٍ كَانَ مِقْدَارُهُ أَلْفَ سَنَةٍ بِمَا تَعْدُونَ
32:5 He directs the command from the sky to the earth. Later it will go up to Him on a day whose length is a thousand years of your reckoning.

اللَّهُ الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ وَمِنَ الْأَرْضِ مِثْنَهُنَّ يَتَنَزَّلُ الْأَمْرُ بَيْنَهُنَّ لِتَعْلَمُوا أَنَّ اللَّهَ
عَلَى كُلِّ شَيْءٍ قَدِيرٌ وَأَنَّ اللَّهَ قَدْ أَحْاطَ بِكُلِّ شَيْءٍ عِلْمًا

65:12 (It is) Allah who created seven skies and similarly from the earth. (Allah's) command descends into their midst to make

it known to you that Allah has power over all things and that Allah indeed encompasses all things in (His) knowledge.

وَاللَّهُيْ يَعْلَمُ مِنَ الْمُحِيطِ مِنْ نِسَائِكُمْ إِنْ ارْتَبَثْتُمْ فَعَدَّتُهُنَّ تَلَاهُنَّ أَشْهَرِ وَاللَّاهُ لَمْ يَجْعُلْنَ حَلْمَهُنَّ أَنْ يَصْنَعُنَ حَلْمَهُنَّ ۝ وَمَنْ يَتَّقِيَ اللَّهَ يَجْعَلُ لَهُ مِنْ أَمْرِهِ يُسْرًا ۝ ذَلِكَ أَمْرُ اللَّهِ أَنْزَلَهُ إِلَيْكُمْ ۝ وَمَنْ يَتَّقِيَ اللَّهَ يُكَفِّرُ عَنْهُ سَيِّئَاتِهِ وَيُعَظِّمُ لَهُ أَجْرًا ۝

57:4-5 It is He who created the skies and the earth in six Days, then He was seated on the Throne (of Authority). He knows what enters the earth and what goes out of it and what comes down from the sky and what ascends to it (i.e., the sky). And wherever you may be, He is with you. And Allah sees well all that you do. To Him belongs the dominion of the skies and the earth, and all affairs are returned to Allah.

يَعْلَمُ مَا يَلْجُعُ فِي الْأَرْضِ وَمَا يَخْرُجُ مِنْهَا وَمَا يَنْزَلُ مِنَ السَّمَاءِ وَمَا يَعْرُجُ فِيهَا ۝ وَهُوَ الرَّحِيمُ الْغَفُورُ

34:2 He knows all that enters the earth and all that goes out of it, and all that comes down from the sky and all that ascends to it. And He is Most Merciful, Oft-Forgiving.

These verses reveal the existence of interconnectivity between Earth and other components of the cosmic space through information flow between them. This is vital for the coordinated working of the component systems. Further all the information transmitted from each component of the universe reaches Allah.

c) Real-time recording of information

The Quran further reveals that moment-to-moment information generated from the Earth and the skies is recorded in real time. Allah thus knows what is happening in Earth and the skies every moment.

وَعِنْدَهُ مَقَاتِعُ الْعَيْبِ لَا يَعْلَمُهَا إِلَّا هُوَ ۝ وَيَعْلَمُ مَا فِي الْبَرِّ وَالْبَحْرِ ۝ وَمَا تَسْفَطُ مِنْ
وَرْقَةٍ إِلَّا يَعْلَمُهَا وَلَا حَيَّةٌ فِي طُلُمَاتِ الْأَرْضِ وَلَا رَطْبٌ وَلَا يَابِسٌ إِلَّا فِي كِتَابٍ مُّبِينٍ

6:59 With Him are the keys of the unseen, the treasures that none but He knows. He knows whatever there is on the earth and in the sea. Not a leaf falls without His knowledge. There is not a grain in the darkness (or depths) of the earth, nor anything fresh or dry (green or withered), but is (inscribed) in a clear Record (Memory).

وَمَا تَكُونُ فِي شَاءٍ وَمَا تَشْلُو مِنْهُ مِنْ قُرْآنٍ وَلَا تَعْمَلُونَ مِنْ عَمَلٍ إِلَّا كُنَّا عَلَيْكُمْ شَهِودًا
إِذْ تُعْبِضُونَ فِيهِ ۝ وَمَا يَعْرِبُ عَنْ رَيْكَ مِنْ مُثْقَلٍ ذَرَّةٍ فِي الْأَرْضِ وَلَا فِي السَّمَاءِ وَلَا
أَصْغَرَ مِنْ ذُلِّكَ وَلَا أَكْبَرَ إِلَّا فِي كِتَابٍ مُّبِينٍ

10:61 You are not (engaged) in any affair, you do not recite about it from the Quran and you do not do any work without Us being witnesses over you when you engage in it. Not even the weight of an atom on the earth or in the sky is hidden from your Lord. And there is nothing smaller or bigger than that but is given in a clear Record.

وَمَا مِنْ ذَائِبٍ فِي الْأَرْضِ إِلَّا عَلَى اللَّهِ رِزْقُهَا وَيَعْلَمُ مُسْتَقْرَئَهَا وَمُسْتَوْدَعَهَا ۝ كُلُّ فِي كِتَابٍ
مُّبِينٍ

11:6 There is no organism on the earth without its sustenance depended on Allah. He knows its resting place and its repository; all (the information) is available in a clear Record.

The verses quoted above offer clear insight into the nature of functioning of the universe like a computer. The verses reveal to us that the universe is a self-regulated programmed system created by God. Divine commands (instructions or programs) are immanent in the living and non-living systems. Existence of mechanisms for real-time monitoring and recording of all that is happening in the universe further supports the computer model of the universe.

Natural designs revealed through the Quran

The universe has been designed by Allah to suit His mission. Naturally every component of the system has specific purpose(s) and is so designed to meet the requirement envisaged in the divine scheme.

وَمَا خَلَقْنَا السَّمَاءَ وَالْأَرْضَ وَمَا بَيْنَهُمَا لَا عِبَيْنَ لَوْ أَرَدْنَا أَنْ تَتَخَذَ لَهُمَا لَا تَخَذْنَاهُ مِنْ لَدُنَّا
إِنْ كُنَّا فَاعِلِينَ

21:16-17 Not for fun did We create the skies and the earth and all that is between them! If We had intended to make a pastime, We would have made it from Ourselves; (but) by no means would We do (it)!

وَمَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ ۖ وَإِنَّ السَّاعَةَ لَآتِيَةٌ ۖ فَاصْفَحْ
الصَّنْعَ الْجَمِيلَ

15:85 We had not created the skies, the earth and all between them except for just ends. And the Hour will surely come. So you (Prophet Muhammad) excuse (their faults) beautifully.

فَالِّيْلُ الْإِسْبَاحُ وَجَعَلَ النَّيْلَ سَكَنًا وَالشَّمْسُ وَالْقَمَرُ حُسْبَانًا ۚ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ
وَهُوَ الَّذِي جَعَلَ لَكُمُ النُّجُومَ لِتَهَنَّدُوا بِهَا فِي ظُلُمَاتِ الْبَرِّ وَالْبَحْرِ ۖ قَدْ فَصَّلْنَا الْآيَاتِ
لِقَوْمٍ يَعْلَمُونَ

6:96-97 It is He who cleaves the dawn (from the dark). He made the night calm (for rest) and the sun and moon for reckoning (of time). That is the system ordained by (Allah), the Mighty, the Omniscient. It is He who made the stars for you to serve as guidance in the darkness of the land and the sea. We explain Our signs for people who know.

أَمْ يَرَوْا إِلَى الصَّطْرِ مُسَخَّرَاتٍ فِي جَوَّ السَّمَاءِ مَا يُمْسِكُهُنَّ إِلَّا اللَّهُ ۖ إِنَّ فِي ذَلِكَ لَآيَاتٍ
لِقَوْمٍ يُؤْمِنُونَ

16:79 Do they not look at the birds subjected to the environmental conditions of the sky? Nothing holds them up but (the power of) Allah. Verily in this are signs for the people who believe.

وَجَعَلْنَا فِي الْأَرْضِ رَوَاسِيَّاً أَنْ تَمْبَدِّدُ هُمْ وَجَعَلْنَا فِيهَا فِحَاجًا سُبُّلًا لَعَلَّهُمْ يَهْتَدُونَ وَجَعَلْنَا السَّمَاءَ سُقُّفًا مَخْفُوظًا ۖ وَهُمْ عَنْ آيَاتِهَا مُعْرِضُونَ

21:31-32 And We have made mountains firmly fixed on the earth to prevent its tilting with them. And We have made therein broad tracks so that they find their way. And We have made the sky a well-guarded canopy. Yet, they turn away from its signs!

وَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً يَقْدِرُ فَأَسْكَنَاهُ فِي الْأَرْضِ ۖ وَإِنَّا عَلَىٰ ذَهَابِ بَهِ لَقَادِرُونَ

23:18 And We send down water from the sky according to certain measure and We store it in the earth. And We certainly are able to drain it off.

يُفَلِّبُ اللَّهُ اللَّيْلَ وَالنَّهَارَ ۚ إِنَّ فِي ذَلِكَ لَعْنَةً لِأُولَئِكَ الْأَبْصَارِ

24:44 It is Allah who alternates the night and the day. Verily in that is a lesson for those who can see!

وَجَعَلَ فِيهَا رَوَاسِيَّاً مِنْ فَوْقِهَا وَتَارِكَ فِيهَا وَقَدَرَ فِيهَا أَفْوَاتَهَا فِي أَرْبَعَةِ أَيَّامٍ سَوَاءً لِلسَّائِلِينَ

41:10 He set on the (earth) firm mountains high above it, and bestowed blessings on the earth, and fixed therein its nourishment in four Days in accordance with (the needs of) those who seek (sustenance).

إِنَّا كُلَّ شَيْءٍ خَلَقْنَاهُ بِقَدَرٍ

54:49 Verily, We created everything in certain measure.

فَاطَّرَ السَّمَاوَاتِ وَالْأَرْضَ ۖ جَعَلَ لَكُمْ مِنْ أَنفُسِكُمْ أَرْوَاحًا وَمِنَ الْأَنْعَامِ أَرْوَاحًا ۖ
يَذْرُؤُكُمْ فِيهِ ۖ كَيْنَسٌ كَمِثْلِهِ شَيْءٌ ۖ وَهُوَ السَّمِيعُ الْبَصِيرُ

42:11 (Allah is) the Creator of the skies and the earth. He made spouses for you from among yourselves and mates

among cattle. By that (means) He multiplies you. There is nothing whatsoever that resembles Him. And He hears and sees (all things).

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَابًا ۝ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِنْ تَقْوَةٍ ۝ فَارْجِعِ الْبَصَرَ
هَلْ نَرَىٰ مِنْ قُطُورٍ ثُمَّ ارْجِعِ الْبَصَرَ كَرَّتَيْنِ يَتَعَلَّبُ إِلَيْكَ الْبَصَرُ حَاسِيًّا وَهُوَ حَسِيرٌ

67:3-4 (He) who created the seven skies one above the other. You will not find any disproportion in the creations of (Allah) the Most Merciful. Then you look (at them). Do you see any fissure? Then you turn your vision again twice. (Your) vision will come back to you discomfited and exhausted (without finding any flaw).

There are many verses in the Quran that point to the designs and purposes to make us aware of them. Only a few are quoted above. We also observe and experience that natural designs are perfect. For instance, in the millions of biological species living on Earth, we do not find even a single case of half-developed organ incomplete in its structure or inefficient in its functioning. Several kinds of designs can be identified and recognized in nature. Apart from the structural design of each component of the universe, there are innumerable processes and mechanisms that exhibit spectacular operational designs. Depending on how they are viewed by our senses, they would appear to range from the simplest to extremely complex phenomena. We are so familiar with many of these natural phenomena in our daily life (e.g., gravity, wind, rain, etc.) that they have ceased to inspire awe in us or to attract our attention. Our stomach is capable of digesting every kind of meat. Suppose that you are able to cut out a piece of stomach and swallow it. It will be immediately digested. But so long as that piece remained as part of the stomach (i.e., before you cut and removed it), it was not digested! In other words, stomach produces juices containing enzymes and other substances capable of its own breakdown but remains at the same time unattacked and safe while it breaks down the food materials

arriving to it! Evidently, there is mechanism designed to prevent it from getting digested. When a morsel of food is taken into the mouth, the teeth chew only the food material and spare the tongue. In effect the teeth can distinguish the food material from tongue. We also know that blood exists as liquid inside the blood vessel; everywhere else, it clots.

Womb provides the most ideal environment and infrastructure for the development of the foetus during a specified period. It anticipates the deposition of male sperm in it, its fusion with female egg to form zygote and its further development into a foetus. Meiosis is a mechanism designed to reduce the chromosome number in the cell to one half (from $2n$ to n) during gamete formation. The process is not an arbitrary one in the sense that it is not a simple reduction of the chromosome number to half; but the reduction is achieved through the separation of homologous chromosomes so that the resulting cells will have one of the chromosomes of each homologous pair (see chapter 9). Fertilization (see chapter 12) brings together the male and female gametes restoring the cell chromosome number to $2n$. Just look around; we will find in everything the most appropriate design to serve the purpose for which it is created. Scientific literature reveals this overwhelming truth in great detail.

Computer model of the physical universe based on the Quran

Basically a computer system consists of software and hardware components. In the computer jargon, the term ‘software’ describes the program. The program is a set of instructions written in a suitable language in the proper sequence and is uploaded into the system for executing the tasks intended. The software stored on the memory device of the computer is thus an *unseen* component, which drives the computer to perform the tasks specified in it. The term ‘hardware’ describes all the visible components of a computer.

Supposition of the universe as divine computer system necessitates the existence of Divine Master Program (DMP). DMP is considered here as the cosmic software. For convenience in discussion, the DMP may be distinguished as having composed of two subprograms namely, the abioprogram and the bioprogram [2]. The abioprogram (abiosoftware) determines abiogenesis (origin of the inanimate world) and the characteristic properties of the inanimate components. It thus forms the source of chemical information. The bioprogram (biosoftware) determines biogenesis (origin of living species) and the characteristic properties of the living matter. It thus represents the source of biological information. This means two kinds of divine information (Allah's Word or instructions) namely, chemical information and biological information are fundamental to the making of the universe.

Insofar as energy is information (Allah's instructions or Word) and the whole universe can be visualized as space filled with information, the concept of memetics with required modifications can be readily applied to the computer universe. The term "meme" was originally proposed by Richard Dawkins to mean "replicator" [12]. Memetics is a fast catching-up concept in epistemology with "meme" describing a piece of knowledge that is transmitted from one individual to the other and gets replicated in the process [13]. In the cosmological context, memetics can be thought of as separate science that describes the universe as divine instruction (information)-laden system. "Meme" is used here not with the connotation of a "replicator" or with the other characteristics originally assigned to it. *A Meme is defined here as piece of divine information (energy) in the abiotic and biotic segments of the universe.* The meme deriving from abioprogram may be referred to as "abiomeme" and the meme deriving from the bioprogram as "biomeme". Accordingly, abiomemetics forms the science of chemical information and biomemetics forms the science of biological information [14]. Of these, the bioprogram will be discussed in chapter 9.

a) Abioprogram –the divine source of chemical information

The Quran reveals that Allah's commands (programs) are immanent in the universal components:

فَقَصَّاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمٍ وَأَوْحَىٰ فِي كُلِّ سَمَاءٍ أَمْرَهَا ۝ وَرَبَّنَا السَّمَاءَ الدُّنْيَا
بِمَاصِبَّيْخٍ وَحَفْظًا ۝ ذَلِكَ تَعْذِيرُ الرَّبِّ الْعَزِيزِ الْعَلِيمِ

41:12 So He completed them as seven skies in two Days and He assigned to each sky its command (instructions or program). And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

وَمِنْ آيَاتِهِ أَنْ تَقْعُمُ السَّمَاءُ وَالْأَرْضُ بِأَمْرِهِ ۝

30:25 “And among His signs is this – the sky and earth stand by His command...”

In the light of these revelations, it can be inferred that the mode of behaviour and functioning of the component systems of the universe are governed by the programs (divine instructions) immanent in them. The fundamental constituents of the universe are energy and space. Tangible energy exists as matter and non-matter (e.g., electromagnetic radiation, heat, electrical, etc.) forms. In whatever form it exists, it has a structure. For a better understanding of the proposed concept, we shall restrict the discussion to matter form from the level of atom or molecule. Presently we know more than one hundred and fifteen chemical elements with several atomic species (isotopes) for each of them. Each element has certain atomic structure, which determines its physical and chemical properties. These elements can combine in numerous combinations obeying certain specific rules to produce a wide range of substances each with specific chemical structure and properties. How does this happen? Are the elements intelligent entities to invent and decide their structures, properties and rules by themselves? This is one of the most fundamental aspects of the working of the universe that has not been and

cannot be addressed in science. The rules that govern the formation of chemical structures as well as acquiring properties by them are prescribed and governed by the divine abioprogram. Similarly for non-matter forms of energy also, the abioprogram determines their nature of existence and behavioural patterns (properties).

Matter and non-matter forms of energy can be conceived as embodiment of divine information. The abioprogram immanent in various matter and non-matter forms of energy can be therefore explained in terms of a structure-code concept. The atom is considered here as the basic unit of matter for illustrating this concept (Table 7.1). We may assume that the structure signifies a code ‘written’ in a special language like the symbolic language used in computer machines; i.e., the structure encodes specific divine instructions. This code is deciphered in terms of the abioprogram and the structure derives its properties (semantic content). The Quranic message that God’s commands are built into the universal components (see verses 41:12 and others quoted above) can be explained that way.

Table 7.1. Illustration of the abioprogram-based structure-code concept explaining how substances acquire their properties in comparison with acquiring of meaning by a word in English language

Building block	Unit	Software	Task
Alphabet	Word	English	Meaning
Element	Molecule	Abioprogram	Properties

Innumerable substances found in the universe owe their vastly diverse properties to their structures, which, in turn, are decided by the composition and arrangement of atoms (Fig. 7.1). Structure at the level of a molecule (substance) is defined here as the totality of the elemental composition and arrangement of the atoms. In the structure-code concept, the elements form the alphabets and along with their arrangement through bonding, etc., the structure (comparable to a word) is formed. The structure so formed is a code that carries chemical information. The chemical information is deciphered in terms of its properties.

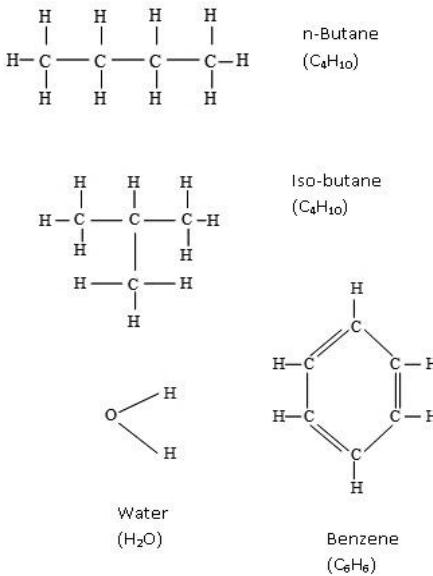


Fig. 7.1. Illustration of structure-code concept in relation to acquiring properties by substances based on the abioprogram
Note: Each chemical structure forms an biomeme.

A set of alphabets can carry meaning only if it is affiliated with a language. The meaning of a word depends on its alphabetic composition as well as the order in which the alphabets are arranged. Two words may be different in their alphabetic composition or in their arrangement. For instance, English words ‘nest’ and ‘sent’ have the same alphabets but different arrangements whereas the words ‘take’ and ‘buy’ are different in their alphabetic composition. Likewise, different chemical structures are formed based on the composition and arrangement of the atoms of the elements. The structures of n-butane and iso-butane have the same elements and same number of atoms with the chemical formula of C_4H_{10} ; but the arrangement of the atoms is different in the two substances. These two structures are comparable with English words ‘nest’ and ‘sent’. The chemical structures of water (H_2O) and benzene (C_6H_6) are different in their elemental (alphabet) composition. They are comparable with English words ‘take’ and ‘buy’ (Fig. 7.1).

By this analogy, the phenomenon of how chemical structures (substances) derive their properties based on the divine program can be explained. Periodicity in the properties of elements which provides the basis for their classification (Periodic Table), specificity in the change of properties of substance with change in structure, etc., are clearly the clauses of the divine abioprogram operating at different levels of structural hierarchy. In fact by studying the structure-property relationships, we are deciphering the divine abioprogram at various hierachal levels of the universe. The chemical structure may be thus likened to a kind of algorithm conforming to abioprogram. The universe is therefore nothing but divine instruction (information)-laden system.

b) Divine governance of the universe

After creating the universe Allah – the Creator, the Programmer – is seated on His throne of authority controlling and regulating everything. A schematic representation of the

divine governance of the universe based on the Quranic revelations is presented in Fig. 7.2.

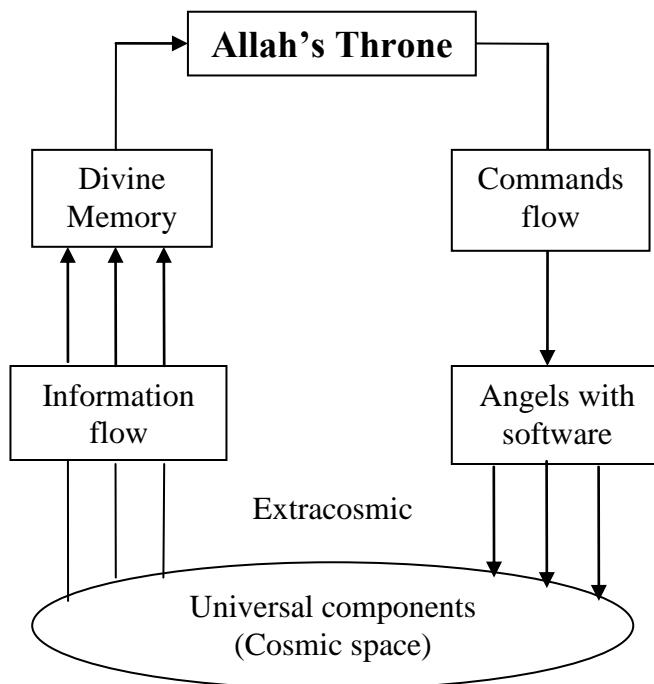


Fig. 7.2. A schematic representation of divine governance of the universe based on the Quran

As we have seen, the Quran provides a good account of Allah's Kingdom and mode of control and regulation of the affairs from His abode, recording of information and flow of information between the universe and Allah's abode.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ
يُدَبِّرُ الْأَمْرَ مَا مِنْ شَيْءٍ إِلَّا مِنْ بَعْدِ إِذْنِهِ ۝ ذَلِكُمُ اللَّهُ رَبُّكُمْ فَاعْبُدُوهُ ۝ أَفَلَا
تَذَكَّرُونَ

10:3 “Verily your Lord is God who created the skies and the earth in six days and is firmly established on the Throne (of authority) regulating and governing all things....”

يُدَبِّرُ الْأَمْرَ مِنَ السَّمَاوَاتِ إِلَى الْأَرْضِ ثُمَّ يَعْرُجُ إِلَيْهِ فِي يَوْمٍ كَانَ مِقْدَارُهُ أَلْفَ سَنَةً مِمَّا تَعْدُونَ
 32:5 He rules (all) affairs from the sky to the earth; in the end all affairs will go up to Him on a day that is a thousand years of your (man's) reckoning.

There are many angels (*malak* in Arabic) in His Kingdom serving Him obediently.

الْحَمْدُ لِلَّهِ فَاطِرِ السَّمَاوَاتِ وَالْأَرْضِ جَاعِلِ الْمَلَائِكَةِ رُسَّالًا أُولَئِكَ هُنَّ خَيْرٌ مِنْ أَنْاسٍ وَثُلَاثَ
 وَرْبَاعٌ ۝ يَرِيدُ فِي الْخَلْقِ مَا يَشَاءُ ۝ إِنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

35:1 “Praise be to God who created the skies and the earth, who made the angels messengers with wings....He adds to creation as He pleases: for God has power over all things.”

فُلُونَ يَتَوَفَّاكُمْ مَلَكُ الْمَوْتَ الَّذِي وَكَلَّ بِكُمْ ثُمَّ إِلَيْ رَبِّكُمْ تُرْجَعُونَ

32:11 Say: The angel of Death put in charge of you will take your (soul at death); then you will be brought back to your Lord.

يَا أَيُّهَا الَّذِينَ آمَنُوا ۖ فُوَّا أَنْفُسَكُمْ وَأَهْلِيَّكُمْ نَارًا وَفُودُهَا النَّاسُ وَالْحِجَارَةُ عَلَيْهَا مَلَائِكَةٌ
 غِلَاظٌ شِدَادٌ لَا يَعْصُونَ اللَّهَ مَا أَمْرَرُهُمْ وَيَعْلَمُونَ مَا يُؤْمِرُونَ

66:6 O believers! Save yourselves and your families from a Fire whose fuel is humans and stone, over which are (appointed) stern (and) harsh angels. They will not defy His orders and they execute what they are commanded.

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيقَةً ۝ قَالُوا أَجَعَّلُ فِيهَا مَنْ يُفْسِدُ فِيهَا
 وَيَسْفِكُ الدَّمَاءَ وَمَنْ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۝ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ وَعَلَمَ
 آدَمَ الْأَمْسَأَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَقَالَ أَنْتُمْ يَا أَسْمَاءُ هُؤُلَاءِ إِنْ كُنْتُمْ صَادِقِينَ
 قَالُوا سُبِّحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَمْتَنَا ۝ إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

2:30-32 Behold, your Lord said to the angels: I will create a vicegerent on earth. They said: Will You place therein one who will make mischief therein and shed blood? While we do celebrate your praises and glorify your holy (name). He (Allah) said: I know what you do not know. And He taught Adam the names of all things; then He placed them (i.e., the things) before the angels and said: Tell Me the names of these if you are truthful. They said: Glory to You. We (angels) do not have any knowledge except what You taught us. Truly it is You who are perfect in knowledge and wisdom.

The angels are assigned specific duties and are at His command. The angels mentioned in the Quran include messenger angels (Q. 35:1), angel for executing death of human beings (Q. 32:11), angel for guarding Hell (Q. 66:6), etc. All these revelations imply that angels have the divine software necessary to carry out their duties. Allah has also given them knowledge though much less compared to the knowledge given to human beings as can be inferred from their statement about the nature of human beings as ‘mischief makers on Earth’ (Q. 2:30-32). The angels do their job exactly as commanded by God (Q. 66:6). They are therefore intelligent dedicated robots. We may visualize that when Allah gives a command, the angel concerned will pick it up and execute the job through appropriate software. This is also suggestive of the divine ground control over and above the programmed functioning of the universe. This means there is connectivity between Allah’s abode and the universe. The Quran reveals there is transmission of Allah’s commands to the universe and flow of information from the universe to Allah’s abode.

يَعْلَمُ مَا يَلْجُّ فِي الْأَرْضِ وَمَا يَخْرُجُ مِنْهَا وَمَا يَنْزِلُ مِنَ السَّمَاءِ وَمَا يَعْرُجُ فِيهَا ۝ وَهُوَ الرَّحِيمُ الْغَفُورُ وَقَالَ الَّذِينَ كَفَرُوا لَا تَأْتِنَا السَّاعَةُ ۝ قُلْ بَلَىٰ وَرَبِّي لَتَأْتِيَنِّكُمْ عَالَمُ الْغَيْبِ ۝ لَا يَعْرِبُ عَنْهُ مِثْقَالُ ذَرَّةٍ فِي السَّمَاوَاتِ وَلَا فِي الْأَرْضِ وَلَا أَصْغَرُ مِنْ ذَلِكَ وَلَا أَكْبَرُ ۝ إِلَّا فِي كِتَابٍ مُّبِينٍ

34:2-3 He knows all that goes into the earth and all that comes out of it, all that comes down from the sky and all that ascends thereto. And He is the Most Merciful, the Oft-Forgiving....He Who knows the unseen – from Whom is not hidden the least little atom in the skies or on the earth; nor is there anything less than that , or greater, but is in the Perspicuous Record.

أَمْ تَعْلَمُ أَنَّ اللَّهَ يَعْلَمُ مَا فِي السَّمَاوَاتِ وَالْأَرْضِ ۖ إِنَّ ذَلِكَ فِي كِتَابٍ ۚ إِنَّ ذَلِكَ عَلَى اللَّهِ بِسِيرٌ

بِسِيرٌ

22:70 Don't you know that Allah knows all that is in the sky and on the earth? Indeed it is (all there) in a Record and certainly that is easy for Allah.

Everything that is going on in the universe is being recorded in real time and is stored on the divine Memory (the divine Register or Record mentioned in the Quran). All the information about the universe is thus available to Allah. And He knows everything, He hears everything and He sees everything. Apart from the programmed functioning of the universe, Allah also executes any command at His Will from His abode. These revelations are no surprise to the people of modern era. We can and we do also use such computerised set-up with God-given knowledge for our purposes. The computer model thus enables us to visualise the design and programmed functioning of the universe to accomplish Allah's mission of testing human robots.

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8. PROGRAMMED EVOLUTION OF THE PHYSICAL UNIVERSE

The divine process of creation of the universe can be understood as a phenomenon of programmed evolution. The creation process did not produce the whole universe in one go but as we shall see, the universe came into existence through various stages. Allah describes Himself as the Evolver and Bestower of forms.

هُوَ اللَّهُ الْخَالِقُ الْبَارِئُ الْمُصَوِّرُ ۖ لَهُ الْأَسْمَاءُ الْحُسْنَىٰ ۚ يُسَبِّحُ لَهُ مَا فِي
 السَّمَاوَاتِ وَالْأَرْضِ ۖ وَهُوَ الْغَنِيُّ الْحَكِيمُ

59:24 He is Allah, the Creator, the Evolver, the Bestower of forms (or colours). To Him belong the most beautiful names. Everything in the skies and the earth sings His praises. And He is the Mighty, the Wise.

Important hints about the process of creation of the present universe can be obtained from the Quranic verses relating to the re-creation of the universe on the Day of Judgement as it is stated that the re-creation of the universe will take place in the same way it was created for the first time (Q. 21:104, 39:67). We can use these revelations about the creation of the next universe to reconstruct the process of creation of the present universe. Although a detailed account of the process of creation of the universe is not given in the Quran, it does give certain sequences and durations relating to the creation of the universe, its organization and ultimate fate.

وَهُوَ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحُقُوقِ ۖ وَيَوْمَ يَقُولُ كُنْ فَيَكُونُ ۖ قَوْلُهُ الْحُقُوقُ
 وَلَهُ الْمُلْكُ يَوْمَ يُنْتَجُ فِي الصُّورِ ۖ عَالَمُ الْعَيْبِ وَالشَّهَادَةِ ۖ وَمُوْمَ الْحَكِيمُ الْحَبِيرُ

6:73 It is He (Allah) who created the skies and the earth in truth. On the day He says “Be”, it comes into being. His Word is truth. His will be the dominion on the Day the trumpet will

be blown. He is the knower of the invisible and the visible. And He is the Wise, well acquainted (with all things).

يَوْمَ نَطْرُي السَّمَاءَ كَطَّى السِّجْلَ لِلْكُتُبِ ۝ كَمَا بَدَأْنَا أَوَّلَ خَلْقٍ تُبَيِّدُهُ ۝ وَعْدًا عَلَيْنَا ۝ إِنَّا كُنَّا فَاعِلِينَ ۝

21:104 The Day We roll up the sky like a scroll rolled up for books! As We originated the first creation, so shall We repeat it – a promise binding on Us. Truly shall We fulfill it.

وَمَا فَلَرُوا اللَّهُ حَقًّا قَدْرِهِ وَالْأَرْضُ جَمِيعًا قَبْصَتُهُ يَوْمَ الْقِيَامَةِ وَالسَّمَاوَاتُ مَطْوِيَاتٌ بِيَمِينِهِ ۝ سُبْحَانَهُ وَتَعَالَى عَمَّا يُشْرِكُونَ ۝

39:67 No just estimate have they made of Allah such as is due to Him. On the Day of Judgment the whole of the earth will be but His handful, and the skies will be rolled up in His right hand. Glory to Him! High is He above the partners they attribute to Him!

The creation process began with Allah's command "Be" (Q. 6:73). The universe in the beginning was just 'handful' implying very small initial size. The first component of the universe to evolve was Earth. It took two Days to evolve.

فَلَمَّا أَتَيْنَكُمْ لَتَكُفُّرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَجَعَلَوْنَ لَهُ أَنْدَادًا ۝ ذَلِكَ رَبُّ الْعَالَمِينَ ۝

41:9 Say: Do you deny the One (Allah) who created the earth in two Days and (also) invent equals to Him? He is the Lord of the worlds.

Following the creation of Earth (human habitat), Allah created all things in it including resources required for the human robot testing programme. The creation of these things took another two Days. Thus creation of Earth as the human robot testing laboratory was complete in every respect on the fourth Day.

وَجَعَلَ فِيهَا رَوَاسِيَّ مِنْ فُؤُقَهَا وَبَارَكَ فِيهَا وَقَدَرَ فِيهَا أَفْوَاتَهَا فِي أَزْبَعَةِ أَيَّامٍ سَوَاءً لِلسَّائِلِينَ

41:10 He set on the (earth) firm mountains high above it, and bestowed blessings on the earth, and fixed therein its nourishment in four Days in accordance with (the needs of) those who seek (sustenance).

هُوَ الَّذِي خَلَقَ لَكُمْ مَا فِي الْأَرْضِ جَمِيعًا ثُمَّ اسْتَوَى إِلَى السَّمَاءِ فَسَوَّاهُنَّ سَبْعَ سَمَاوَاتٍ ۝
وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

2: 29 It is He who created for you all things that are on earth. Then He turned to the sky and He perfected it as seven skies. And of all things He has complete knowledge.

After the creation of Earth and its development as the laboratory for human robot testing, Allah turned to the sky. It was then ‘smoke’. He brought Earth and the smoke together and completed the creation of the whole universe. The next stage was marked by the separation of the component systems and commencement of the expansion of the universe. The expansion of the universe following separation of the components led to the organization of the universe into ‘seven skies and Earth’.

ثُمَّ اسْتَوَى إِلَى السَّمَاءِ وَهِيَ دُخَانٌ فَقَالَ لَهَا وَلِلأَرْضِ ائْتِنَا طَوْعًا أَوْ كَرْهًا قَالَتَا أَئْتِنَا
طَائِعَيْنَ فَقَضَاهُنَّ سَبْعَ سَمَاوَاتٍ فِي يَوْمَيْنِ وَأَوْحَى فِي كُلِّ سَمَاءٍ أَمْرَهَا ۝ وَرَزَّانَا السَّمَاءَ
الدُّنْيَا بِمَصَابِيحٍ وَحَفْظًا ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

41:11-12 Then He turned to the sky and it was smoke. He said to it and to the earth: You both come together willingly or as from compulsion. They said: We do come (together) obediently (i.e., as programmed). So He completed them as seven skies in two Days and He assigned to each sky its command. And We adorned the lower sky with lamps and rendered it inviolable. Such is His decree, the Mighty, the Omniscient.

أَوْمَّ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا زَنَقًا فَقَتَنَاهُمَا ۝ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ
شَيْءٍ حَيٍ ۝ أَفَلَا يُؤْمِنُونَ

21:30 Do not the unbelievers see that the skies and the earth were joined together (as one unit) before We clove them asunder? We made from water every organism. Will they not believe then?

وَالسَّمَاوَاتِ بَيْنَهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ

51:47 We constructed the sky with hands and We do expand it.

أَمْ تَرَوْا كَيْفَ خَلَقَ اللَّهُ سَبْعَ سَمَاوَاتٍ طِبَابًا وَجَعَلَ الْقَمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ سِرَاجًا

71:15-16 Do you not see how Allah has created seven skies one above another, and made the moon a light in their midst and made the sun a lamp?

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَابًا ۖ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِنْ تَفَاؤُتٍ ۗ فَارْجِعِ الْبَصَرَ هَلْ تَرَىٰ مِنْ قُطُورٍ

67:3 (Allah) who created the seven skies one above the other. You will not find any disproportion in the creations of (Allah) the Most Merciful. Then you look (at them). Do you see any fissure?

The statement “So He completed them as seven skies in two Days” in verses 41:11-12 must be seen as the time taken for the transformation of the smoke into the other component systems of the universe, separation of the component systems including Earth, expansion of the space and subsequent organization of the sky (i.e., the extraterrestrial cosmic space) as seven strata one above the other (see chapter 4). Thus the adult universe is described in the Quran as ‘seven skies and Earth’ clearly emphasizing the significant role of Earth in the overall mission of God. The universe is not referred to in the Quran by a single word. In all it took six Days for the whole universe to evolve. Allah’s one Day is equal to one thousand years of man. This means that the whole process took six thousand years of human reckoning.

وَيَسْعِجُلُونَكَ بِالْعَذَابِ وَلَنْ يُخْلِفَ اللَّهُ وَعْدَهُ ۝ وَإِنَّ يَوْمًا عِنْدَ رَبِّكَ كَالْفِ سَنَةٌ مِمَّا تَعْدُونَ ۝

22:47 And they ask you to hasten the Punishment! But Allah will not violate His promise. Verily a Day in the sight of your Lord is like thousand years of your reckoning.

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ يُعْشِي
النَّلَّاَتِ النَّهَارَ يَطْلُبُهُ حَيْثِنَا وَالشَّمْسَ وَالْقَمَرَ وَالنُّجُومُ مُسَخَّرَاتٍ بِأَمْرِهِ ۝ أَلَا لَهُ الْحُلْقُ
وَالْأَمْرُ ۝ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ ۝

7:54 Your Lord is Allah who created the skies and the earth in six Days, and then was seated on the Throne (of Authority). He draws the night as veil over the day each seeking the other in rapid succession. He created the sun, the moon and the stars (all) obeying His command (i.e., programmed). Are not the creation and command His? Blessed be Allah, Lord of the worlds!

إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَى عَلَى الْعَرْشِ ۝
يُدَبِّرُ الْأَمْرَ ۝ مَا مِنْ شَفِيعٍ إِلَّا مِنْ بَعْدِ إِذْنِهِ ۝ ذُلِّكُمُ اللَّهُ رَبُّكُمْ فَاعْبُدُوهُ ۝ أَفَلَا
تَدَكَّرُونَ ۝

10:3 Verily your Lord is Allah who created the skies and the earth in six days and is firmly established on the Throne (of Authority) regulating and governing all things. No intercessor (can plead with Him) without His permission. This is Allah, your Lord. Therefore you serve (worship) Him. Will you not then think over?

These verses reveal that following the creation of the universe, Allah is seated on His Throne regulating and governing all things. The Quranic revelations quoted above relating to the process of creation of the universe can be explained scientifically as execution of the divine software.

Execution of the abioprogram

We have seen the creation process began following Allah's command "Be" (Q. 6:73). This command is given to the intangible software of the thing to be created (see chapter 6). Therefore the command "Be" mentioned in verse 6:73 refers to that given to the invisible software (abioprogram) of the physical universe. As a result, the abioprogram came into operation. This moment (i.e., the moment Allah ordered "Be") may be considered as denoting the "big bang", which marked the beginning of the evolution of physical universe. Memetically, the moment marked abiogenesis or the origin of chemical information.

The process of creation of the inanimate universe can be visualized as programmed evolution through the execution of the divine abioprogram. *The abioprogram is considered here as the driving force behind the inorganic evolution and the one which determined its course and the properties of the inanimate forms of energy.*

Following Allah's command "Be", the intangible (*ghayb*) software of the universe (abioprogram) began to transform itself into the *shahadat* form, which human beings can perceive (Fig. 8.1). It has been evolving ever since in accordance with the divine instructions carried in it. The programmed nature of evolution is very much evident from verses 41:11-12, which tell us that the system has been obeying Allah during its evolution. The term 'obey' means it was evolving as programmed. The programmed behaviour of the universal components is also indicated in verse 7:54.

The Quranic revelation that the universe was just 'handful' in the beginning may be considered to indicate the size of the first *shahadat* form. This stage is denoted in Fig. 8.1 as the primordial abiochip (PAC) representing the first visible state prior to the evolution of Earth. Earth was the first component of the universe to evolve. This indicates that the

instructions in the abioprogram executed first were those relating to the creation of Earth. The step by step execution of the instructions relating to the creation of Earth took two thousand years to complete.

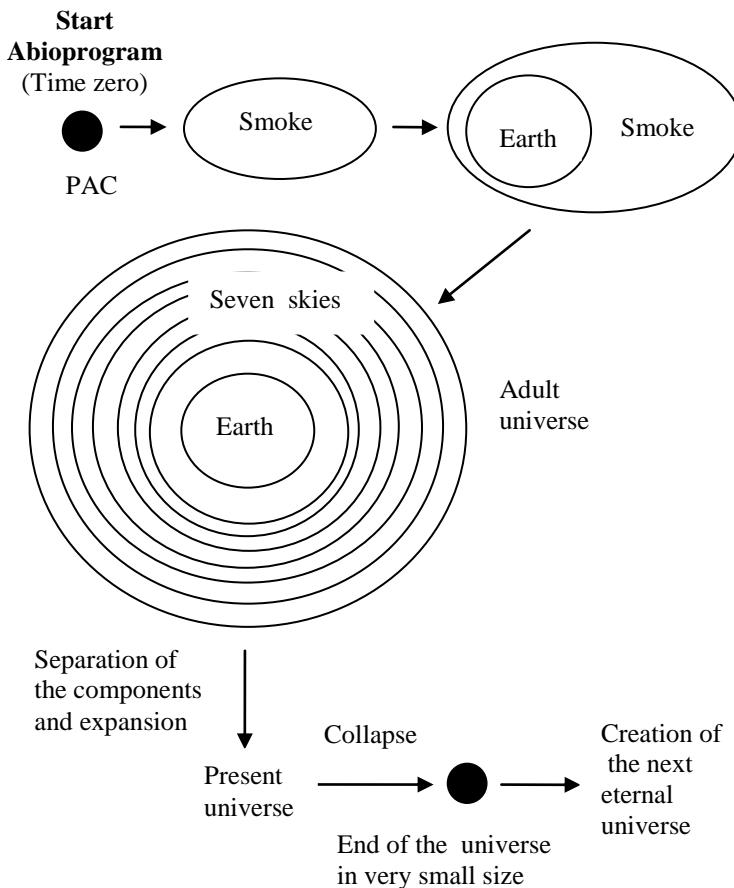


Fig. 8.1. Programmed evolution of the universe based on the Quran
Note: PAC – Primordial abiochip.

The creation of Earth was followed by the execution of the instructions for its development as the habitat and venue of

human robot testing. The developmental process took two thousand years for completion. The rest of the universe was then smoke. The term ‘smoke’ used in the Quranic verses 41:11-12 can be thought of as referring to the primordial gas cloud blown out by the big bang. Scientific evidence for the initial state of the universe as gas cloud has been obtained (see chapter 4). Therefore it can be understood that Earth evolved first from this cloud. When the evolution of Earth was completed, the rest of the universe was still in the form of gas cloud. The rest of the universe comprising galaxies, etc., evolved subsequently from this cloud. The universe so created was together in one piece. This was followed by the execution of instructions for the separation of the component systems, commencement of expansion, and organization of the sky into seven strata, in that order. The adult universe was formed thus. The entire process of creation of the adult universe through programmed evolution took six thousand years to complete after Allah gave the command “Be” to its software.

The Quranic statements like “Then He turned to the sky and it was smoke. He said to it and to the earth: You both come together willingly or as from compulsion. They said: We do come (together) obediently (i.e., as programmed). So He completed them as seven skies in two Days and He assigned to each sky its command. And We adorned the lower sky with lamps and rendered it inviolable” in verses 41:11-12 quoted above must be seen as referring to the sequential execution of Allah’s instructions contained in the abioprogram and not Allah is giving orders each time.

All the evolved components of the universe like the sun, moon and stars obey His command (Q. 7:54 quoted above) and are guided by Him (87:1-3). This implies they all have instructions immanent in their structures and hence they function as they are programmed. Allah made the moon a light in their midst and made the sun a lamp (Q. 71:16; 25:61). Allah had prescribed for the moon its mansions (i.e., orbits) (Q.

36:39). He subjected the sun and the moon to His law each running its course for a fixed term (Q. 39:5). The sun moves on for a period determined for it. That is the decree of Allah (Q. 36:38). The sun cannot reach up to the moon and the night cannot outstrip the day; each swims along (in its own) orbit (Q. 36:40). The sun and the moon follow certain rules (Q. 55:5). He ordained laws and granted guidance (Q. 87:3) implying programmed functioning of the universal components.

وَجَعَلَ النَّمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ سِرَاجًا

71:16 And made the moon a light in their midst and made the sun a lamp?

سَبِّحْ اسْمَ رَبِّكَ الْأَعْلَى الَّذِي خَلَقَ فَسَوَّى وَالَّذِي قَدَرَ فَهَدَى

87:1-3 Glorify the name of your Lord Most High, who created and then organized (the creations), who ordained laws and granted guidance.

تَبَارَكَ الَّذِي جَعَلَ فِي السَّمَاوَاتِ بُرُوجًا وَجَعَلَ فِيهَا سِرَاجًا وَقَمَرًا مُنِيرًا

25:61 Blessed is He who made constellations in the skies and placed therein a lamp (i.e., the sun) and a shining moon.

وَالشَّمْسُ بَحْرٌ لِمُسْتَقَرٍ لَهَا ۝ ذُلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ وَالنَّمَرَ قَدْرَتَاهُ مَنَازِلَ حَتَّى عَادَ
كَالْعَرْخُونِ الْقَدِيمِ لَا الشَّمْسُ يَنْبَغِي لَهَا أَنْ تُدْرِكَ النَّمَرَ وَلَا اللَّيْلُ سَابِقُ النَّهَارِ ۝ وَكُلُّ فِي
فَلَلِكَ يَسْبِحُونَ

36:38-40 And the sun moves on for a period determined for it. That is the decree of (Allah), the Mighty, the All-Knowing. And the moon – We prescribed for it mansions (i.e., orbits to traverse) till it returns like the old (and withered) inflorescence stalk of date palm. The sun cannot reach up to the moon and the night cannot outstrip the day; each swims along (its own) orbit.

خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ ۖ يُكَوِّرُ اللَّيْلَ عَلَى النَّهَارِ وَيُكَوِّرُ النَّهَارَ عَلَى الْلَّيْلِ ۖ
وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ ۖ كُلُّ كَاذِبٍ لَأَجَلٍ مُسَمًّى ۖ أَلَا هُوَ الْعَزِيزُ الْغَفَّارُ

39:5 He created the skies and the earth in truth. He covers the night over the day and He covers the day over the night. He subjected the sun and the moon (to His law) each running (its course) for a fixed term. Is He not the Mighty, the Forgiver?

الشَّمْسُ وَالْقَمَرُ يَخْسِبَا

55:5 The sun and the moon follow certain rules.

Programmed evolution represents the creation process in which Allah's instructions are executed in the prescribed sequence. At each execution step, the intangible (*ghayb*) energy that carried the instruction transformed itself into the corresponding tangible (*shahadat*) form. This resulted in the sequential appearance of the visible components of the universe, which is referred to here as programmed evolution. This is how the universe was designed, developed and perfected as coherent system by Allah.

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طَبَاقًا ۖ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِنْ تَقْوِيتٍ ۖ فَازْجِعْ الْبَصَرَ
هَلْ تَرَىٰ مِنْ فُطُورٍ ثُمَّ ارْجِعْ الْبَصَرَ كَرَتَيْنِ يَنْعَلِبُ إِلَيْكَ الْبَصَرُ خَاسِئًا وَهُوَ حَسِيرٌ

67:3-4 (It is Allah) who created the seven skies one above the other. You will not find any disproportion in the creations of (Allah) the Most Merciful. Then you look (at them). Do you see any fissure? Again turn your vision a second time. Your vision will come back to you dull and discomfited in a state worn out.

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ الْلَّيْلِ وَالنَّهَارِ وَالْفَلْكِ الَّتِي يَجْرِي فِي الْبَحْرِ بِمَا
يَنْفَعُ النَّاسَ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ مَاءٍ فَأَحْيَا بِهِ الْأَرْضَ بَعْدَ مَوْتَهَا وَبَثَّ
فِيهَا مِنْ كُلِّ ذَائِبٍ وَتَصْرِيفِ الرِّبَاحِ وَالسَّحَابِ الْمُسَخَّرِ بَيْنَ السَّمَاءِ وَالْأَرْضِ
لَا يَأْتِي لِقَوْمٍ يَعْقِلُونَ

2:164 In the creation of the skies and the earth, the alternation of the night and the day, the ship that sails through the ocean for the benefit of the mankind, the water which Allah sends down from the sky, then He gives life with it to the earth after its death and disperses in it all kinds of organisms, the controlling of the winds, and the clouds suspended between the sky and the earth, are indeed signs for people who think.

The execution of the abioprogram still goes on and will continue so till it reaches the end instruction for the present universe. In other words, the evolution of the present universe has not stopped; it continues as per the abioprogram.

The scientific community does not recognize the divine program as the driving force behind the creation process. They also do not realize that energy is the entity that carries Allah instructions. Consequently the scientific community finds it impossible to explain how innumerable components (both material and nonmaterial) of the universe with widely varying properties evolved. In other words, it is not possible to scientifically discover the source of chemical information. All the components of the universe represent divine instructions. The Quran points to that through verses 41:11-12 (quoted above) that divine commands are immanent in the evolved components. This means that the chemical structure encodes divine instructions, which we can distinguish as ‘chemical information’. It is from this divine instructions a chemical structure (i.e., a compound or substance) derives its properties and behaviour. This will also answer the big question how a chemical structure *knows* how to react and what to produce. The information encoded by the structure is also the source of natural laws and rules. We only discover them through scientific experiments. Evolution of the universe demonstrates how from an original source of chemical information (abioprogram), material and nonmaterial components encoding Allah’s instructions were formed through transformation of intangible (*ghayb*) energy into tangible (*shahadat*) forms. Since

the creation of the universe through programmed evolution (which still goes on) is a process of transformation of energy and does not involve addition or loss of energy, the original quantum of energy (carried by the divine software) will always remain unaltered or conserved. This in fact forms the basis of the first law of thermodynamics, which states that energy can be transformed from one form to another but cannot be created or destroyed.

Age of the universe and Earth

Allah tells us that He created the Earth first and then the rest of the universe. This means Earth is older than the rest of the universe. The creation of the universe took six Days, which is 6000 years of human reckoning as already mentioned. However, there is no indication whatsoever as to the time elapsed since then.

Edwin Hubble's classic work published in 1929 revealed the proportionality between galaxy's distance and its redshift as $Ho = v/d$, where v is the galaxy's radial outward velocity, d is the galaxy's distance from the earth, and Ho is the Hubble constant [1]. The age of the universe or the time elapsed from the big bang to the present day is given by $1/Ho$. The estimated age of the universe based on this reasoning is 13.6 ± 1.5 billion years [2]. Obtaining true value of Ho is very complicated because it depends on the accuracy of the estimated values of its two determinants, v and d , of which d is particularly difficult to determine. The value of Ho originally determined by Edwin Hubble was around $500 \text{ km s}^{-1} \text{ Mpc}^{-1}$ (kilometers per second per megaparsec; 1 Mpc is 3.26×10^6 light years or $3.086 \times 10^{16} \text{ m}$). The present value is between 50 and $100 \text{ km s}^{-1} \text{ Mpc}^{-1}$ [3]. A lot of uncertainties exist in the estimation of the age of the universe and its components [4].

So far it has not been possible to determine the exact age of the earth directly from the earth rocks employing radiometric or other methods because the earth's oldest rocks

have been recycled and destroyed by the process of plate tectonics. If there are any of the earth's primordial rocks left in their original state they have not yet been traced. The age of the earth is therefore estimated not from the individual rocks but by considering the earth and meteorites (fragments of asteroids that fall to the earth) as part of the same evolving system in which the isotopic composition of lead, specifically the ratio of lead-207 to lead-206 changes over time owing to the decay of radioactive uranium-235 and uranium-238, respectively. Using this approach, the age of the earth and meteorites, and hence the solar system, has been estimated to be 4.54 billion years with an uncertainty of less than 1%. This age in fact represents the last time the lead isotopes were homogeneous throughout the inner solar system and the time that lead and uranium were incorporated into the solid bodies of the solar system. This estimate is consistent with the current calculation of 11 to 13 billion years for the age of the Milky Way Galaxy (based on the stage of evolution of globular cluster stars) and 10 to 15 billion years for the age of the universe (based on the recession of distant galaxies) [5]. While it is not possible to compute the actual age of Earth, the estimates establish the lower limit, i.e., Earth must be at least as old as any formation on it. However these methods and the estimates of age still remain controversial. For example, Christian creationists claim that the Earth is much younger than these estimates indicate. The young-earthers have several methods, which they claim to give 'upper limits' to the age of the Earth. The age of the Earth according to them is between 5700 and 10000 years.

The age of any component of the universe must be reckoned as the time elapsed since the instructions in the divine abioprogram for its evolution (transformation into tangible or *shahadat* form) were executed. Every component was however there right from the beginning in intangible (*ghayb*) form in the abioprogram to which Allah said "Be" (see Q. 6:73 quoted earlier). This is like the development of an organ in human biosystem. For instance, breasts develop much later in the

human female biosystem. The instructions for breast development are there in the zygote as for any other organ. However, it develops much late because its program is timed to come into operation following the execution of a series of other programs. We should look at every creation phenomenon in this way as programmed phenomenon and not as random phenomenon. Going by the time of evolution of Earth as per the divine abioprogram (Q. 41:9-12), we may say the earth is the oldest component of the universe for the reason it was the first to evolve. The Quran however does not give any indication of the time elapsed since then, which actually forms the age of the earth following its evolution. More studies are required to understand the evolution sequence of the universal components in the light of the Quran. Studies are also required to explain the organization of cosmos as seven skies as mentioned in the Quran.

End of the universe

The Quran also gives information on the fate of the universe. This universe will end one day and another eternal universe will emerge in continuation of that. The present universe is a temporary system created for a term. The term refers to the period of human robot testing programme for which the universe was created to serve as infrastructure facility.

اللَّهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِعَيْرٍ عَمَدٍ تَرْوَنَهَا ۝ إِنَّمَا اسْتَوَى عَلَى الْعَرْشِ ۝ وَسَخَّرَ الشَّمْسَ
وَالْقَمَرَ ۝ كُلُّ هُنْكَرٍ لِأَجْلٍ مُسَمًّى ۝ يُدَبِّرُ الْأَمْرَ يُفَصِّلُ الْآيَاتِ لَعَلَّكُمْ بِإِلَقاءِ رِبْكُمْ
تُوقَنُونَ

13:2 It is Allah who raised the skies without any visible pillars. He then established (Himself) on the Throne. He subjected the sun and the moon (to His law), all moving for a prescribed term. He regulates all affairs. He explains the signs in detail so that you firmly believe in the meeting with your Lord.

أَوْمَ يَرَوْا أَنَّ اللَّهَ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ قَادِرٌ عَلَىٰ أَنْ يَخْلُقَ مِثْلَهُمْ وَجَعَلَ لَهُمْ أَجَالًا لَا رَبَّ فِيهِ فَأَبَى الظَّالِمُونَ إِلَّا كُفُورًا

17:99 Do they not see that Allah who created the skies and the earth is able to create the likes of them (anew)? He has decreed a fixed term for them; there is no doubt in it. But the wrongdoers only preferred to reject (it).

أَوْمَ يَنْفَكُرُوا فِي أَنفُسِهِمْ ۖ مَا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَحَدٌ مُسَمَّىٌ ۖ وَإِنَّ كَثِيرًا مِنَ النَّاسِ بِلِقَاءَ رَبِّهِمْ لَكَافِرُونَ

30:8 Do they not think themselves? Allah did not create the skies and the earth, and all in between except with truth (i.e., with purpose) for a fixed term. Yet there are many among people who deny meeting with their Lord!

أَمْ تَرَ أَنَّ اللَّهَ يُولِجُ اللَّيْلَ فِي النَّهَارِ وَيُولِجُ النَّهَارَ فِي اللَّيْلِ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ كُلُّ يَجْرِي إِلَى أَجَلٍ مُسَمَّىٍ وَأَنَّ اللَّهَ بِمَا تَعْمَلُونَ حَسِيرٌ

31:29 Do you not see that Allah merges night into the day and He merges day into the night and He has subjected the sun and the moon (to his commands), each running its course for a pre-determined term, and that Allah is well-acquainted with all that you do?

وَالشَّمْسُ تَجْرِي لِمُسْتَقْرٍ لَهَا ۗ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ

36:38 And the sun moves on for a period determined for it. That is the decree of (Allah), the Mighty, the All-Knowing.

خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ ۖ يُكَوِّرُ اللَّيْلَ عَلَى النَّهَارِ وَيُكَوِّرُ النَّهَارَ عَلَى اللَّيْلِ ۖ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ ۖ كُلُّ يَجْرِي لِأَجَلٍ مُسَمَّىٌ ۖ أَلَا هُوَ الْعَزِيزُ الْغَفَّارُ

39:5 He created the skies and the earth in truth. He covers the night over the day and He covers the day over the night. He subjected the sun and the moon (to His law) each running (its course) for a fixed term. Is He not the Mighty, the Forgiver?

يُولِّي اللَّيْلَ فِي النَّهَارِ وَيُولِّي النَّهَارَ فِي الظَّهَارِ وَسَحَرَ الشَّمْسَ وَالْقَمَرَ كُلَّنِيْجِيرِي لِأَجْلِ مُسَمِّي ۝ ۝ ذُلِكُمُ اللَّهُ رَبُّكُمْ لَهُ الْمُلْكُ ۝ ۝ وَالَّذِينَ تَدْعُونَ مِنْ دُونِهِ مَا يُلْكُونَ مِنْ قِطْمِيرِ

35:13 He merges night into the day and He merges day into the night. He has subjected the sun and the moon (to His Law), each running its course for a fixed term. That is Allah, your Lord. To Him belongs all dominion. And those whom you invoke besides Him have not even the control over a date-stone skin.

مَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَجْلٍ مُسَمِّي ۝ ۝ وَالَّذِينَ كَفَرُوا عَمَّا أَنْذَرُوا مُعَرِّضُونَ

46:3 We created the skies and the earth and all in between in truth (i.e., with purpose) and for a fixed term. But those who reject Faith turn away from what they are warned of.

The verses quoted above make it unambiguously clear that the entire universal system has a fixed term. On expiry of that term, the universe will end. We know that stars have limited supply of hydrogen for fusion reaction in their cores and therefore they have only limited life. This indicates that the stars cannot go on forever. The finite life of the stars is a clear indication of the finite life of the whole universe. Occasionally we do hear about prediction of the end of the universe by scientists. Generally such predictions put the timeline between 20 and 40 billion years from now. But the Quran says that none can get the knowledge of the final day or doomsday. That knowledge is with Allah alone.

يَسْأَلُونَكَ عَنِ السَّاعَةِ أَيَّانَ مُرْسَاهَا ۝ ۝ قُلْ إِنَّمَا عِلْمُهَا عِنْدَ رَبِّي ۝ ۝ لَا يُجَلِّيهَا لِوَقْتِهَا إِلَّا هُوَ ۝ ۝ نَئَلْتُ فِي السَّمَاوَاتِ وَالْأَرْضِ ۝ ۝ لَا تَأْتِيْكُمْ إِلَّا بَعْثَةً ۝ ۝ يَسْأَلُونَكَ كَائِنَكَ حَفِيْظٌ عَنْهَا ۝ ۝ قُلْ إِنَّمَا عِلْمُهَا عِنْدَ اللَّهِ وَلِكِنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ

7:187 They ask you (Prophet Muhammad) about the (Final) Hour - when will it happen? Say: "Verily, its knowledge is with my Lord (alone). None but He can reveal its time. It will

be hard for the skies and the earth. It will come to you all of a sudden.” They ask you as if you are well informed about it. Say: “Certainly, its knowledge is with Allah (alone); but most people do not know.”

The fate of the universe has been the topic of serious discussion following the failure of the steady state theory (which described the universe as a static system without beginning and end) and the successful demonstration of the predictions of the big bang model. Theoretical explorations to find answers to this issue are possible with the big bang model which portrays an expanding universe. Consistent with the observations of several supernovae (a supernova is a stellar explosion producing an extremely luminous object made of plasma – ionized state of matter) in other galaxies, the rate of expansion of the universe has been found to be accelerating. The concepts of dark energy and dark matter, which act against gravitational attraction, have been introduced to allow for the acceleration. The ultimate fate of the universe is supposed to depend on how much dark energy it contains and the value of the density parameter, omega (Ω). Density parameter (Ω) is defined as the average matter density of the universe divided by a critical value of that density. Based on these conditions, three scenarios have been suggested as the probable ultimate fate of the universe [6]. An Ω greater than 1 represents a “closed universe”. In a closed universe gravity eventually brings the expansion of the universe to a stop, after which it starts contracting until all matter in the universe collapses to a point, a final singularity called “the big crunch”. A universe is called “open” if its Ω is less than 1. The open universe expands forever. Matter will spread thinner and thinner. Galaxies will exhaust their gas supply for forming new stars. The old stars will eventually burn out, leaving only dust and dead stars. The universe will become quite dark and the temperature of the universe will approach absolute zero. The universe will peter out in a “big chill”. An Ω equal to 1 describes a “flat universe”. A flat universe expands forever but at a decelerating rate

asymptotically approaching zero. The universe will not end in a big crunch nor expand into an infinite big chill, but will remain at equilibrium [7]. Besides these, the possibility of “multiverse” (parallel universes) is also indicated. It is assumed that our universe may be one among many universes with even different physical laws. There is also the cyclic cosmological model that suggests the universe will exist forever through cyclic repetition of big bang and big crunch.

The Quran repeatedly draws our attention to the end of the universe reminding us of that impending event. The verses 21:104 and 39:67 provide certain hints about the end process namely, the skies will be rolled up like a scroll and the size of the universe will be reduced to a handful. These statements relating to the end of the universe are fully consistent with the theoretical expectations of the big crunch hypothesis which predicts that the universe will eventually stop expanding and start collapsing. The collapse thus leads to the end of the universe. “The rolling up of the sky like a scroll rolled up for books” (Q. 21:104) may be considered as metaphorical description of collapse of the universe while the reference to the size of the earth as “handful” is the small size of the universe following the collapse (Fig. 8.1). The big crunch theory is thus acceptable for explaining the end of the universe as it agrees with the Quranic description in a broad theoretical sense. This also means that the present universe is a closed universe (Fig. 8.2). It may be reminded here that this is a case of application of the Quran to science to arrive at the correct theory from among the many theories proposed to explain a given phenomenon. That way science can be purified by picking out the right one and rejecting the others. Thus the Quran guides science to the truth on the question of the fate of the universe. Since the universe has been designed and programmed to suit the divine mission of human robot testing, the end of the universe will mark the completion of the human robot testing programme.

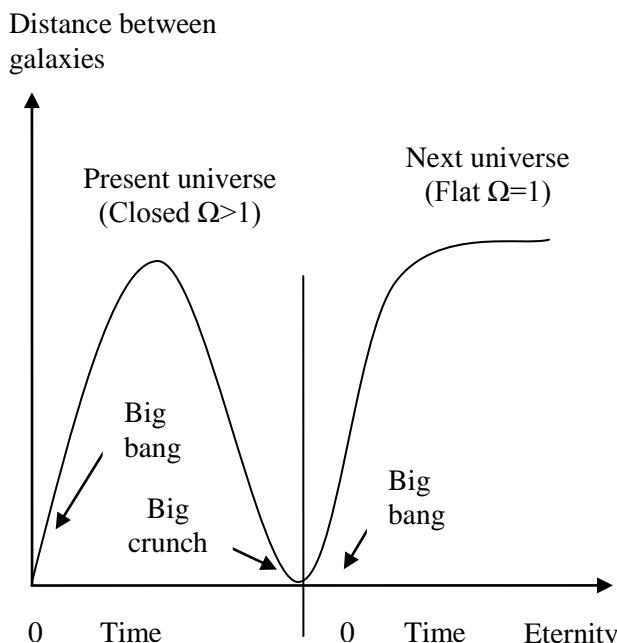


Fig. 8.2. Diagrammatic representation of the creation of the next eternal universe following the end of the present universe

Creation of the next universe

As with the end of the universe, the creation of the next universe is also a certainty. The Quranic verse 21:104 quoted above also gives certain hints about the mode of creation of the next universe. Allah tells us that the mode of creation of the next universe will be similar to the one adopted by Him in its first creation. Going by the big bang model to describe the cosmogony (the genesis of the universe), it will be by the same process that God will create the next universe on the Day of Judgement. The end (big crunch) of the present universe being a cosmic singularity, it may serve as the big bang of the next

universe. According to Khoury *et al.*, the universe can undergo a transition from big crunch to a big bang through a string theoretic regime which connects the two phases [8]. This scenario offers a continuum between the present and the next universe and corroborates the Quranic disclosure of creation of a new universe following the end of the present universe. The big crunch of this universe serves as the big bang of the next universe.

The most glaring feature of the next universe that distinguishes it from the present universe is its eternal nature mentioned at several places in conjunction with the description of Heaven (Q. 57:12) and Hell (Q. 43:74).

يَوْمَ تَرَى الْمُؤْمِنِينَ وَالْمُؤْمِنَاتَ يَسْعَى نُورُهُم بَيْنَ أَيْدِيهِمْ وَبِأَيْمَانِهِمْ بُشِّرَاكُمُ الْيَوْمَ حَنَّاثٌ
بَخْرِيٌّ مِّنْ تَحْتِهَا الْأَنْهَارُ حَالِدِينَ فِيهَا ۝ ذَلِكَ هُوَ الْفَوْزُ الْعَظِيمُ

57:12 The Day you will see the believing men and the believing women (with) their glow spreading to their front and their right. (They will be told): Today's good news for you is Gardens with rivers flowing beneath. (You will) dwell therein forever! That is indeed the great success!

إِنَّ الْمُجْرِمِينَ فِي عَذَابٍ جَهَنَّمَ خَالِدُونَ

43:74 The sinners will be in the punishment of Hell forever.

The eternal nature is theoretically a characteristic of “flat universe” with Ω equal to 1. A flat universe will expand at a rate that is just enough to avoid re-collapse (Fig. 8.2). It also implies that the abioprogram of the next universe will satisfy the eternal nature as well as its other special characteristics. This proposition of the re-creation of the universe is comparable with the theoretical model of cyclic universe with the difference that the big crunch occurs only once and the next universe will not meet with the same fate (big crunch) as its predecessor. In other words with the creation of the next universe, the cycle completes. Therefore, the abioprogram of

the universe may be thought of as an integrated software for the present universe and the next universe together.

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9. THE *ROOH* AND THE PHENOMENA OF LIFE, DEATH AND SOUL

How to define ‘life’ is a sweeping question that affects all branches of biology. Carol Cleland opines that it is a mistake to try to define ‘life’ [1]. Nevertheless, life has been described in terms of the properties or attributes of living organism. Some examples are given below.

- a) “Living things tend to be complex and highly organized. They have the ability to take in energy from the environment and transform it for growth and reproduction. Organisms tend toward homeostasis: an equilibrium of parameters that define their environment. Living creatures respond, and their stimulation fosters a reaction-like motion, recoil, and in advanced forms, learning. Life is reproductive, as some kind of copying is needed for evolution to take hold through a population’s mutations and natural selection. To grow and develop, living creatures need foremost to be consumers, since growth includes changing biomass, creating new individuals and the shedding of waste. To qualify as a living thing, a creature must meet some variation for all these criteria. For example a crystal can grow, reach equilibrium, and even move in response to stimuli, but lacks what commonly would be thought of as a biological nervous system” [1].
- b) Five basic characteristics are used to describe life namely, evidence of growth and replication, evidence of purposeful energy transfer, response to stimuli, self-preservation, and significant difference from the surrounding environment, although difficulties are faced in its implementation [2].
- c) “Living beings are systems that have three simultaneous features: they are self-supported, they reproduce themselves and they evolve through interaction with the environment” [3].

- d) “Life is a chemical system able to replicate itself through autocatalysis and to make mistakes that gradually increase the efficiency of the autocatalysis” [3].
- e) “Living beings are protein-made bodies formed by one or more cells that communicate with the environment through information transfer carried out by electric impulses or chemical substances, and capable of morphological evolution and metabolism, growth and reproduction” [3].
- f) “Life is a self-sustained chemical system capable of undergoing Darwinian evolution” [4].

None of these descriptions characterizes the phenomenon of life in its entirety. According to Cleland and Chyba, “there is no broadly accepted definition of ‘life’. Suggested definitions face problems, often in the form of robust counter-examples. Here we use insights from physiological investigations into the language to argue that defining ‘life’ currently poses a dilemma analogous to that faced by those hoping to define ‘water’ before the existence of molecular theory. In the absence of an analogous theory of the nature of living systems, interminable controversy over the definition of life is inescapable.” [5].

Holy Quran is the only source of information on the phenomena of life and death. The Quran reveals that life is caused by a nonmaterial (invisible) entity called *rooh*.

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي خَالِقٌ بَشَرًا مِّنْ صَلْصَالٍ مَّنْ حَمِّاً مَسْتُونٌ فَإِذَا سَوَّيْتُهُ وَنَفَخْتُ فِيهِ مِنْ رُوحِي فَقَعُوا لَهُ سَاجِدِينَ ﴿١٥﴾

15:28-29 Behold! Your Lord said to the angels: I am about to create a man from sounding clay (made) from sticky mud. When I have fashioned him and breathed into him from My *rooh*, you fall down in obeisance to him.

The verses 15:28-29 describe the process of creation of Adam, the first human being, by breathing *rooh* into a nonliving material – a clay model of Adam. The term “*nafs*” is also used

in the Quran (Q. 4:1) in several verses to mean *rooh* present in the human biosystem.

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبِّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً ۝ وَاتَّقُوا اللَّهَ الَّذِي تَسْأَلُونَ بِهِ وَالْأَرْضَ حَمَّ ۝ إِنَّ اللَّهَ كَانَ عَلَيْكُمْ رَقِيبًا

4: 1 O mankind! Fear your Lord who created you from a single *nafs* and from that, He created its mate, and from them both He (created and) spread plenty of men and women. Be conscious of Allah about whom you ask each other and (be also conscious of) the family relations. Verily, Allah is watching you.

This verse informs us that it is from a single *nafs* the entire humanity is created. The *nafs* referred to in this verse corresponds to the *rooh* breathed into the clay model of Adam. These revelations make it clear that *rooh* is the cause of life. In the light of these revelations, the phenomena of life and death have been explained scientifically based on the computer model of organism [6].

Organism – natural biocomputer or biorobot

“Breathing of *rooh*” into the clay model to create man (Adam) mentioned in the verses quoted above (Q. 15:28-29) may be considered as metaphoric expression of the installation of the divine biosoftware in the clay model of man. Upon installation of the *rooh* in that non-living clay model, it sprang to life much like a lifeless computer springs to “life” when software is installed. Therefore the invisible nonphysical *rooh* can be considered as biosoftware. The Quranic verses thus reveal to us that biosoftware (God’s instructions or program) exists in living systems in nonphysical form. Accordingly a living organism can be described as natural biocomputer system or more precisely biorobot in view of the presence of sensory mechanisms in them.

A computer consists of basically two components namely, the visible (tangible) hardware and the invisible (intangible or nonphysical) software. Although the software is nonmaterial, it requires a physical medium for its storage. The storage medium of the computer is its hard disk. An organism can also be described as biocomputer or biorobot. It is made of one or more cells. The cell is a biochip (Fig. 9.1). The structures in the cell (organelles and nuclear structures including DNA), tissues and organs at the level of the organism constitute the hardware. The invisible biosoftware, as in the case of computer software, is stored on a physical medium. The storage device of the cell is chromosome. It is the hard disk of the organism. Since the hardware components (chemical structures) are intended for the execution of the bioprogram, they are produced in the cell in accordance with the bioprogram to carry out the intended functions. The variations observed among the tissues in their hardware including DNA [7] confirm this. Since the biological functions of the tissues are different, their hardware must also be different to suit the functions. In computer parlance the biosoftware may be described as integrated divine program or sets of divine instructions in the right sequence for the development of the organism (phenotype or biohardware), execution of various bioprocesses, its behaviour, instincts, habits and every other task performed by it. Accordingly, an organism can be viewed as natural biocomputer or biorobot whose development and functioning are determined by an integrated divine biosoftware (bioprogram).

Definitions of life, death and soul

Most people irrespective of their religious affiliation believe in an invisible ‘soul’ that resides inside the body. However the ‘soul’ remains even today an abstract entity in the minds of people. Soul is what the Quran refers to as *rooh*. Therefore the explanation given for *rooh* based on the computer model is equally applicable to “soul” also. The

invisible software of a computer may be considered as its soul because it is the software that gives ‘life’ to it. Likewise, the invisible divine biosoftware (*rooh*) of an organism is its soul. In this way the soul can be scientifically defined.

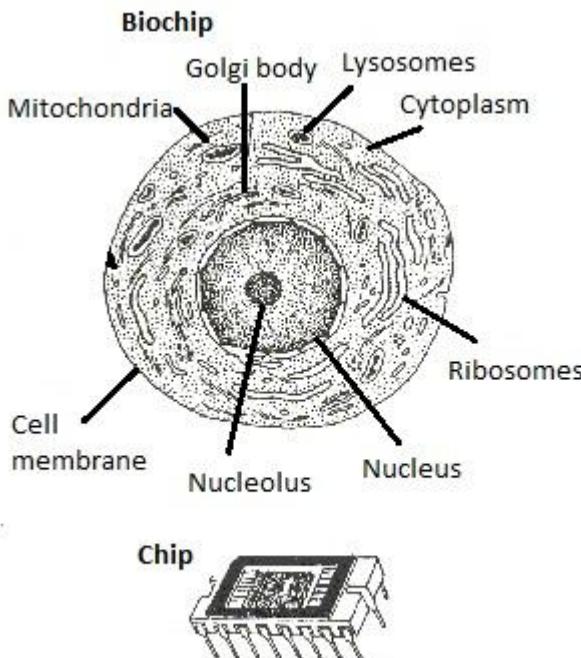


Fig. 9.1. A generalized diagram of the biochip (living cell) contrasted against man-made computer chip

Note: The biochip is microscopic whereas man-made chip is macroscopic.

The Quran further reveals at verse 6:93 that it is the removal (or in computer jargon, ‘deletion’) of *nafs* (biosoftware) from the body that results in death.

وَلَنْ تَرَى إِذ الظَّالِمُونَ فِي غَمَرَاتِ الْمَوْتِ وَالْمَلَائِكَةُ بَاسِطُو أَيْدِيهِمْ أَخْرِجُوا أَنْفُسَكُمْ

6:93 "...If you could see the wicked in their panicky state at death when the angels stretch forth their hands (saying), "Release your *nafs*"...."

This implies that at death the biosoftware is *permanently* deleted from the body; i.e., it is irreversibly lost from the body cells. A dead body is therefore like a computer without software. This will explain why life cannot be created from nonlife, why a dead cell cannot be cultured, and why the material gene (genome) concept (discussed later) is wrong. Based on these Quranic revelations, *the phenomenon of life can be defined as the manifestation of the execution of the divine biosoftware, and death as the deletion (permanent loss) of biosoftware from the body cells.*

Strictly speaking, the computer model does not distinguish between living and nonliving systems. The so-called nonliving system or the physical universe is also living as per the definition of life because it is also run on a divine program, the abioprogram. Similarly computers, robots, etc. that run on man-made software can be considered as forms of 'artificial life'. Thus we can distinguish three forms of life in the universe based on the type of software. These are: a) abiosystems or the so-called nonliving systems that run on the divine abioprogram, b) biosystems or the living organisms that run on the divine biosoftware, and c) forms of artificial life that operate on man-made software. For convenience in discussion we shall however retain the terms 'nonliving' and 'living'.

Rooh – The invisible nonmaterial biological information

The word *rooh* appears in the Quran in twenty verses. These are 2:87, 2:253; 4:171; 5:110; 15:29; 16:2, 16:102; 17:85; 19:17; 21:91; 26:193; 32:9; 38:72; 40:15; 42:52; 58:22; 66:12; 70:4; 78:38 and 97:4. The various purposes for which Allah used *rooh* are discussed below.

a) *Rooh* as biosoftware

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي خَالقٌ بَشَرًا مِنْ صَلْصَالٍ مِنْ حَمَّا مَسْنُونٍ فَإِذَا سَوَّيْتُهُ وَنَفَخْتُ فِيهِ مِنْ رُوحِي فَقَعُوا لَهُ سَاجِدِينَ

15:29 When I have fashioned him (clay model of Adam) and breathed into it from My *rooh*, you fall down in obeisance to him.

ثُمَّ سَوَّاهُ وَنَفَخَ فِيهِ مِنْ رُوحِهِ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأُفْنَادَ فَيَلَّا مَا تَشْكُرُونَ

32:9 Then He (Allah) fashioned him (Adam) in due proportion and breathed into him from His *rooh*. And He made for you (the faculties of) hearing, seeing and feeling. Little thanks it is you give!

فَإِذَا سَوَّيْتُهُ وَنَفَخْتُ فِيهِ مِنْ رُوحِي فَقَعُوا لَهُ سَاجِدِينَ

38:72 When I (Allah) have fashioned him (clay model of Adam) and breathed into it (clay model of Adam) from My *rooh*, you (angels) fall down in obeisance to him.

In these verses (15:29, 32:9 and 38:72) the word ‘*rooh*’ denotes biosoftware of Adam.

وَالَّتِي أَخْصَنَتْ فَرِحَّهَا فَنَفَخْنَا فِيهَا مِنْ رُوحِنَا وَجَعَلْنَاهَا وَانْتَهَا آيَةً لِلْعَالَمِينَ

21:91 And (remember) her (i.e., Mary) who guarded her genital organ. We breathed into her from Our *rooh*, and We made her and her son a sign for the people of the world.

وَمَنِيمَ ابْنَتَ عِمْرَانَ الَّتِي أَخْصَنَتْ فَرِحَّهَا فَنَفَخْنَا فِيهِ مِنْ رُوحِنَا وَصَدَّقَتْ بِكَلِمَاتِ رَبِّهَا وَكُتُبِهِ وَكَانَتْ مِنَ الْقَانِتِينَ

66:12 And Mary the daughter of Imran who guarded her genital organ and We breathed into it (i.e., her genital organ) from Our *rooh*. She believed in the Words of her Lord and His Books. She was one of the devout (servants).

يَا أَهْلَ الْكِتَابِ لَا تَعْلُو فِي دِينِكُمْ وَلَا تَقُولُوا عَلَى اللَّهِ إِلَّا الْحَقُّ ۝ إِنَّمَا الْمُسِيَّخُ عِيسَى ابْنُ مَرْيَمٍ رَسُولُ اللَّهِ وَكَلِمَتُهُ أَلْقَاهَا إِلَى مَرْيَمَ وَرُوحٌ مِنْهُ ۝ قَاتَمُوا بِاللَّهِ وَرَسُولِهِ ۝ وَلَا تَقُولُوا ثَلَاثَةٌ ۝ اتَّهُوا خَيْرًا لَكُمْ ۝ إِنَّمَا اللَّهُ إِلَهٌ وَاحِدٌ ۝ سُبْحَانَهُ أَنْ يَكُونَ لَهُ وَلَدٌ ۝ لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ ۝ وَكَفَىٰ بِاللَّهِ وَكِيلًا

4:171 O People of the Book! Commit no excesses in your religion and do not say anything but truth about Allah. Jesus Christ son of Mary was an apostle of Allah and His Word, which He transmitted to Mary and a *rooh* from Him. So believe in Allah and His apostles. Do not say “Trinity”, desist (from saying that); it will be better for you. Verily Allah is one God. Glory be to Him; (too exalted is He) to have a son. To Him belong all things in the skies and on earth. And enough is Allah for a protector.

In these verses (21:91, 66:12 and 4:171) the word ‘*rooh*’ is used to mean biosoftware of Prophet Jesus Christ. The verse 4:171 further reveals that *rooh* is Allah’s Word.

b) *Rooh* as special program in human biosystem

In verses 2:87, 2:253 and 5:110 the term ‘*Rooh-ul-Qudusi*’ is used to indicate the *rooh* (program) used to strengthen Prophet Jesus Christ. The *Rooh-ul-Qudusi*, as we shall see later, is Jibreel.

وَلَقَدْ آتَيْنَا مُوسَى الْكِتَابَ وَقَفَّيْنَا مِنْ بَعْدِهِ بِالرُّسُلِ ۝ وَآتَيْنَا عِيسَى ابْنَ مَرْيَمَ الْبَيِّنَاتِ وَأَيَّدْنَاهُ بِرُوحِ الْقُدْسِ ۝ أَفَكُلَّمَا جَاءَكُمْ رَسُولٌ إِمَّا لَا تَهْوَى أَنفُسُكُمْ أَسْتَكْبِرُمُ فَرِيقًا كَذَبْتُمْ وَفَرِيقًا تَقْتَلُونَ

2:87 We (Allah) gave Moses the Book and followed him up with a succession of apostles. We (Allah) gave Jesus son of Mary, clear signs and strengthened him with *Rooh-ul-Qudusi* (Jibreel). Is it that whenever an apostle comes to you with what is not pleasing to yourselves, you get arrogant? You treated some of them as fake and you killed some others.

تِلْكَ الرُّسُلُ فَصَلَّى بَعْضُهُمْ عَلَى بَعْضٍ ۝ مِنْهُمْ مَنْ كَلَمَ اللَّهُ ۝ وَرَفَعَ بَعْضُهُمْ دَرَجاتٍ ۝ وَآتَيْنَا عِيسَى ابْنَ مَرْيَمَ الْبَيْتَاتِ وَأَيَّدَنَا بِرُوحِ الْقُدُسِ ۝ وَلَوْ شَاءَ اللَّهُ مَا افْتَنَ الَّذِينَ مِنْ بَعْدِهِمْ مِنْ بَعْدِ مَا جَاءَتْهُمُ الْبَيْتَاتُ وَلَكِنَّهُمْ فَمِنْهُمْ مَنْ آمَنَ وَمِنْهُمْ مَنْ كَفَرَ ۝ وَلَوْ شَاءَ اللَّهُ مَا افْتَنُوا وَلَكِنَّ اللَّهَ يَفْعَلُ مَا يُرِيدُ ۝

2:253 We have graced some of those apostles more than some others. Among them are those to whom Allah spoke and He has elevated the status of some of them. We gave clear (signs) to Jesus son of Mary and strengthened him with *Rooh-ul-Qudusi* (Jibreel). If Allah had so willed, the later generations would not have clashed each other after clear (signs) had come to them. But they split up; some of them believed and some of them rejected (Faith). If Allah had so willed, they would not have fought each other; but Allah does what He intends.

إِذْ قَالَ اللَّهُ يَا عِيسَى ابْنَ مَرْيَمَ اذْكُرْ نِعْمَتِي عَلَيْكَ وَعَلَىٰ وَالِّدَتِكَ إِذْ أَيَّدْنَاكَ بِرُوحِ الْقُدُسِ ۝ ثُكَلَمَ النَّاسَ فِي الْمَهْدِ وَكَهْلًا ۝ وَإِذْ عَلَمْنَاكَ الْكِتَابَ وَالْحِكْمَةَ وَالثُّوْرَةَ وَالْإِجْيلَ ۝ وَإِذْ خَلَقْنَا مِنَ الطَّيْنِ كَهْيَةً الطَّيْرَ بِإِذْنِنَا فَتَنَفَّخْنَا فِيهَا فَتَكُونُ طَيْرًا بِإِذْنِنَا ۝ وَتَبَرِّئُ الْأَكْمَةَ وَالْأَبْرَصَ بِإِذْنِنَا ۝ وَإِذْ تُخْرِجُ الْمُؤْمَنَى بِإِذْنِنَا ۝ وَإِذْ كَفَرْتُ بْنَى إِسْرَائِيلَ عَنْكَ إِذْ جَهَنَّمَ بِالْبَيْنَاتِ فَقَالَ الَّذِينَ كَفَرُوا مِنْهُمْ إِنْ هَذَا إِلَّا سِحْرٌ مُّبِينٌ

5:110 (Remember) Allah said: O Jesus the son of Mary! Remember My favour to you and to your mother. I strengthened you with *Rooh-ul-Qudusi* (Jibreel) to enable you to speak to the people from the cradle (as infant) and in adulthood. I taught you the Book and wisdom, the *Taurat* (i.e., the Book revealed to Prophet Moses) and the *Injeel* (i.e., the Book given to Prophet Jesus Christ). And behold, you made clay mould of a bird by My permission, then you breathed into it and it became a bird by My permission, and you cured the blind and the lepers by My permission. And you brought out the dead (alive from the grave) by My permission. And behold, I did restrain the Children of Israel from (violence to) you

when you approached them with clear signs and the unbelievers among them said: This is nothing but sheer magic.

Another term ‘*Rooh-ul-Ameen*’ is also used to mean Jibreel (Q. 26:193).

نَزَّلَ بِهِ الرُّوحُ الْأَمِينُ

26:193 The *Rooh-ul-Ameen* (Jibreel) brought it (the Quran) down.

Verse 16:102 indicates *Rooh-ul-Quodusi* (Jibreel) transmitted the Quran.

فَإِنْ تَرَكُوكُمْ رُوْحٌ مِّنْ رَّبِّكُمْ بِالْحُقْقِ لِيُتَبَيَّنَ أَمْنُوا وَهُدًى وَبُشْرَى لِلْمُسْلِمِينَ

16:102 Say: The *Rooh-ul-Quodusi* (Jibreel) has brought it (the Quran) down from your Lord in truth in order to strengthen those who believe and as guide and good news to Muslims.

The verses 16:102 and 26:193 indicate that a *rooh* referred to as *Rooh-ul-Quodusi* or *Rooh-ul-Ameen* transmitted the Quran. From verse 2:97 given below, it can be understood that these two names refer to the same *rooh*, i.e., Jibreel. Please note that the pronoun ‘it’ (instead of ‘he’ used by the translators of the Quran to refer to Jibreel) is used here as the Quran describes Jibreel as *rooh* and not as angel.

فَإِنْ مَنْ كَانَ عَدُوًّا لِجِبْرِيلَ فَإِنَّهُ نَزَّلَهُ عَلَى قَلْبِكَ يَأْذِنُ اللَّهُ مُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ وَهُدًى
وَبُشْرَى لِلْمُؤْمِنِينَ

2:97 Say (O Muhammad!): Whoever is an enemy of Jibreel (a *rooh*) that certainly it was that (Jibreel) which transmitted the (revelation) onto your mind by Allah’s order confirming the (revelations) that came before it and as guidance and glad tidings to the believers.

Thus it can be understood that it is through *rooh* Jibreel Allah transmitted the Quran to the mind of Prophet Muhammad. The mechanism of transmission of divine message is discussed in detail in chapter 15.

c) Distinction between *malak* and Jibreel

Being an intangible (*ghayb*) entity and because not much information is given in the Quran, a lot of confusion and uncertainty exist over the meaning of the word *rooh* among the scholars. This has also led to misinterpretation of the words *malak* (angel) and Jibreel. The lack of clarity is also very much evident in the Quran translations published by different scholars. A comparison of the translations and interpretations given by Yusuf Ali, Pickthal, Shakir and Mohsin Khan [8] will make this point clear.

Of the twenty verses on *rooh* in the Quran already mentioned, the verses 2:87, 2:253, 5:110, and 16:102 are about *Rooh-ul-Qudusi*, and 26:193 about *Rooh-ul-Ameen*. In the remaining fifteen verses, Yusuf Ali interprets the word *rooh* as “spirit” in eleven verses (4:171; 15:29; 17:85; 21:91; 32:9; 38:72; 58:22; 66:12; 70:4; 78:38; 97:4), as angel in one verse (19:17), and as “spirit of inspiration” or “inspiration” in the other three (16:2; 40:15; 42:52). Pickthal prefers to interpret it as “spirit” in all the verses except in 42:52 where the phrase “Spirit of Our Command” is used. Shakir translates the word *rooh* as “spirit” in eight verses (4:171; 15:29; 19:17; 32:9; 38:72; 70:4; 78:38; 97:4), as “soul” in one verse (17:85), as “inspiration” in five verses (16:2; 21:91; 40:15; 58:22; 66:12) and as “inspired book” in one (42:52) while Mohsin Khan interprets it as “spirit” in two verses (4:171; 17:85), as “soul” in three verses (15:29; 32:9; 38:72), as “angel Jibreel” in six verses (19:17; 21:91; 66:12; 70:4; 78:38; 97:4), as “inspiration” in three verses (16:2; 40:15; 42:52), and as “proofs, light, and true guidance” in one verse (58:22).

It is quite evident that there is no consensus meaning for the word *rooh* adopted by the scholars. The given meanings “spirit”, “soul” and “inspiration” are abstract, vague and lack consistency. Thus the translations of the verses concerned do not offer a clear idea of the message conveyed through them.

Although the Quran makes clear distinction between “rooh” and “malak”, the scholars and hence Muslims traditionally believe that Jibreel, which is described as *Rooh-ul-Qudusi* or *Rooh-ul-Ameen*, is a *malak* (more precisely a high ranking *malak* or archangel) and not *rooh*. Verse 16:2 itself distinguishes *rooh* from *malak* as it states that *rooh* is sent through a *malak* (angel). Verses 70:4, 78:38 and 97:4 further confirm this.

يُنَزِّلُ الْمَلَائِكَةَ بِالرُّوحِ مِنْ أَمْرِهِ عَلَىٰ مَنْ يَشَاءُ مِنْ عِبَادِهِ أَنْ أَنذِرُوا اللَّهَ إِلَّا أَنَا
فَأَنَّقُونِ

16:2 He sends down angels with *rooh* (Scripture) from His command to whom He likes from among His servants to warn (man) that: There is no God but I (Allah); so you fear Me.

تَعْرِجُ الْمَلَائِكَةُ وَالرُّوحُ إِلَيْهِ فِي يَوْمٍ كَانَ مِقْدَارُهُ خَمْسِينَ أَلْفَ سَنَةٍ

70:4 The angels and the *rooh* ascend to Him in a Day whose measure is fifty thousand years.

يَوْمٌ يُثُومُ الرُّوحُ وَالْمَلَائِكَةُ صَفَّا ۝ لَا يَتَكَبَّرُونَ إِلَّا مَنْ أَذِنَ اللَّهُ الرَّحْمَنُ وَقَالَ صَوَابًا

78:38 The Day the *rooh* and the angels will stand in line. None except who is permitted by (Allah) Most Merciful and (who) told what is right will (alone) speak.

تَنَزَّلُ الْمَلَائِكَةُ وَالرُّوحُ فِيهَا بِإِذْنِ رَحْمَمِ مِنْ كُلِّ أَمْرٍ

97:4 The angels and *rooh* descend in that (Night of Power) with the permission of their Lord for every affair.

In all these verses, *malak* and *rooh* are treated as two different entities. In the light of verse 16:2, verses 70:4 and 97:4 also appear to convey that *malak* is the carrier of *rooh*. Not only for sending *rooh* (Q. 16:2) but also for taking back the *rooh* (or *nafs*), angel is appointed by Allah. This is very much evident from verse 6:93 (quoted earlier), which reveals that the *nafs* is deleted from human body by an angel at the time of death.

The distinction between *rooh* and *malak* is also quite evident in the Quranic account of the conception of Prophet Jesus Christ by Virgin Mary. Prophet Jesus Christ was conceived by Mary from the *rooh* (biosoftware) sent to her genital organ (Q. 66:12 quoted earlier). The *rooh* was sent through an angel who appeared as male messenger before Mary (Q. 19:17-22).

فَلَّهَّخَتْ مِنْ دُونِهِمْ حِجَابًا فَأَرْسَلْنَا إِلَيْهَا رُوْحَنَا فَتَمَثَّلَ هَذَا بَشَرًا سَوِيًّا قَالَتْ إِنِّي أَعْوَدُ
بِالرَّحْمَنِ مِنْكَ إِنْ كُنْتَ تَقِيًّا قَالَ إِنَّمَا أَنَا رَسُولٌ رَّبِّنِي لِأَهْبِطَ لَكَ عَلَامًا زَكِيًّا قَالَتْ أَنِّي
يُكُونُ لِي عَلَامٌ وَمَمْ يَمْسِسْنِي بَشَرٌ وَمَمْ أَكُ بَعِيًّا قَالَ كَذَلِكَ قَالَ رَبِّكَ هُوَ عَلَيَّ هِينَ
وَلَنْ جُعَلَهُ آيَةً لِلنَّاسِ وَرَحْمَةً مِنَنِ ۝ وَكَانَ أَمْرًا مَفْضِيًّا فَحَمَلَتْهُ فَانْتَبَدَتْ بِهِ مَكَانًا فَصِيًّا

19:17-22 She placed a screen (to separate herself) from them. Then We sent to her Our *rooh* and he (i.e., the angel) appeared to her as man in all respects. She said: “I seek refuge in Most Gracious (Allah) from you (i.e., the angel in human male form), if you fear Allah.” He (i.e., the angel in human male form) said: “Indeed I am only a messenger from your Lord to gift to you a pure son.” She said: “How can I have a son as no man has (ever) touched me and I have not been an unchaste (woman)?” He (i.e., the angel in human male form) said: “It is like that. Your Lord says, “It is a simple thing for Me and (We wish) to make him (i.e., her son Jesus) a sign to mankind and a Mercy from Us.” It is a matter ordained.” So she conceived him (i.e., her son Jesus) and she retired with him to a remote place.

In the above verses while describing how Virgin Mary conceived Prophet Jesus, the word *rasool* (messenger) and not *malak* is used to indicate the agent who brought the *rooh* of Prophet Jesus Christ for deposition in his mother’s genital organ. It may be noted that in the Quran the word *rasool* is also used to indicate *malak*.

اللَّهُ يَصْطَفِي مِنَ الْمَلَائِكَةِ رُسُلًا وَمِنَ النَّاسِ ۝ إِنَّ اللَّهَ سَمِيعٌ بَصِيرٌ

22:75 Allah chooses messengers from the angels and from mankind. Indeed Allah hears and sees (all things).

الْحَمْدُ لِلّٰهِ فَاطِرِ السَّمَاوٰتِ وَالْأَرْضِ جَاعِلِ الْمَلَائِكَةِ رُسُلًا أُولَئِكُنَّ أَجْيَحَةٌ مُّتَّنَّىٰ وَتَلَاثَ
وَزَيْعَانٌ ۝ يَرِيدُ فِي الْخُلُقِ مَا يَشَاءُ ۝ إِنَّ اللّٰهَ عَلٰى كُلِّ شَيْءٍ قَدِيرٌ

35:1 Praise be to Allah who created the skies and the earth, who made the angels messengers with wings – two, three or four (pairs). He adds to creation as He pleases. Verily Allah has power over all things.

There are also other contexts in which the word *rasool* is used in the Quran to mean *malak*. For instance, the Quran described the guests (angels) who came to Prophet Abraham (Q. 15:51-60; 51:24-34) as *rasool*.

وَنَبَّئُهُمْ عَنْ ضَيْفٍ إِبْرَاهِيمَ إِذْ دَخَلُوا عَلَيْهِ فَقَالُوا سَلَامًا قَالَ إِنَّا مِنْكُمْ وَجَهْلُونَ قَالُوا لَا
تَؤْخِلْنَا إِنَّا نُبَشِّرُكُ بِغُلَامٍ عَلَيْهِ قَالَ أَبْشِرْنُّونِي عَلَىٰ أَنْ مَسِينِي الْكَبِيرُ فِيمَ تُبَشِّرُونَ قَالُوا
بَشَّرْنَاكُ بِالْحَقِّ فَلَا تَكُنْ مِنَ الْقَاطِنِينَ قَالَ وَمَنْ يَقْنَطُ مِنْ رَحْمَةِ رَبِّهِ إِلَّا الضَّالُّونَ قَالَ فَمَا
خَطَبْكُمْ أَيْهَا الْمُرْسَلُونَ قَالُوا إِنَّا أُرْسَلْنَا إِلَىٰ قَوْمٍ مُّجْرِمِينَ إِلَّا آلَ لُوطٍ إِنَّا لَمُنْجَوْهُمْ أَجْعَيْنَ
إِلَّا امْرَأَتُهُ قَدَّرْنَا ۝ إِنَّهَا لَمِنَ الْغَافِرِينَ

15:51-60 Inform them about the guests of Abraham. When they came to him (in human form) and said, “Peace”, he (Prophet Abraham) said: We are afraid of you! They said: Do not fear. We give you glad tidings of a son endowed with wisdom. (Abraham) said: Do you give me (this) glad tidings in spite of my old age? Then what else is there to inform? They said: We conveyed to you good news about the truth. So do not be among the disappointed (any more). (Abraham) said: And who is disappointed of the mercy of his Lord except those who had gone astray? (Abraham) said: What then is your purpose (of visit), O you messengers (i.e., angels)? They said: We have been sent to a sinning people, except the followers of Lut. We will certainly save them all (from punishment), except his wife,

who, We have ascertained, will be among those who will lag behind.

هَلْ أَنْتَكَ حَدِيثُ صَيْفٍ إِبْرَاهِيمَ الْمُكْرِمِينَ إِذْ دَخَلُوا عَلَيْهِ فَعَالُوا سَلَامًا ۝ قَالَ سَلَامٌ
قَوْمٌ مُنْكَرُونَ فَرَاغُ إِلَىٰ أَهْلِهِ فَجَاءَ بِعِجْلٍ سَمِينٍ فَقَرَبَهُ إِلَيْهِمْ قَالَ أَلَا تَأْكُلُونَ فَأَوْجَسَ مِنْهُمْ
خِيفَةً ۝ قَالُوا لَا تَحْفَ ۝ وَبَشَّرُوهُ بِعَلَامٍ عَلَيْهِ فَاقْبَلَتِ امْرَأَتُهُ فِي صَرَّةٍ فَصَكَّتْ وَجْهَهَا
وَقَالَتْ عَجُوزٌ عَقِيمٌ قَالُوا كَذِيلَكَ ۝ قَالَ رَبِّنِي ۝ إِنَّهُ هُوَ الْحَكِيمُ الْعَلِيمُ قَالَ فَمَا حَطْبُكُمْ
أَيُّهَا الْمُرْسَلُونَ قَالُوا إِنَّا أُرْسَلْنَا إِلَىٰ قَوْمٍ مُجْرِمِينَ لِتُرْسِلَ عَلَيْهِمْ حِجَارَةً مِنْ طِينٍ مُسَوَّمَةً
عِنْدَ رَبِّنِكَ لِلْمُسْرِفِينَ

51:24-34 Has the story of the honourable guests of Abraham reached you? When they came to him (Prophet Abraham) and said: Peace! He (Prophet Abraham) said: Peace! – they were strangers. Then he went to his wife and brought a (roasted) fat calf, and placed it before them. He said: Will you not eat? (When he saw them not eating, he got scared); he concealed his fear. They said: Do not fear. And they gave him good news of a son endowed with knowledge. But his wife came forward (laughing) aloud. Then she struck her forehead and said, “A barren old woman!” They said: Yes, it is like that. Your Lord told so. Certainly He is the Wise, the Omniscient. (Prophet Abraham) said: O you messengers! Then what is your errand (now)? They said: We have been sent to a sinning people – to send on them stones (i.e., missiles) of clay earmarked by your Lord for the transgressors.

Further, there are also two other verses, which make it unambiguously clear that Jibreel is not an angel (Q. 2:98 and 66:4). Of these, verse 2:98 also reveals that Michael, which is also believed by the ulema as *malak*, is not a *malak*. *Malak*, Jibreel and also Michael are given distinct identities. Jibreel and Michael are not identified as angels in the Quran.

مَنْ كَانَ عَدُوًّا لِلَّهِ وَمَلَائِكَتِهِ وَرَسُولِهِ وَجَبَرِيلَ وَمِيكَالَ فَإِنَّ اللَّهَ عَدُوٌّ لِلْكَافِرِينَ

2:98 Whoever is an enemy of Allah, His angels, His apostles, Jibreel and Michael, certainly Allah is an enemy of the unbelievers.

إِنْ تَتُوبَا إِلَى اللَّهِ فَقَدْ صَعَّتْ قُلُوبُكُمَا ۝ وَإِنْ تَظَاهَرَا عَلَيْهِ فَإِنَّ اللَّهَ هُوَ مَوْلَاهُ وَجَنَّبَ
وَصَالِحُ الْمُؤْمِنِينَ ۝ وَالْمَلَائِكَةُ بَعْدَ ذَلِكَ ظَهِيرٌ

66:4 If you two (Hafsa and Aysha, wives of Prophet Muhammad) turn in repentance to Him, (that is good for you); for your minds have indeed slipped (into evil). And if you both support each other against him (Prophet Muhammad), (remember) certainly Allah is his protector. Jibreel, the righteous among the believers and the angels besides that, will also back (him) up.

From the foregoing, it is evident that the words ‘*rooh*’ and ‘*malak*’ mean two different things. In spite of the clear distinction, “Jibreel” and “*malak*” are wrongly understood perhaps because the term “*rooh*” remains unexplained even today. The scientific explanation of *rooh* helps to clarify the situation.

d) *Rooh* as Scripture

The Scripture is also referred to as *rooh* in verses 16:2, 40:15 and 42:52. These verses reveal that *rooh* (Scripture) is sent to persons selected by Allah as His prophets. Further, verse 16:2 also reveals that it is through an angel the *rooh* is sent to the prophet.

يُنَزَّلُ الْمَلَائِكَةُ بِالرُّوحِ مِنْ أَمْرِهِ عَلَىٰ مَنْ يَشَاءُ مِنْ عِبَادِهِ أَنْ آتِيُّرُوا أَنَّهُ لَا إِلَهَ إِلَّا أَنَا
فَاتَّقُونَ

16:2 He sends down angels with *rooh* (Scripture) from His command to whom He likes from among His servants to warn (man) that: There is no God but I (Allah); so you fear Me.

رَفِيعُ الدَّرَجَاتِ دُوْعَ الْعَرْشِ يُلْقِي الرُّوحُ مِنْ أَمْرِهِ عَلَىٰ مَنْ يَشَاءُ مِنْ عِبَادِهِ لِتُنذِرَ بِوْمَ النَّلَاقِ

40:15 Elevated is He in ranks, the Lord of the Throne (of Authority). He sends the *rooh* (Scripture) from His Command to any of His servants He chooses that he (i.e., the chosen individual) warns (people) of the Day of Mutual Meeting (of Allah and His servants).

وَكَذَلِكَ أَوْحَيْنَا إِلَيْكَ رُوحًا مِنْ أَمْرِنَا ۝ مَا كُنْتَ تَدْرِي مَا الْكِتَابُ وَلَا الْإِيمَانُ وَلِكُنْ جَعَلْنَاهُ بُورًا نَهَدِي بِهِ مَنْ نَشَاءُ مِنْ عِبَادِنَا ۝ وَإِنَّكَ لَتَهَدِي إِلَى صِرَاطٍ مُسْتَقِيمٍ

42:52 And thus We transmitted to you a *rooh* (the Quran) from Our command. You did not know what the Book (i.e., Scripture) was and (what) the Faith was. But We made it (the Quran) a light. We guide with it whom We wish from Our servants. And verily you are guiding (people) to the right path.

The use of the term ‘*rooh*’ to indicate the Scripture in the above verses justifies the interpretation of *rooh* as biological information because the Scriptural information (divine revelation) can be stored in human biosystem (in the brain memory).

e) *Rooh* to strengthen faith

Verse 58:22 reveals that *rooh* is also used to strengthen one’s belief. This is also consistent with the computer model as *rooh* being biological program can be used to strengthen the faith.

لَا تَجِدُ قَوْمًا يُؤْمِنُونَ بِاللَّهِ وَالْيَوْمِ الْآخِرِ يُؤَاذُونَ مِنْ حَادَّ اللَّهَ وَرَسُولِهِ وَلَوْ كَانُوا آبَاءُهُمْ أَوْ أَبْنَاءُهُمْ أَوْ إِخْوَانَهُمْ أَوْ عَشِيرَةَهُمْ ۝ أُولَئِكَ كَتَبَ فِي قُلُوبِهِمُ الْإِيمَانَ وَأَيْدِيهِمْ بِرُوحٍ مِنْنَا ۝ وَإِنْجَلُهُمْ جَنَّاتٍ خَرَجَي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا ۝ رَضِيَ اللَّهُ عَنْهُمْ وَرَضُوا عَنْهُ ۝ أُولَئِكَ حِزْبُ اللَّهِ ۝ أَلَا إِنَّ حِزْبَ اللَّهِ هُمُ الْمُفْلِحُونَ ۝

58:22 You will not find people who believe in Allah and the Last Day in close relationship with those who resist Allah and His messenger even if they are their fathers, their sons, their brothers or their kindred. For them (i.e., the believers) He has written belief in their minds and strengthened them with a *rooh* from Himself. And He will admit them to Gardens with rivers flowing beneath, to dwell therein (forever). Allah is well pleased with them and they are well pleased with Him. They are the party of Allah. Truly it is the party of Allah who are successful.

From verses 16:2, 40:15 and 42:52 quoted above, and from verse 17:85 given below, it can also be understood that *rooh* is nothing but Allah's command or instruction, which in computer terminology is program.

وَيَسْأَلُونَكَ عَنِ الرُّوحِ ۖ قُلِ الْرُّوحُ مِنْ أَمْرِ رَبِّيٍّ وَمَا أُوتِيْشُ مِنَ الْعِلْمِ إِلَّا قَلِيلًا

17:85 They ask you about the *rooh*. Say: The *rooh* is from the command of my Lord. You were given only a little from (Our) knowledge.

It is quite evident that the term “*rooh*” is used in the Quran to denote not only the biosoftware but also the Scripture. It can also be observed that the word *rooh* is invariably used in the Quran in respect of living beings. Hence, “*rooh*” can be best understood as the general term for the divine biological information based on the computer model. The term “biological information” refers to, in a broad sense, any information that can be stored on the chromosome. This also implies that every kind of biological information is stored on the chromosome by the same mechanism. This is discernible from the Quranic revelations on information storage in human memory (see chapter 11) as well as in the cells of various other organs (Q. 36:65, 41:20-23, see chapter 17). Further, from the revelations that Prophet Jesus Christ is both *rooh* and Allah's Word (Q. 4:171 quoted earlier) and the Quran is also both *rooh* (Q. 16:2, 40:15 and 42:52 quoted above) and Allah's Word (Q.

18:27, see chapter 15), it can be deduced that the divine biological information, which includes biosoftware, special programs (e.g., Jibreel) installed in selected human individuals (e.g., prophets) and revelation (Scripture), is Allah's Word. And Allah's Word is what we call energy (see chapter 6). The *rooh* in the light of computer model of the organism can be scientifically explained in this way.

f) Death – a certainty

As discussed above, death is the result of deletion of *nafs* (*rooh* or biosoftware) from the body. The biosoftware is irreversibly lost from the body at death. The Quran reiterates that death is a certainty ordained for all (Q. 3:185, 4:78) and the term of every individual has been fixed as if by writing (Q. 3:145) implying lifespan and death are programmed for each individual in the biosoftware (*nafs*). None can exceed that term.

كُلُّ نَفْسٍ ذَائِقَةُ الْمَوْتِ ۝

3:185 “Everyone will taste death....”

أَيَّنَمَا تَكُونُوا يُدْرِكُكُمُ الْمَوْتُ وَلَوْ كُنْتُمْ فِي بُرُوجٍ مُّسْتَدِّيٍّ

4:78 “Wherever you are, death will find you out, even if you are in forts built strong and high!...”

وَمَا كَانَ لِنَفْسٍ أَنْ تَمُوتَ إِلَّا يَأْذِنُ اللَّهُ كَيْنَاءِ مُؤَجَّلٍ

3:145 None can die without Allah's consent, the term being fixed as by writing.

These revelations indicate that in the normal case the term expires with the execution of the end instruction in the biosoftware, that is, deletion of the *nafs* (biosoftware) from the body cells resulting in the death of the individual. Death being a certainty ordained by Allah, man will never be able to conquer death. Despite this Quranic warning, studies are going on in the field of gerontology to extend longevity and conquer death ultimately. A book published by the Immortality Institute

(www.imminst.org) in the US in 2004 entitled *The Scientific Conquest of Death – Essays on Infinite Lifespans*, discusses methods including cryonics for preserving human body on the hope that one day in the near future it will be possible to conquer death. According to them, it is now possible to clinically ‘turn off’ people for more than an hour with no heartbeat or brain activity for certain surgical procedures. Studies are also going on to preserve individual organs indefinitely by using a new ice-free preservation method called vitrification. Animal brains have been found to resume functioning even after as long as seven years of frozen storage. Can human life be preserved for years instead of hours? The idea is, if human body can be preserved for long in a state of ‘dormancy’ without losing the ability to resume functioning, the people at near-death state can be preserved and brought to life in future when method of conquering death has been discovered. Although there is natural mechanism of dormancy that we observe in plant seeds, etc., going by the Quranic revelation eternal life without death is an impossible proposition. Death is a certainty ordained by Allah for all. It is imperative therefore that we take guidance from the Quran in these subjects and realize that every research effort now being directed to stop ageing and conquer death is destined to fail. The research will prove in the end the Quran is truth.

Rooh and the modern concept of molecular gene

The Quranic revelation of *rooh* as the divine biosoftware, the driving force of life, indicates that biological information exists in biological systems in nonmaterial (or nonphysical) form. This perception is opposed to the molecular gene (genome) concept in biology. Molecular gene implies that genetic program is encoded by DNA structure. In other words, biological information exists in material form. A brief discussion of the scientific inadequacies and demerits of this concept is presented here.

In 1865, the Austrian monk Johann Gregor Mendel proposed three laws governing heredity, which however did not see light of the day until after 30 years when in 1900 three botanists independently and almost simultaneously rediscovered them. Bateson coined the term “genetics” for the emerging science of heredity in 1906. Subsequently in 1909, Wilhelm Johannsen introduced the notions of “genotype” and “phenotype”. In addition, for the elements of the genotype, he proposed the term “gene”. Johannsen had reservations with respect to gene’s particulate nature and had also warned against conceiving genes for a particular character [9]. Thus the gene remained as hypothetical nonphysical entity in biology since Mendelian genetics did not permit supposition of material genetic elements. It is important to note in this context that Johannsen’s nonphysical gene agrees well with the Quranic revelation of nonphysical *rooh*. Thomas Hunt Morgan and his group contributed substantially to the understanding of the mechanism of heredity. In the year 1933, on the occasion of his Nobel address, Morgan observed: “At the level at which the genetic experiments lie it does not make the slightest difference whether the gene is a hypothetical unit, or whether the gene is a material particle.” [10]. Nevertheless, many geneticists like Herman J. Muller (Morgan’s student), believed that genes had to be material particles. In 1950, on the occasion of the fiftieth anniversary of the rediscovery of Mendel’s work, Muller however admitted: “[T]he real core of gene theory still appears to lie in the deep unknown. That is, we have as yet no actual knowledge of the mechanism underlying that unique property which makes a gene a gene... its ability to cause the synthesis of another structure like itself, [in] which even the mutations of the original gene are copied. [We] do not know of such things yet in chemistry.” [11]. The growing success of various studies relating to classical genetics led to hardening of the belief that the gene is discrete, material entity [12, 13]. It has been known since about 1913 that the individual active units of heredity - the genes - are strung together in one-dimensional array along

the chromosomes, the threadlike bodies in the nucleus of the cell. It has also become apparent that the information-containing part of the chromosomal chain is the DNA molecule [14].

George Beadle and Edward Tatum during the late 1930s and early 1940s established the connection between genes and metabolism. They proposed the “one gene, one enzyme hypothesis”. Since chemical reactions occurring in the body are mediated by enzymes, and since enzymes are proteins and thus heritable traits, it is supposed that the gene and proteins are related. These views of gene function strengthened the idea of genetic specificity leading to molecularization of the gene. In the early 1940s, Oswald Avery and his colleagues purified the deoxyribonucleic acid (DNA) of one strain of bacteria, and demonstrated that it was able to transmit the infectious characteristics of that strain to another, harmless one [12]. Elucidation of the structure of DNA as macromolecular double helix (Fig. 9.2) by Francis Crick and James Watson in 1953 [15] and *in vitro* characterization of the process of protein biosynthesis led to the idea that it was the linear sequence of ribonucleic acid derived from one of the DNA strands that directed the synthesis of a linear sequence of amino acids, or a polypeptide, and that this process was mediated by an adaptor molecule (RNA template). In 1958 Francis Crick formulated the “sequence hypothesis” (triplet code or codon, i.e., three bases at a time specified one amino acid) and the “central dogma” of molecular biology. All these considerations ultimately led to defining the molecular gene. According to the classical molecular concept, *a gene is a stretch of DNA that encodes a functional product, a single polypeptide chain or RNA molecule*. The entire collection of genes encoded by a particular organism is the “genome” that is supposed to constitute the genetic program. Johannsen’s non-particulate gene thus metamorphosed into particulate gene. The molecular gene was born!

The material gene is not strictly a product prompted by research findings; rather it is more a product of the conviction of geneticists that *the gene has to be material entity*. The assumption of “one gene, one protein” makes the genes generally synonymous with proteins. Thus the term “gene” refers to the gene that codes for protein.

Molecular biology opened the floodgates of boundless optimism about the ability of the super molecule DNA to decipher the mechanism of life as well as the potential of gene for genetic manipulation. In his classic and influential textbook, *The Molecular Biology of the Gene*, James Watson stated: “We have complete confidence that further research of the intensity given to genetics will eventually provide man with the ability to describe with completeness the essential features that constitute life.” [16]. But he was grossly wrong. Peter Cook reflects: “Watson and Crick must have thought that the sequence was everything. But life is much more complicated than that.” [17]. That the molecular gene is too inadequate to explain the phenomenon of life is becoming increasingly evident from studies being conducted in genetics and related fields.

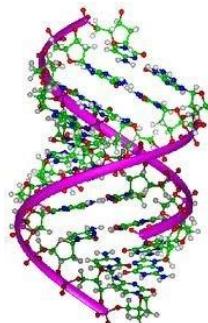


Fig. 9.2. Double helical structure of DNA, the genetic material

a) The gene is indefinable

Although molecular biologists hoped that it would be possible to identify the genes for different attributes of an organism, the gene remained elusive. According to geneticist Peter Portin, “The gene is no longer a fixed point on the chromosome, producing a single messenger RNA. Rather, most eukaryotic genes consist of split DNA sequences, often producing more than one mRNA by means of complex promoters and/or alternative splicing. Furthermore, DNA sequences are movable in certain respects, and proteins produced by a single gene are processed into their constituent parts. Moreover, in certain cases the primary transcript is edited before translation, using information from different genetic units and thereby demolishing the one-to-one correspondence between gene and messenger RNA. Finally, the occurrence of nested genes invalidates the simpler and earlier idea of the linear arrangement of genes in the linkage group, and gene assembly similarly confutes the idea of a simple one-to-one correspondence between the gene as the unit of transmission and of genetic function....” [18]. Other leading scientists like Thomas Fogle and Michel Morange also concede that there is no longer a precise definition of what could count as a gene [19, 20]. An important objective of genome projects is the identification of genes. Current estimates of human genes generated from genome sequencing is 30,000–40,000, with occasional excursions to 100,000 or more. One reason for the continuing ambiguity is that genes are neither well defined nor easily recognizable [21]. If gene cannot be defined, how can it be counted and what reliability is there in gene estimates? Horace Freeland Judson notes: “The phrases current in genetics that most plainly do violence to understanding begin “*the gene for*”: the gene for breast cancer, the gene for hypercholesterolaemia, the gene for schizophrenia, the gene for homosexuality, and so on. We know of course that there are no single genes for such things.” [22]. In spite of that the phrase ‘the gene for’ is still in use.

Instead of generating more evidence in support of the particulate nature of the gene, research in molecular biology is generating evidence to the contrary. Craig Holdrege observes (italics added): “The complexity at the molecular level reveals that the simple mechanisms one imagined in the 1960s simply do not exist in that form. It has become less and less clear what a gene actually is and does. And although the deterministic gene is still the gene that lives in the minds of many students, lay people, and - at least as a desire - in the minds of many biologists, *the findings of late twentieth century genetics show one thing clearly: the simple deterministic gene, the foundational “atom” of biology is dead.* There is no clear-cut hereditary mechanism - no definite sequence of nitrogenous bases in a segment of a DNA molecule that determines the make-up and structure of proteins, which in turn determine a definite feature of an organism.” [23]. Evelyn Fox Keller makes the case for a radically new thinking about the nature of heredity in her book *The Century of the Gene*. In her articulate and insightful history of genetics and molecular biology, she suggests that most of our common assumptions about genes are either too simplistic or simply incorrect. It turns out, for example, that a single functioning gene may be split and found in several locations on a chromosome, and it is rare that a gene can be determined to have caused any particular trait, characteristic or behavior [24]. The problem with molecular gene concept has attracted the attention of leading scientists. It has also been the subject of reviews [25].

b) Lack of genome-phenome correspondence

The objective of genomic research is to ultimately understand the relationships between heritable units and their phenotypes. But it appears that genome concept would not deliver that information. The genome organization is extremely complex. Genes reside within one another, share some of their DNA sequences, are transcribed and spliced in complex patterns, and can overlap in function with other genes of the

same sequence families. “Today, in the era of genomic sequencing and intense effort to identify sites of expression, the declared goal is to search for genes, entities assumed to have physical integrity. Ironically, the sharper resolving power of modern investigative tools make less clear what, exactly, is meant by a molecular gene, and therefore, how this goal will be realized and what it will mean”, observes Fogle [19].

Knowledge of the DNA sequence does not tell us how this genetic information leads to the observable traits and behaviours (phenotypes) [26]. For biological research, the twentieth century has been the century of the gene. According to geneticist William Gelbart, “we may well have come to the point where the use of the term “gene” is of limited value and might in fact be *a hindrance to our understanding of the genome*. Although this may sound heretical, especially coming from a card-carrying geneticist, it reflects the fact that, unlike chromosomes, genes are not physical objects but are merely concepts that have acquired a great deal of historic baggage over the past decades.” [27, *italics added*].

Studies at the molecular level fail to demonstrate the expected correspondence between genome structure and phenotype. The most spectacular example of this is the morphological dissimilarity between human being and chimpanzee despite a 98.7% similarity in their DNA [28]. Although evolutionary biologists speak of genomes of chimp and man as being almost identical in support of their argument of human evolution from animal, and for establishing chimpanzee as the closest animal ancestor of human being, they have not enumerated so far the identical phenotypic characters in human and chimp in terms of anatomy, physiology, development and other biological features. In fact there is none. A chimp is not even 0.1% human being or a human being 0.1% chimp. *A human being differs from chimp in every detail and at every point of the body. The only similarity between chimp and man is in the DNA.* The differences in

traits, characteristic behaviour, instincts and capabilities between human (*Homo sapiens*) and chimpanzee (*Pan* sp.) are far greater than the small degree of sequence divergence (1.3%) could account for. This indicates DNA does not encode the genetic program for the development and functioning of the phenotype.

The chimp-human comparison is a case of similar genomes but dissimilar phenotypes. The reverse case is also known. *Caenorhabditis elegans* and *C. briggsae* are physically very similar organisms. It takes an expert to distinguish them. The two have near-identical biology, even down to the minutiae of developmental processes. Surprisingly, however, their genomes are not so similar. *C. elegans* has more than 700 chemoreceptor genes when *C. briggsae* gets on by just 430. There are also many genes unique to each of them [29]. “Typically when people say that the human genome contains 27,000 genes or so, they are referring to genes that code for proteins,” points out Michel Georges, a geneticist at the University of Liège in Belgium. But even though that number is still tentative – estimates range from 20,000 to 40,000 – it seems to confirm that there is no clear correspondence between the complexity of a species and the number of genes in its genome. “Fruit flies have fewer coding genes than roundworms, and rice plants have more than humans,” notes Mattick [30]. It is rather strange to see that genes are counted and their number estimated when the gene cannot be correctly defined.

Many insects exhibit alternative morphologies (polyphenisms) based on differential gene expression rather than genetic polymorphism (differences in genes themselves). One of the best understood insect polyphenisms is the queen-worker dimorphism in honey bee. Both the queens and the workers are females but morphologically distinct forms. Besides, the queen is fertile whereas the worker is sterile. Studies conducted with *Apis mellifera* revealed that numerous

genes appeared to be differentially expressed between the two castes [31]. The seven differentially expressed loci observed in the study belonged to at least five distinctly different functional groups. The queen and the worker castes in honey bee provide an unfailing proof of the natural existence of similar genomes exhibiting dissimilar phenotypes. The absence of genome–phenome relationship is very much evident from these studies. It implies that genome does not constitute the biological program.

c) Genome - chemically untenable

Several non-chemical features have been assigned to material genome. Some of the obvious departures from chemical fundamentals are given below.

It is generally believed that genomes of the tissues of the body are identical. This notion has been however challenged [32]. Investigation into the underlying genetic causes of abdominal aortic aneurysms (AAA) revealed major genetic differences between blood cells and tissue cells of the same individuals. The finding calls into question one of the most basic assumptions of human genetics that DNA in every cell in the body is essentially identical to every other cell. Apart from that, “This discovery may undercut the rationale behind numerous large-scale genetic studies conducted over the last 15 years, studies which were supposed to isolate the causes of scores of human diseases. Except for cancer, samples of diseased tissue are difficult or even impossible to take from living patients. Thus, the vast majority of genetic samples used in large-scale studies come in the form of blood. However, if it turns out that blood and tissue cells do not match genetically, these ambitious and expensive genome-wide association studies may prove to have been essentially flawed from the outset.” [33]. Now the question is how can the genetic information constituted by the genome of a zygote via mitosis, which is believed to result in identical daughter cells, can produce different genomes and organelles? The discovery thus

challenges this belief about mitotic cell division also. A chemical molecule (DNA in this case) cannot do that. There are two angles to this issue. One is, if genome remains the same, how cytologically and functionally different tissues arise; and the other is, if genome is different in different tissues, how such variation can occur. Either way, the molecular gene concept flops.

It has been observed that an overwhelming 95% of genome consisted of non-coding DNA in eukaryotes and about 5% is constituted by the coding-DNA or genes. The non-coding DNA (ncDNA) is referred to as “junk DNA” [30]. Though structurally comparable with the coding DNA, the so-called junk DNA does not encode similar biological information (or vice versa).

The variations observed in the use of triplet codes among organisms are another issue. Like the pseudogene this aspect is against chemical fundamentals and remains unexplained. The degenerate nature of the biological code implies several triplets coding per amino acid. Further, two amino acids have only one mRNA codon each; AUG for methionine and UGG for tryptophan. Hence 59 degenerate triplets code 18 amino acids; these 18 have two to six synonymous codons each. Choices between synonymous codons are not random; some codons in the set specific to an amino acid are used more than the others [34]. The ‘genome hypothesis’ which tries to explain the variation in codon use states that codon use is species specific, i.e., each genome or type of genome shows a particular pattern of choices between synonymous codons. Thus overall codon usage differs between taxa; but codon bias is also influenced by other factors like gene length, gene expressivity (the amount of protein made per gene), environment and lifestyle of the organism [35]. The codon bias gives rise to the paradox whether protein evolution determined DNA sequence or DNA commanded protein evolution. Many such dilemmas remain in molecular evolution.

The origin of bias in codon and anticodon frequencies continues to elude researchers [34].

Presently an organism, be it a single-celled microorganism or a multicellular animal, is treated as mere bundle of chemical molecules. What we know in chemistry is that the chemical information is encoded by the molecular structure and it is that information which determines the specific physical and chemical properties of the substance. The specificity and stability of the properties under a given set of environmental conditions are characteristics of the chemical structure. There is no chemical structure in nature that shows departure from these chemical fundamentals. On the other hand, the genetic program (biological information) is dynamic in nature as evidenced from the variable phenotype it produces with time. How is it possible to explain evolution of different phenotypes from the same genome without sacrificing chemical principles? It is this dynamic genetic information that is superimposed over the chemical information encoded by the structure of DNA. There is no chemical structure in nature that shows dynamic properties with time or under similar environmental conditions. The superimposition of biological information on the DNA structure cannot be scientifically justified as it violates the structure-property constancy.

Another fundamental attribute of a chemical molecule is it cannot lose the properties assigned by its structure. The genome is an exception to this rule also! It appears it can lose its property as is evident from its behaviour in a dead body. Although the genome is intact in the dead body, it does not show any sign of life indicating it does not carry genetic program. If biological program is encoded by the structure of DNA, how can the body die? Even if it dies, it should be possible to restore life through repair of the faulty DNA. What happened to the biological information the genome structure encoded while the body was alive? How can information

encoded by a chemical structure disappear? There is no scientific answer to any of these questions.

d) Other anomalies

Although there are certain criteria suggested to identify the genes, their application has not been straightforward. Besides, issues like overlap, alternative splicing, and pseudogenes are also involved. “Pseudogenes are similar in sequence to normal genes, but they usually contain obvious disablements such as frameshifts or stop codons in the middle of coding domains. This prevents them from producing a functional product or having a detectable effect on the organism’s phenotype.... The boundary between living and dead genes is often not sharp. A pseudogene in one individual can be functional in a different isolate of the same species... and so technically is a gene only in one strain.... there are other pseudogenes that have entire coding regions without obvious disablements but do not appear to be expressed.... Ultimately, we believe that identification of genes based solely on the human genome sequence, while possible in principle, will not be practical in the foreseeable future.” [36].

There are many kinds of DNA repairs. Rosenfeld gives a detailed account of the self-healing strategies of the ‘master molecule’. If a base is put in wrong place during replication, there are enzymes to correct the mistake. Purines, without any errors and without any damages drop out by the thousands every day presumably due to wear and tear of existence in the chromosomes only to be promptly replaced by insertases. A base can spontaneously undergo change. A cytosine, for example, will lose an amino group and become uracil. Uracil is perfectly at home in RNA but not in DNA. The enzymes called uracil glycosylases recognize the uracil, remove it and replace it with a new cytosine. Suppose that an error has occurred in one of the DNA strands say, a T has been put across from a G, where a C really belongs. This would give rise to two strands one with a G and the other with a T. The enzymatic apparatus

'knows' that cannot be correct, but how does it know whether to replace the C with a T on one strand, or the C with an A on the other? If the replacement takes place not on the right strand, the result would be either death of the cell or a mutation. How does it know which is the authentic original? [37]

Besides the anatomical, physiological and biochemical characteristics, there are an altogether different set of heritable attributes. Instincts (e.g., food habits, mating behaviour, etc.) exhibited by various species and mental (intelligence, imagination, feelings, etc.) attributes exhibited by human beings belong to this category. It is not possible to explain how chemical structures or base sequence in nucleic acids can be translated into information of this kind. All these facts go against molecular gene concept and do not support the contention that a material (genome) constitutes the genetic program.

The foregoing discussion brings to light the current dismal plight of material gene concept. The failure of the material gene will provide the confirmatory proof of the validity of the Quranic revelation of nonmaterial biological information – the *rooh*. The present-day DNA technology is mere manipulation at the hardware level. It is precisely biohardware technology and not biosoftware technology. Molecular biologists are erroneously pursuing a chemical trail to find out the source of biological information. Using DNA-technology they are unwittingly trying to find hardware solution for software problem. In the process they are altering some of the hardware elements (DNA) assuming that these structures form the software. This is like changing the typeface of an electronic typewriter connected to a computer. The typewriter will print out the words as ordered by the software. If a typeface is changed it will print most of the time a wrong word with the changed typeface although occasionally it *may* print a meaningful word. This will explain why in spite of all-out global effort in genetic engineering, not much success

(except cases like Bt cotton, Bt brinjal and insulin production) has been achieved in this field.

Scientific evidence for nonmaterial bioinformation

The inadequacies and anomalies of the molecular gene discussed above are indirect evidence of the existence of bioinformation in nonmolecular form. Of these, the existence of the genome in the dead body without showing any sign of life is perhaps the most glaring. There are also other scientific evidence for the existence of bioprogram in the cell independent of DNA.

There is growing wealth of information to indicate that the cell itself carries the program to change DNA. However, this fact has been rather sidelined by the scientific community. Miroslav Radman, a molecular geneticist at the Universite Rene Descartes in Paris, discovered the phenomenon of cell-directed mutagenesis in 1970. He showed that bacteria harboured a genetic program to make mutations. At that time, no one believed this heretical proposal [38]. Many biologists were skeptical about this discovery because genetic mutation was considered a random phenomenon. In 1988 Cairns *et al.* confirmed that genetic mutations are induced from within the cell. They found cell-induced changes of various elements of the lac operon in *Escherichia coli* bacteria [39]. This report literally galvanized the critics. According to Chicural, depending on environmental conditions, bacteria may be able to direct mutation of specific genes. The discovery of cell-directed mutagenesis outraged a number of evolutionary biologists who quickly embarked on studies to test the notion [38]. Goodman described the studies conducted by Joshua Lederberg at the University of Wisconsin which showed that mutations for resistance to some antibiotics occurred spontaneously in microbial cells that had never been exposed before to the antibiotics [40]. Another report of resistance of bacteria to antibiotics by Kohanski *et al* also provides evidence of cell-induced mutation [41]. Commenting on the work,

Martin Enserink writes: “Traditionally, the development of antibiotic resistance – a big and growing problem in medicine – has been seen as a passive phenomenon. Haphazard mutations occur in bacterial genomes, and bacteria randomly swap genetic elements. Every now and then, a mutation or a bit of newly acquired DNA enables the microbes to detoxify antibiotics, pump them out of the cells, or render them harmless in another way. When these microbes are exposed to antibiotics, natural selection will allow them to outcompete the ones that aren’t resistant. But in the past 6 years, a different view has emerged, says microbiologist Jesús Blázquez of the Spanish National Research Council in Madrid. Researchers have discovered that mutation rates in bacteria sometimes go up in response to stress, in some cases promoting resistance. And studies by Blázquez and others have shown that the antibiotics themselves can cause this phenomenon, called hypermutability.” [42]. Genetic change, and hence the evolution of new species, is commonly thought as the result of small, random mutations in individual genes. But this perception is wrong in the light of growing wealth of data. The mutations leading to evolutionary change can involve the wholesale shuffling or duplication of the genetic material, changes that can affect the expression of genes or free up duplicated genes to evolve new functions. Further these changes may not be totally random. Biologists need to consider genomes and the evolutionary changes they undergo in a much different light [43].

The phenomenon of cell-directed mutagenesis provides ample support to the Quranic revelation of nonphysical *rooh* (biosoftware) existing in the cell (as stored information). It also validates the nonphysical gene originally proposed by Wilhelm Johannsen [9]. DNA mutation has to be seen as change in hardware element effected as per the biological program stored on the chromosomes. Such changes create hardware required for the execution of new programs as situation warrants.

In this era of computer technology, we cannot treat nonmaterial or nonphysical phenomenon as something non-existing, superstitious and improbable. Information is basically nonphysical. Information stored on computer disk is intangible and nonphysical. Ironically, molecular biologists cannot bring themselves to believe that biological information also exists in nonparticulate form. More than sixty years of intensive research has gone into molecular biology worldwide and yet biologists know precious little about the gene and phenomenon of life! Biology is science of life. But biologists have not been able to define and explain what life is. As is very much evident from the above discussion, we will be able to understand and explain the phenomena of life and death only in conjunction with the Quranic revelations.

a) Falsifiability of nonmaterial bioinformation concept

The Quranic revelation of nonmaterial basis of life is scientifically verifiable as it offers falsifiable predictions. Falsifiability of the revelation equates it with a scientific theory. The Quranic revelation about *rooh* yields at least two predictions. One is, it is impossible to create life from nonliving matter. That is, life can only be created from life and not from nonlife. Another is, it is impossible to restore life to a dead cell or dead body. These predictions are falsifiable. A lot of effort is now being directed to synthesize living cell chemically (i.e., without involving a living cell at any stage) from scratch. In fact these experiments also test the validity of the predictions offered by the Quranic revelations.

A team of molecular biologists led by Craig Venter in the US produced the complete genome of an organism *Mycoplasma genitalium*, a parasitic bacterium with the smallest genome for any free-living cell [44]. This is a landmark achievement in biology for two reasons: one is that it has been possible to synthesize the genome of a living organism in the laboratory, and the other is that it demonstrated the synthetic genome could not come to life implying that genome does not

encode biological information. This means life cannot be produced from nonlife. Failure of the synthetic genome to spring to life provides experimental proof of the validity of the prediction based on the Quranic revelation of the nonmaterial *rooh* as the cause of life.

Claim has been made of the production of “synthetic cell” of *Mycoplasma mycoides* in a paper published by Craig Venter team [45]. This was accomplished by synthesizing the genome of *M. mycoides* and transplanting it into *Mycoplasma capricolum* recipient cell. The use of the term “synthetic cell” in the paper is highly misleading because the synthesis was not accomplished through purely chemical means. The study had also involved in vivo methods using yeast (*Saccharomyces cerevisiae*) cells. Further, the cytoplasm of the recipient cell was also not synthetic. It is imperative that the experiments to produce life from nonlife should not involve use of living cell or organism at any stage as otherwise use of the term “synthetic” will be meaningless.

Biologists can also adopt an alternative approach to prove the material basis of the biological program by restoring life to a dead cell through chemical means. A dead cell is equivalent to a prosthetic cell or a synthetic cell. It has all the material ingredients and components of a living cell (including DNA) except life. By bringing a dead cell back to life through chemical means, biologists can prove that life is a material phenomenon. Thereby, they can also falsify the Quranic revelations relating to life and death quoted above. However, the growing instances of failure of experiments to chemically synthesize living cell from nonlife only support the Quranic revelations. Continued failure of experiments in this line will ultimately prove the Quran is truth, which will also prove God is truth. In all probability biologists are poised to prove God as physicists did through failure of steady state cosmology (see chapter 3).

Biomemetics

The term “biomemetics” refers to the science of nonmolecular bioinformation based on the Quranic revelation of intangible *rooh* as the cause of life. The biological information can be thought of as information stored on the chromosome in sectors (Fig. 9.3).

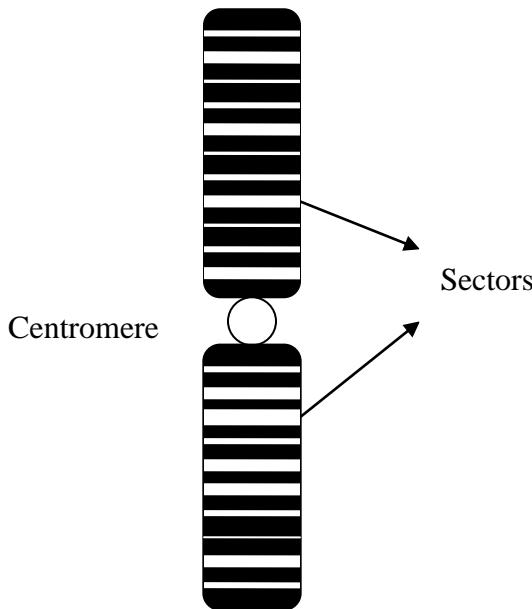


Fig. 9.3. Biomemory organization on the chromosome

Note: The chromosome (biomemory or hard disk of an organism) is divided into many sectors.

The nonphysical invisible biological program stored on the chromosome can be perceived in terms of biomemetic concept. Biomeme (see chapter 7) may be defined as the smallest unit of biological information that can be transmitted

from parent to offspring and that can take part in natural biosoftware engineering processes like cutting and splicing of chromosomal sectors, deletion, replication, translocation, crossing over (recombination), etc. A sector on chromosome may be storing one or more biomemes. If a sector does not store a biomeme, it would be like a blank sector in computer memory.

The bioprogram at the level of the species may be distinguished as microbioprogram and as biomemome at the level of the individual. Microbioprogram constitutes the common biomeme pool for creation of diverse biomemomes (individuals) within a species. Biomemome represents the biosoftware (or *nafs*) of an individual generated from the microbioprogram of the species and transmitted to the individual via the germ line. It contains all the programs (biomemes) prescribed for the individual. It is the execution of the biomemome that results in various manifestations such as development of hardware (phenotype), biosystem functioning, behaviour, instincts, disease development, biosystem maintenance, coordination and control, etc.

Biological phenomenon can be perceived as the product of execution of the divine instructions contained in one or more biomemes in the prescribed sequence. Separate programs govern the development of structures (hardware components or the so-called phenotype) and their functioning in the organism. An organism may have a well-developed structure, but it may not function if biomeme(s) for its functioning is lacking. For instance, although we all have two hands, not all of us can write with left hand; only those who have the biomeme(s) for that can do that. For every function, be it an externally performed activity or an internally performed house-keeping biological activity, appropriate biomeme(s) is required. Further, there are also biomemes that coordinate all the developmental processes and functions of the organs at the level of the individual.

a) Natural biosoftware engineering

Insofar as biomemes are stored in sectors on the chromosome, qualitative and quantitative changes in the semantic content can be brought about by shifting, adding, deleting and shuffling the chromosome sectors. The bioinformation content of a cell as a whole can also be altered by increasing or decreasing the number of chromosomes. We find a variety of such mechanisms in operation that can do all these and more. Unfortunately, biologists look at them as random phenomena, errors or mistakes. As every bioprocess needs program to take place and is carried out in accordance with the biomemome, it is surprising to see these important bioprocesses are considered in biology as chance events or mistakes. Evidently, molecular gene concept cannot offer any explanation for these mechanisms. Biomimetically these processes can be understood as natural biosoftware engineering mechanisms brought about in the cell in accordance with the biomemome. Some of the natural biosoftware engineering phenomena are presented here.

Mitosis and meiosis: Mitosis (Fig. 9.4) and meiosis (Fig. 9.5) are two kinds of cell division found in living organisms. They are natural processes carried out in specified steps and sequence to produce biomimetically variable cells. Somatic ($2n$) cells (body cells and not gametes) serve as parent cells for both mitosis and meiosis.

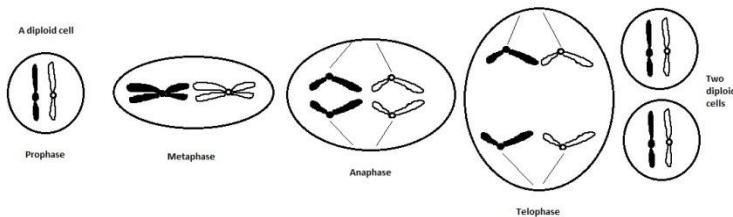


Fig. 9.4. Mitosis – a type of cell division that produces two daughter cells with identical or different operamemomes

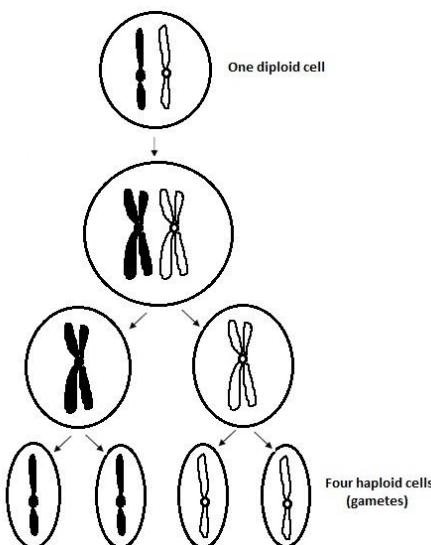


Fig. 9.5. Meiosis – a type of cell division to create four haploid (n) cells (gametes) from a diploid ($2n$) somatic cell

Mitotic division produces two daughter cells with same number of chromosomes as in parent cell. The operamemomes of the daughter cells may be identical as in the case of cells of a tissue or different as in the case of cells of different tissues.

Meiotic division takes place during gametogenesis, i.e., formation of gametes (Fig. 9.5). During this process, the somatic cell undergoes halving of the homologous chromosomes and replication resulting in the production of four cells, gametes. Each of these cells will have half the number (n) of chromosomes. During fertilization the male gamete and female gamete fuse to form diploid ($2n$) cell – the zygote, which produces diverse tissues through mitosis in the developing individual.

Crossing over: During meiosis through a process of ‘crossing over’, the segments of non-sister chromatids of a homologous

pair of homologous dyads are exchanged (Fig. 9.6). This swapping of portions leads to alteration of bioinformation content in the chromosomes involved.

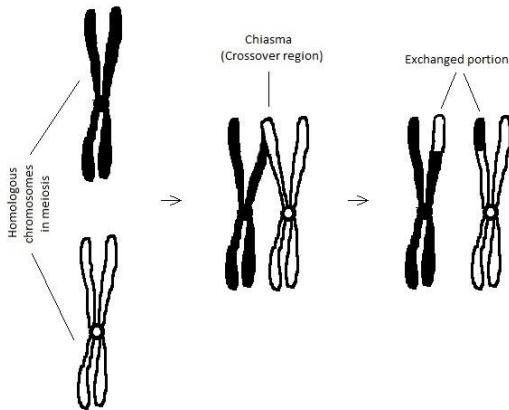


Fig. 9.6. Crossing over phenomenon exchanging sectors between homologous chromosomes

Trisomy mosaicism: During cell division (both mitosis and meiosis) sister chromatids may not sometimes separate but move together to the same daughter cell increasing its chromosome number by one. This phenomenon is called non-disjunction. Anaphase lag is another mechanism in which one chromosome fails to get incorporated into the nucleus of a daughter cell. These mechanisms can increase or decrease the number of chromosomes in the daughter cells and hence alter the biomimetic content.

Chromosomal aberrations: The so-called ‘aberrations’ are changes that may occur in the chromosomes during cell division (Fig. 9.7). Although many types of aberrations are found, the more commonly observed are deletion (loss of small segment of chromosome usually in only one homologue), translocation (a segment of one of the two homologous chromosomes breaks and binds to the other), duplication

(occurrence of the same sectors twice on the same chromosome), inversion (a particular sector is reversed in the chromosome), insertion (a new sector is inserted into the chromosome), and substitution (a certain chromosome sector is replaced with another).

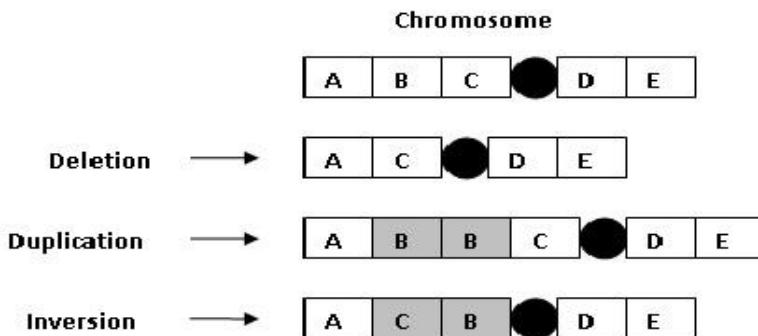


Fig. 9.7. Some types of chromosomal aberration
Note: A, B, C, D and E indicate chromosome sectors

Occurrence of more than the usual set of chromosomes in the same cell (polyploidy, a consequence of lack of disjunction between the daughter chromosomes following replication) is also seen in nature. These phenomena serve as powerful tools to produce radically different chromosome compositions and hence bioinformation content.

Transposable elements (TEs): The discovery of built-in natural genetic engineering mechanisms dates back to Nobel laureate Barbara McClintock's pioneering cytogenetic studies on transposable elements during the late 1940s and early 1950s [45]. These mobile elements offer a versatile cut-and-splice tool in bringing about specific changes in the organization of chromosomes. Transposition plays an important role in chromosome rearrangements. Insertion, deletion and inversion occur either as direct consequence of transposition or by general recombination.

All these processes viewed in the light of the computer model of organism produce specific changes in the chromosome sectors and hence biomeme composition in accordance with the bioprogram.

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10. ORIGIN OF BIOINFORMATION AND PROGRAMMED EVOLUTION OF BIOLOGICAL SPECIES

The magnitude of biodiversity existing on Earth is overwhelming, to say the least. Several millions of diverse biological species have been created and sustained by Allah in the human robot testing laboratory for the benefit of man. Although the phenomenon of life remains undefined and unexplained in science, we find several theories advanced in biology to explain the origin of life as well as subsequent evolution of biological species on Earth. The theories of origin of life suggest in one way or the other that life arose on this planet from simple organic compounds. The process is referred to as abiogenesis. Louis Pasteur held the view that living things can come only from other living beings. This assertion later came to be known as law of biogenesis. The term “biogenesis” was originally coined by Henry Charlton Bastian to mean generation of life from nonliving materials. However, T.H. Huxley, a strong proponent of Darwin’s theory of evolution, preferred the term “abiogenesis” and redefined “biogenesis” for life arising from already existing life forms. The generation of life from nonliving material is henceforth called abiogenesis [1]. The term “biogenesis” is used in this book not in the sense mentioned above but to mean origin of divine biological information on Earth that led to the creation of living species. Before we discuss biogenesis and creation of biological species in the light of the Quran, let us examine briefly theories of abiogenesis and Darwin’s theory of evolution.

Theories of abiogenesis

Theories advanced to explain the origin of life from nonlife can be broadly categorized into four a) prebiotic soup theory, b) gene-first model, c) metabolism-first model [2] and

d) panspermia theory. The essence of these theories is only presented here.

a) Prebiotic soup theory

In the beginning, the earth was very hot and did not possess an atmosphere. But as it cooled, an atmosphere began to develop from the gas emitted from the rocks. The early atmosphere was without oxygen, the vital gas required for higher forms of life. Only primitive forms of life could have survived then. It was supposed that by *chance* combination of atoms macromolecules were formed from which self-reproducing structures were formed. The reactions leading to their formation took place when the earth had been sufficiently cooled. The lowering of temperature would have also caused the condensation of steam into water creating large water bodies like oceans, seas, etc., on the planet. Several chemical elements particularly carbon, hydrogen, nitrogen and oxygen present in the primitive atmosphere combined to form amino acids from which proteins were formed. Stanley L. Miller and Harold Urey demonstrated that simple amino acids and several complex organic compounds could be formed in a closed system containing hydrogen, ammonia, methane and water vapour under the influence of an electric discharge [3]. This was taken as evidence to suggest that a similar reaction might have taken place in the early atmosphere under the influence of lightning, resulting in the formation of amino acids and from them, the proteins. These organic substances might have accumulated in the soupy sea. According to Robinson, "The suggestion that random chemistry could produce the molecules of life "held the field for a long time." But later calculations appeared to show that the early atmosphere contained much more carbon dioxide and much less hydrogen than Miller's model required, and correcting these concentrations cast doubt on the likelihood that complex molecules would form in abundance. Where, then, might organic precursors have come from? There is some, albeit scant, evidence for their arrival on

comets colliding with the earth, but there is little enthusiasm for this as a solution. Finally, there is no geologic evidence, in either sediments or metamorphic rocks that such a soup ever existed.” [2].

b) Gene-first model

This model is handicapped by the chicken-and-egg problem associated with DNA and protein. Since DNA codes for protein, it is required for the production of protein while protein is required for the synthesis of DNA as catalyst. The role of DNA in the prebiotic scenario thus became suspect. The importance shifted to RNA as it can function as temporary information carrier and catalyst. According to the RNA world hypothesis, the first living system was a polymer(s) of catalytic RNA capable of self-replication that subsequently evolved the ability to encode more versatile peptide catalysts [4, 5]. Mineral-catalyzed reactions, followed by a series of fractionations, have been suggested to offer the most plausible route to RNA [6, 7]. According to Smith *et al.*, a stable cell wall is required to protect the first primitive organism. The first cell wall might have been an internal mineral surface, from which the cell developed a protective biological cap emerging into a nutrient-rich “soup”. Ultimately, the biological cap might have expanded into a complete cell wall, allowing mobility and colonization of energy-rich challenging environments [8].

c) Metabolism-first model

Even while the RNA world hypothesis was seriously considered, Wächtershäuser proposed a radical alternative theory of the origin of life based on iron sulfide. Iron disulfide (pyrite) can catalyze a variety of crucial biochemical reactions. According to him the earliest living system was not a nucleotide-based replicator but a mineral-based metabolizer converting simple and abundant inorganic compounds like carbon dioxide and hydrogen sulfide into more complex organic ones on the surface of a pyrite crystal [9, 10, 11].

Wachtershauser's theory of auto-origin suggests pyrite formation as the earliest energy source for life based on surface metabolism and autocatalytic reproduction cycle. Essentially, it is a theory of carbon fixation from an archaic, pyrite-pulled version of the reductive citric acid cycle. Another view is that life on the earth might have begun in rocks on the ocean floor more than four billion years ago. Hot springs deposit a honeycomb of iron sulphide mineral on the ocean floor. This would have served as the ideal place for life to originate [11]. Bernal preferred life to begin by catalytic assembly on a mineral surface [12].

Another suggestion is the clay system of Cairns-Smith [13]. Clays may have been the catalysts that spurred the spontaneous assembly of fatty acids into small sacs that ultimately would have evolved into the first living cell. These vesicles could be induced to grow and split into separate vesicles under laboratory conditions. Many other substances with negatively charged surfaces also catalyze formation of vesicles. When montmorillonite particles were loaded with a fluorescently labeled RNA and those particles were added to micelles, the RNA-loaded particles could be detected inside the resulting vesicles. When the labeled RNA alone was encapsulated inside vesicles, it did not leak out. This is considered as a demonstration of growth and division without any biochemical machinery [14].

d) Panspermia theories

The idea that life originated on this planet in continuation of the inorganic evolution received a jolt when, in 1973, Francis Crick and L. Orgel proposed a new theory called the 'directed panspermia' [15]. According to them, spores of life might have been sent to the earth in an unmanned spaceship by a more advanced civilization evolved billions of years ago on a planet of another star. In effect the theory only shifts the venue of origin of life from Earth to another planet; but does not explain how life originated. The original

panspermia theory did not say that the spores were intentionally sent to other planets, but merely said that microbes in space brought life to planets like the earth. In different versions of the theory, the microbes are supposed to have been transported by light pressure (Arrhenius's radio-panspermia), meteorites (ballistic panspermia), or comets (modern panspermia) [16].

e) Problems with the theories

Although there is no evidence for the origin of life from nonlife, there is no dearth in such theories either. All attempts to assemble an integrated scheme of physicochemical processes have significant weaknesses [17]. Problems occur with hypotheses of the earliest molecules with the properties commonly associated with life. These include the unlikelihood of formation of complex self-replicating molecules such as RNA by chance encounters even over geological time; the difficulty of protecting such molecules following their formation from dilution and destruction by high temperatures, hydrolysis and ultraviolet radiation; and finally the difficulty of imagining how self-organization alone could lead to encapsulation of a complex hierarchy of biochemical reactions in a membrane to form the simplest unicellular organism [17]. The “RNA world” theory is not a feasible proposition and is losing ground. The theory is appealing because of the supposed dual roles played by RNA – both as genetic material and as a catalytic molecule in the protobiological evolution. However this concept encounters considerable difficulties for the fact that RNA is chemically fragile and difficult to synthesize abiotically. The known range of its catalytic activities is rather narrow, and the origin of an RNA synthetic apparatus is not clear [18].

A high temperature origin of life (80° to 110°C) was widely favoured because hyperthermophiles which grow at temperatures between 80° and 110°C are claimed to be the oldest organisms on the earth, although there are dissenting

opinions [19]. The atmospheric models depicting an early warm (approximately 85° to 110°C) Earth support this theory. Still higher temperature origin (350°C in submarine vents) was also proposed. However, the instability of nucleobases (adenine, uracil, guanine, cytosine and thymine) at temperatures much above 0°C would make them unlikely to accumulate on the early Earth. Since these compounds are essential for the formation of the first genetic material in the pre-RNA and RNA world, a low-temperature origin of life and atmospheric models suggesting a cool early earth (about 0°C) rather than a warm one (around 85° to 110°C) can only be considered, if origin of life involving these nucleobases is assumed [19].

Many of the theories of origin of life including those relating to the origin of the genetic code have been tested in laboratory experiments on the assumption that the protocol used in those experiments shall provide suitable proxy for a prebiotic environment [20]. A pre-RNA world would have come first, during which some substance, RNA-like polymer carried out the genetic functions later taken over by RNA. Although the hypothesis required the existence of a nucleotide soup in which RNA molecules performed the catalytic activities to assemble themselves, the experimental evidence does not appear to support the existence of such a soup [21]. Metabolism-first model has also been challenged by Vasas *et al.* [22]. They demonstrated that replication of compositional information is so inaccurate that fitter compositional genomes cannot be maintained by selection and, therefore, the system cannot evolve. This fundamental limitation of ensemble replicators goes against metabolism-first theories of origin of life.

Another serious problem is explaining chirality. “To date, none of the models have proposed a solution to one of the more vexing origin problems: chirality. Three-dimensional molecules such as sugars and amino acids can exist in two

mirror-image forms, like left and right hands (*chiros* means hand in Greek). Any nonbiological synthesis of such molecules, as would have occurred before life arose, produces equal amounts of each type. Nonetheless, modern cells use exclusively left-handed amino acids and right-handed ribose sugars, and interference from the wrong kind shuts down biological reactions. How could chiral life arise in the presence of so much interference?" [2].

According to Freeman Dyson, the popular accounts of the origin of life side step the issue of the origin of the complex cooperative schema worked out between proteins and nucleic acids – the controlled production of self-replicating catalytic systems of biomolecules. Instead they focus on other hurdle, i.e., producing amino acids and nucleotides, and getting them to polymerase into proteins and nucleic acids (typically RNA). All the scenarios that have been proposed for producing RNA under plausible natural conditions lack experimental demonstration and this includes the RNA world, clay crystals and vesicle accounts. No one has been able to synthesize RNA without the help of protein catalysts or nucleic acid templates, and on top of this problem, there is the fragility of the RNA molecule to contend with [23]. It seems very unlikely that minerals played an important part in prebiotic chemistry, both as simple adsorbents and as catalysts. It is also unlikely that a single mineral would have functioned as a specific catalyst for several unrelated reactions. Even if the members of a suite of minerals could each catalyze one step in a complex cycle, it does not seem likely that the cycle would self-organize on their surfaces [24].

A common feature of all these theories is that they all remain in the nonlife domain. Although none of these proposals suggests how life originated, they do go by the name ‘theory of origin of life’! This will be made amply clear from the following conclusions drawn from a study relating to origin of life (italics added): “A CO-dominant atmosphere *may have*

existed when life originated. This atmosphere *could have* produced a variety of bioorganic compounds with yields comparable to those obtained from a strongly reducing atmosphere. A small amount of CO₂ *could have* allowed the primitive Earth to freeze. This could mean that CO *would have been* more stable in the atmosphere than previously thought because of the reduced vapor pressure of water. Methane and ammonia *would have been* also more stable and *could have* contributed to the synthesis of bioorganic compounds. CO₂ is *likely to have been* present, but it *might not have been* significantly involved in the synthesis of bioorganic compounds.” [25]. The conclusions drawn from this study exemplify the kind of information being spewed out from research on origin of life.

Biologists only construct storylines to enhance the credibility of the false assumption that life originated from nonlife as emergent phenomenon through chance combination of certain chemical compounds for which there is not even an iota of evidence in nature or from laboratory experiments. When we come down to the ultimate precursor molecule required for the origin of life, it should be genome, the one that encodes genetic program. Here again, experimental results do not support the chemical origin of life. As we have already seen (see chapter 9), the synthetic genome produced by Craig Venter’s team did not exhibit any sign of life. This is a clear scientific verdict that life cannot originate from nonlife. No wonder, despite several decades of studies on the origin of life no solution is yet in sight. The failure of experiments to create life chemically is also indication of the nonmaterial nature of biological information.

Darwin’s theory of evolution

Although the phenomenon of life and the concept of species are not understood in science, research has been going on to explain how millions of living species appeared on Earth.

Biodiversity on Earth has been described in terms of species. Organisms in reality present a mosaic of characters with specific and overlapping non-specific characters. Consequently all efforts made so far to categorize them into coherent non-arbitrary groups or species with well-demarcated boundaries have been unsuccessful. The problem of defining ‘species’ has been recognized since Linnean time. Karl von Linne, a Swedish botanist and medical doctor known to scientific world as Carolus Linnaeus, published the most influential book in taxonomy “Systema Naturae” in 1735 in which he outlined a scheme for classifying organisms according to the degree of similarities. The levels of hierarchy in Linnaeus classification are: Kingdom-Phylum-Class-Order-Family-Genus-Species [26]. In this system, the species are classified based on morphological and anatomical similarities. The Linnaean system of classification is the most widely accepted method in taxonomy and is very useful in studying diverse organisms in the bioworld. It was not however meant to suggest a species evolved from similar species.

The term ‘species’ means different things to different people. This leads to a very complicated situation in evolutionary biology because species is the unit of evolution. There are as many definitions of species as there are authors who have written about them. Some of these are: morphological species concept, biological species concept, evolutionary species concept, recognition species concept, cohesion species concept, phylogenetic species concept, Greek species concept, tyological species concept, Darwin’s species concept, ecological species concept, phenetic species concept, etc. [27]. According to Ernst Mayr, who introduced the biological species concept, the species is the principal unit of evolution and it is impossible to write about evolution, and indeed about almost any aspect of the philosophy of biology, without having a sound understanding of the meaning of species [28]. With all the confusion and complexity existing in the definition of species – the unit of biological evolution –

how is it possible to propose a theory on the origin of species? That puts the theory of evolution in a quandary. What exactly then the theory conveys by the term species? Mayr further admits that “the conclusion that there are concrete describable objects in nature which deserve to be called “species” is not unanimously accepted. There has been a widespread view that species are only arbitrary artifacts of the human mind, as some nominalists, in particular, have claimed” [28]. It is an irony that although a unifying concept of species could not be advanced so far, the term “species” is being used by evolutionists indiscriminately to suit one’s idea. On this count, the term “species” is no different from the term “gene”, which also remains undefined. But then Darwin himself admits that species is an arbitrary unit. See what Darwin says: “... I look at the term species, as one *arbitrarily given for the sake of convenience* to a set of individuals closely resembling each other, and that it does not essentially differ from the term variety, which is given to less distinct and more fluctuating forms. The term variety, again, in comparison with mere individual differences, is also applied arbitrarily, and for mere convenience sake” [29, p. 46; emphasis added]. “No one definition has as yet satisfied all naturalists; yet every naturalist knows *vaguely* what he means when he speaks of a species” [29, p. 39; emphasis added]. “Certainly *no clear line of demarcation has as yet been drawn between species and sub-species* that is, the form which in the opinion of some naturalists come very near to, but do not quite arrive at the rank of species; species also is a vague form, or again, between sub-species and well marked varieties, or between lesser varieties and individual differences.” [29, p. 45; emphasis added]. These statements are indeed surprising as Darwin himself did not know what he meant by the term ‘species’. As rightly pointed out by Graybeal, to try and divide all organisms into species using one of today’s concepts, is misguided because the important characteristics used to define species, interbreeding

and descent, are only variably attained by groups of individuals which one might call species [30].

Studies on the evolution of species got momentum since the publication of Darwin's theory of evolution a century and half ago. British naturalist Charles Darwin published the book *On The Origin of Species by Means of Natural Selection, Or The Preservation of Favoured Races in the Struggle for Life* in 1859, which formed the foundation of theory of evolution [29]. Darwin believed that species were mutable and could give rise to newer forms if beneficial heritable variation occurred. In this way new species evolved as descent with modification. He assumed heritable variations occur in species by chance. He further assumed there is severe competition between species leading to struggle for existence. If a variation occurs in an individual that helps it in some way to outcompete, that individual survives and the variation is transmitted down to future generations. In this way the variation gets preserved in the population. He called this mechanism "natural selection". According to the theory, natural selection is a purposeless, unconscious mechanism driven by chance whose result is supposed to take geologic time for manifestation. Gradual accumulation of small variations ultimately leads to speciation. Thus every species evolved as descent with modification from earlier species and the process of evolution will go on forever creating newer and newer species.

Darwinism in the latter part of the 19th century faced an alternative evolutionary theory known as neo-Lamarckism [31]. This hypothesis shared with Lamarck's original theory the importance of use and disuse in the development and obliteration of organs, and it added the notion that environment acts directly on organic structures, which explained their adaptation to the ways of life and environments of each organism. Adherents of this theory rejected natural selection as an explanation for adaptation to the environment. In the Netherlands, Hugo de Vries advanced a new evolutionary

theory known as mutationism which essentially did away with natural selection as a major evolutionary process. [31]. Mutationists believe that the driving force of evolution is mutation and not natural selection. "...the mutationist school did not, of course, regard mutations as random. They thought that the body had a built-in tendency to change in certain directions rather than others, though they left open the question of how the body 'knew' what changes would be good for it in future." [32].

Mutationism was also opposed to by many naturalists particularly biometricians like Briton Karl Pearson who defended Darwinian natural selection as the major cause of evolution [31]. The work of theoretical geneticists like R. A. Fisher and J. B. Haldane in Britain and Sewall Wright in the United States in this area contributed to the downfall of mutationism. The biologists were slow starters to accept the new developments particularly because of the involvement of mathematics and omission of many issues such as speciation that were of great importance to evolutionists. With the advancement of a reasonably comprehensive account of the evolutionary process by Theodosius Dobzhansky in his book *Genetics and the Origin of Species* [33], the evolutionary theory started being understood and appreciated as genetic change in populations. This led to the development of the "synthetic theory" which is not just one single hypothesis (or theory) but a multidisciplinary body of knowledge cutting across genetics, embryology, zoology, botany, paleontology, and molecular biology. The "synthetic" epithet is now often omitted and it is known as the Theory of Evolution. Th. Dobzhansky, together with Ernst Mayr, Julian Huxley, the paleontologist George G. Simpson, and the botanist George Ledyard Stebbins are considered the architects of the synthetic theory. [31]. The synthetic theory (modern synthesis) is also referred to as neo-Darwinism. According to Futuyma, genetic variations arise in population by random mutation and recombination. Changes in gene frequency brought about by

random genetic drift, gene flow and natural selection lead to the evolution of populations. Most adaptive genetic variants have individually slight phenotypic effects so that phenotypic changes are graded. Diversification occurs through separation among populations which in turn results in reproductive isolation among populations. These processes continued over long periods give rise to changes of such great magnitude as to warrant the designation of higher taxonomic levels (genera, family, etc.) [34]. Compared to Darwinism the modern synthesis gives more emphasis to random genetic drift than to natural selection. It recognizes that *genes are discrete entities* through which characteristics are inherited and the existence of multiple alleles of a gene is responsible for variation within a population. Speciation occurs as a consequence of gradual accumulation of small genetic changes. In other words, macroevolution is nothing but multiples of microevolutions.

According to the neutral theory of Motoo Kimura, the vast majority of evolutionary changes are neutral or not selective. The neutral theory of molecular evolution accepts that, for any gene, a large proportion of all possible mutants are harmful to their carriers; these mutants are eliminated or kept at very low frequency by natural selection. The theory assumes, however, that many functional mutants can occur at each locus that are adaptively equivalent to one another. These mutants are not subjective to selection relative to one another because they do not affect the fitness of their carriers (nor do they modify their morphological, physiological, or behavioural properties). Evolution at the molecular level consists for the most part of the gradual, random replacement of one allele by another that is functionally equivalent to the first. The theory assumes that favourable mutations occur, but are sufficiently rare that they have little effect on the overall evolutionary rate of nucleotide and amino acid substitutions [35, 36].

Although Darwin's theory has been widely publicized as scientifically proven theory, the truth is that it has not been

even possible to defend the theory scientifically. Only a few examples are given here. The only possible natural evidence that would have swayed in favour of the theory is the fossil record showing intermediate forms predicted by the theory. Darwin stated: "...the number of intermediate and transitional links between all living and extinct species, must have been inconceivably great. But assuredly, if this theory be true, such have lived upon this earth." [29, p. 231]. "Lastly, looking not to any one time, but to all time, if my theory be true, numberless intermediate varieties, linking most closely all the species of the same group together, must assuredly have existed; but the very process of natural selection constantly tends, as has been so often remarked, to exterminate the parent forms and the intermediate links. Consequently evidence of their former existence could be found only amongst fossil remains..." [29, p. 149-150]. But the fossil record did not live up to Darwin's expectations. It is barren for transitional forms. Darwin's reaction to the absence of intermediate forms is: "Geology assuredly does not reveal any such finely graduated organic chain; and this, perhaps, is the most obvious and gravest objection which can be urged against my theory. The explanation lies, as I believe, in the extreme imperfection of the geological record." [29, p. 230]. By that remark, Darwin misled the scientific community in two ways. Firstly, Darwin knew even before he wrote the book that fossil record did not show intermediate stages. Yet instead of developing the theory in accordance with natural reality, Darwin developed the theory against it describing the natural archive of biodiversity as imperfect! Evidently there is no other way he could think of to develop the theory. Darwin's verdict about the fossil record literally galvanized the evolutionists. Some are putting their best effort to prove fossil record is imperfect while others are doing their level best to establish that the fossil record does show intermediate forms as is evident from the occasional reports of 'discovery of transitional forms'. These reports are rather against Darwin's verdict about the fossil forms. Yet the

evolutionary biologists out of sheer despair want to do that. Secondly, by the prediction of intermediate forms, Darwin diverted the attention of scientists solely to the geological record. It may be noted that the theory asserts that evolution is a continuous process and therefore intermediate forms should be present at all times. This means intermediate forms should exist not only in the past, but also in the present as well as in future populations. Here again Darwin's theory flopped. Out of supposedly several million species, over two million species have been recorded on Earth. None of them has been found to be imperfect in its structure or function. There is not a single extant organism that qualifies as intermediate form envisaged by Darwin!

Darwin was also skeptical about the acceptance of his own view of imperfection of geological record as is evident from his statement: "He who rejects these views on the nature of the geological record will rightly reject my whole theory. For he may ask in vain where are the numberless transitional links which must formerly have connected the closely allied or representative species, found in the several stages of the same great formation." [29, p. 279-280]. To consider a natural phenomenon (in this case, the fossil record) as imperfect for the reason it does not agree with one's idea is something unheard of and unthinkable in science. What Darwin did not realize was by looking for evidence against Allah in His creations, he was committing a big blunder! There are many theories in physical and chemical sciences that yield predictions to enable us to verify their veracity. But in the event of failure of a prediction, no one would consider the theory is correct and Nature wrong! If natural evidence goes against the predictions of a theory, it is preposterous to defend it by perfunctory arguments. No evolutionist would have doubted the perfection of the fossil record if Darwin's theory had not predicted transitional forms. In no other field of science can one find such unethical move to deliberately misinterpret natural formation in defense of a theory.

Another example of erroneous assumption is competition between species, which is vital for evolution of new species. Darwin assumes there is severe competition between species leading to struggle for existence. “A struggle for existence inevitably follows from the high rate at which all organic beings tend to increase” [29, p. 55]. “Nothing is easier than to admit in words the truth of universal struggle for life” [29, p. 54]. Darwin’s assumption that evolution of new structures or innovations enables a species to outcompete the others and that results in its survival is perhaps the most misleading idea. Darwin’s theory is a circular argument. The theory implies that a species evolves with the ability to outcompete others. If that were the case, evolution cannot take place without interspecific competition. In other words, competition among organisms should also be a product of evolution. This means evolution only creates competition and does not eliminate it. There is no rationale in the argument that evolution takes place for enabling the species to overcome the competition (for its survival) when completion has also to be preserved in the resulting population by the very process of evolution for its continuance.

Peter Kropotkin was a Russian revolutionary anarchist and a critic of Darwinism. His views about evolution revolved round cooperation and not competition. As a naturalist studying the geology and zoology of eastern Russia, his observation of the animal world taught him that living beings coped with the harsh Siberian environment primarily through cooperative behaviour. He categorically denied that evolution resulted from struggle for life. Kropotkin could not accept Thomas Huxley’s (a staunch believer and protagonist of Darwinism) ‘gladiatorial’ Darwinism as valid: “They conceive of the animal world as a world of perpetual struggle among half-starved individuals, thirsting for one another’s blood.” Stephen Jay Gould devotes a full chapter in his book *Bully for Brontosaurus* presenting Kropotkin’s views on biological evolution based on cooperation in sharp contrast with

Darwinism based on competition [37]. Kropotkin's idea of natural co-operation and Darwin's idea of fierce competition are diametrically opposite views but both trying to explain the same phenomenon.

Evidence is mounting against the theory. In his book, *Darwinism: The Refutation of a Myth*, Soren Lovtrup, professor of zoophysiology at University of Umea, Sweden, points out a very important fact about the critics of Darwinism. He states: "Some critics turned against Darwin's teachings for religious reasons, but they were a minority; most of his opponents...argued on a completely scientific basis." He goes on to explain many reasons for the rejection of Darwin's proposal. "...first of all that many innovations cannot possibly come into existence through accumulation of many small steps, and even if they can, natural selection cannot accomplish it, because incipient and intermediate stages are not advantageous." [38]. Lovtrup's remarks in effect clear the misunderstanding that the theory is opposed only by religious leaders. Many scientists have either rejected it or are skeptical about it. There are several websites and books that argue either in support of the theory or against it. The various aspects of the theory and its scientific inadequacies have also been discussed elsewhere [39]. Ever since the publication of Darwin's theory more than 150 years ago, it has remained controversial. This is very much expected as it is against the truth of creation revealed by the Quran. The theory is downright denial of Creator God. Darwinism challenged the religion, particularly its theory of creation. As succinctly epitomized by Ernest Haeckel, one of the expounders of the theory of evolution, "Darwin's theory of evolution and natural selection revolutionised biology. The implication of this postulated struggle for existence seemed to undermine the basis of religion...no miracle, no creation, no creator." It is with this 'theory', the atheists promote the idea that living species evolved by chance and were not created!

Being an orthodox Christian during his teens, Charles Darwin knew better than anyone else how his theory of origin of new species threatened belief in God and religion. He called himself “the Devil’s Chaplain” and complained that by publishing the theory he felt “like confessing a murder.” [40]. He also described his theory as “the Devil’s gospel” [41]. He was also not fully convinced of his theory: “I have hitherto sometimes spoken as if the variations so common and multiform in organic beings under domestication, and in a lesser degree in those in a state of nature had been due to chance. *This, of course, is a wholly incorrect expression...*” [29, p. 111, italics added]. Darwin wrote later in his another book, *The Descent of Man* that: “I admit...that in the earlier edition of my *Origin of Species* I probably attributed too much to the action of natural descent of the survival of the fittest.” [42]. “But then arises the doubt, can the mind of a man, which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animals, be trusted when it draws such grand conclusions? Would anyone trust in the convictions of a monkey’s mind, if there are any convictions in such a mind.” [43]. Charles Darwin stated his theory was “grievously hypothetical”. Saying “The eye to this day gives me a cold shudder”, Darwin couldn’t possibly believe the eye had evolved by natural selection. He openly admitted his own doubts saying that “this seems, I freely confess, absurd in the highest possible degree.” [44]. In a letter to Asa Gray, Harvard biology professor, Charles Darwin wrote: “I am quite conscious that my speculations run quite beyond the bounds of true science.” [45]. Fourteen years after the publication of *The Origin of Species*, Darwin wrote to a friend thus: “In fact the belief in Natural Selection must at present be grounded entirely on general considerations....When we descend to details, we can prove that no one species has changed...nor can we prove that the supposed changes are beneficial, which is the groundwork of the theory. Nor can we explain why some

species have changed and others have not.” [46]. No wonder the theory continues to remain controversial.

Evolutionary tree

Genomic similarity is considered as the indicator of evolutionary relationship between organisms. Molecular tools enable us to compare the genetic similarities through genome analysis and to ascertain the genetic relationships among species and their pedigrees [47]. The construction of a phylogenetic tree is conceptually simple. The number of differences between pairs of corresponding DNA sequences from different organisms is taken to be some measure of the “evolutionary distance” that separates them. Pair-wise differences between the sequences of many organisms are used to construct maps of the evolutionary paths that led to the modern-day sequences [48]. Protein sequencing offers a tool for establishing homologies from which genealogies leading to the construction of phylogenetic tree can be arrived at.

Evolutionary biologists look at the universal tree of life as being consisted of three domains: the ordinary bacteria, the Archaea which are microbes best known for living in extreme environments and the eukaryotes (eukarya) including man having nucleated cells. From comparisons of the genes encoding ribosomal RNAs of the microbes, they believed that life began with some primitive bacteria. These then branched into Archaea, modern bacteria and later to eukaryotes. However comparisons of DNA sequences of other kinds of genes had led to varied versions of the evolutionary tree making the tree of life more confusing rather than more focusing. “More genomes have only further blurred the branching pattern of the tree of life. Some blame shanghaied genes; others say the tree is wrong.” [49]. One reason attributed to this ‘unexpected’ finding is the lateral transfer of the genes. According to Andre Goffeau, a geneticist at the Universite Catholique de Louvain, Belgium, there is so much lateral transfer that even the concept of the tree is debatable. The

genomes of modern microbes may be mosaics of genes from different organisms rather than descendants of any single early form of life suggesting thereby that not even the ribosomal genes reflect evolutionary relationships [49]. Pennisi presented an impressive cross section of the growing body of evidence questioning the veracity of the evolutionary tree. In the case of bacteria, lateral gene transfer has been considered to be so widespread that it renders the concept of species among bacteria meaningless and makes it impossible to construct an evolutionary tree [49]. Daubin *et al.* also expressed similar views [50]. Philippe and Forterre [51] demonstrated that the phylogenies were highly confusing due to the combining effects of gene duplication, gene loss, lateral gene transfer and tree reconstruction artifact. Many alternative scenarios were proposed with no obvious possibility to make a rational choice. The results of a study of the patterns of a certain type of genomic change, called transposon insertions, among 13 vertebrate species supported an earlier proposal of evolutionary trees showing that primates (human, chimpanzee, baboon) are more closely related to rodents (mouse, rat) than to carnivores (cat, dog) or artiodactyls (cow, pig) [52]. This placement had earlier triggered off a heated controversy in the field of evolutionary genomics as the new sequence data refutes alternative evolutionary tree that place rodents much farther away from primates. The evolutionary tree constructed based on genetic parameters is clearly a departure from the expected morphological classification.

A particularly unexpected outcome of the studies in this field is that structures traditionally viewed as being analogous are regulated in their development by genes that are clearly homologous. There is uncertainty among biologists in the determination of homology. We must accept that homology is usually a hypothesis about evolutionary history rather than a deduced matter of fact [53]. More detailed discussion of these subjects may be found elsewhere [54]. The difficulties and ever-increasing inconsistencies observed with the phylogenetic

approach greatly mar its scientific merit. *The available information indicates that the diverse forms of life could not have evolved from a common ancestor. There is no evidence whatsoever to say that morphological, anatomical, embryonic and genetic relationships among diverse forms of life are indicators of descent with modification from a common ancestral species.* It is also argued that similar genomes should result in similar phenotypes under identical environmental conditions. However, nature provides clear proof that it is not so. Polyphenisms observed in many insects (e.g., queen and worker castes of ants, bees and wasps) are strong indicators of the differential gene expression in spite of the similar genomes [55]. These natural phenomena are evidence of the non-correspondence of one genome-one phenotype concept and question the very basis of determining phylogeny based on genome analysis. No wonder Elizabeth Pennisi asked the most relevant question “Is it time to uproot the tree of life?” [49].

Creation of biological species

Programmed evolution can be thought of as probable mode of creation of living beings by Allah. A theory of programmed evolution of biological species has been proposed earlier in the light of certain Quranic hints and scientific facts [56]. Human species is excluded from the ambit of this theory because the Quran reveals that man was created by a special process (Q. 15:28-29, see chapter 11). The theory of programmed organic evolution is in no way comparable with Darwin’s theory. It is not based on the view that life originated from nonlife as emergent phenomenon. The origin of species is also not viewed as evolution from existing species as a result of random mutations (supposed to be caused by the action of certain agents external to the cell) followed by natural selection. Instead, it explains the origin of species as creation through programmed evolution based on divine biosoftware carried in a primordial cell. The theory takes into account the existence of molecular tools and systems for rearranging and

reorganizing chromosome sectors effectively changing the bimeme composition (i.e., semantic content) and the fact that these rearrangements are carried out as cell-directed (i.e., programmed) functions.

a) Ontogeny as model phenomenon

The phenomenon of ontogenetic development (biosystem development) is the natural demonstration of creation of an individual through programmed evolution.

In the case of human being, the zygote undergoes mitotic division to form a ball of cells. Once there are 32 cells (blastomeres), the developing baby is called a morula. With further cell division, the morula becomes an outer shell of cells with an attached inner group of cells. This stage is called blastocyst stage. The inner cells become the embryo. These cells of the embryonic stage multiply through repeated divisions and initiate differentiation on time schedules prescribed by the program. Differentiation implies transformation of the cells from the more general to the particular along a pre-determined direction. Thus a neuroblast, which may be indistinguishable from another cell in the beginning, would become increasingly different from the others as the process of differentiation continues and eventually becomes a nervous tissue. Embryo formation is completed in about two months during which, almost all of the internal organs are well laid down. From the third month onwards to the end of gestation, the changes that occur in the foetus are growth and further tissue differentiation. Ultimately, through repeated mitotic division, morphogenesis and histogenesis, the baby is formed which following birth develops into an adult.

The phenomenon of ontogenetic development illustrates in effect step by step differentiation of the biomemome carried in the zygote in accordance with the instructions contained in the biomemome. It is therefore a cell-directed phenomenon. The various stages are identified as

blastomere, blastocyst, etc. The process ultimately produces specific number of end cells each with different set of operable biomemes (operamemome) and inoperable or dormant biomemes (Fig. 10.1). Each end cell undergoes further mitotic divisions producing specific number of cells with identical operamemomes. This mass of cells which are structurally and functionally identical represents a tissue. Biologists consider mitosis as a process of cell division that creates daughter cells with identical genomes (i.e., genetic program). However this notion has been proven wrong with the discovery of variations in the genomes of different tissues [57]. The discovery is in conformity with the biomemetic concept. The observed structural and functional differences among tissues can be attributed to differences in the operamemomes. The differences cannot be explained based on the molecular gene concept.

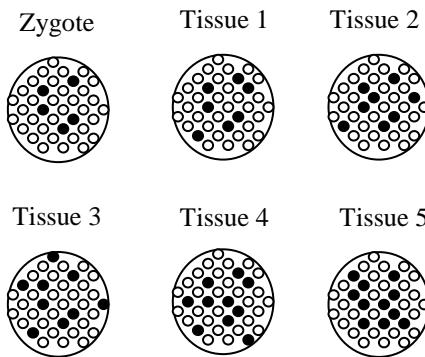


Fig. 10.1. Programmed evolution of end cells from the zygote during ontogenetic development

Note: Unfilled circles indicate the operable biomemes that can come into operation in the cell. Filled circles indicate dormant biomemes. The totality of operamemes constitutes the operamemome of a cell.

A similar process can be thought of for the creation of millions of diverse species by Allah. From the biomemetic point of view, creation of species through programmed evolution involves two steps namely, biogenesis (origin of

biological information) and programmed evolution of microbioprograms of diverse species. Primary requirement of the programmed evolution of species is the availability of a source of biological information, without which biological organisms cannot evolve. But this most important requirement of biological evolution has been comfortably ignored by biologists by supposing genetic mutation will bring new information; but from where or from which source? This issue remains unresolved and will remain so forever as it cannot be addressed in science. The theory of programmed evolution of species requires that a primordial cell or primordial biochip (PBC) comparable with zygote carrying the divine bioprogram should have appeared first on the Earth. This bioprogram served as the biomeme pool (like the biomemome stored in the zygote) for the creation of millions of end cells with diverse microbioprograms. The origin of the PBC carrying the divine bioprogram for the creation of diverse species is considered here as biogenesis. Following that, the bioprogram came into operation leading to the creation of millions of end cells (as specified in the program) carrying diverse microbioprograms each representing a species.

b) Biogenesis – origin of divine biological information

How did the PBC with the divine bioprogram to guide the evolution of diverse species originate on the earth? There are certain verses in the Quran that indicate how *rooh* (biosoftware) is transmitted to Earth by Allah. The creation of zygote in the womb of Mary carrying the biosoftware of Prophet Jesus Christ is a case in point. The event is an illustration of the divine mode of transmission of biosoftware to Earth. Prophet Jesus was created from a Word (*rooh*) from Allah.

إِذْ قَالَتِ الْمَلَائِكَةُ يَا مَرْيَمُ إِنَّ اللَّهَ يُبَشِّرُكِ بِكَلِمَةٍ مِنْهُ أَنَّهُ أَنْتِ مَرْيَمُ وَجِيلًا
فِي الدُّنْيَا وَالْآخِرَةِ وَمِنَ الْمُفَرِّجِينَ

3:45 Behold! The angels said: O Mary! Allah gives you glad news of a Word from Him. His name will be Jesus Christ son of Mary, held in honour in this world and in the Hereafter and one of those nearest to Allah.

Allah's Word is divine software. The 'Word' mentioned in the above verse is the *rooh* (biosoftware) to create Prophet Jesus Christ.

وَادْكُرْ فِي الْكِتَابِ مَرْيَمَ إِذْ أَنْتَبَدْتَ مِنْ أَهْلِهَا مَكَانًا شَرْقِيًّا فَأَخْتَدَتْ مِنْ دُونِهِمْ حِجَابًا فَأَرْسَلْنَا إِلَيْهَا رُوحًا فَتَمَثَّلَ لَهَا بَشَرًا سُوِّيًّا قَالَتْ إِنِّي أَعُوذُ بِالرَّحْمَنِ مِنْكَ إِنْ كُنْتَ تَقِيًّا قَالَ إِنَّمَا أَنَا رَسُولٌ رَّبِّكُوكَ لِأَنَّهُمْ لَكُوكَ عُلَامًا زَكِيًّا قَالَتْ إِنِّي يَكُونُ لِي غُلَامٌ وَمَمْبَسِسِيٌّ بَشَرٌ وَلَمْ أَكُوكَ بَعِيًّا قَالَ كَذِيلِيٌّ قَالَ رَبِّكُوكَ هُوَ عَلَيَّ هَيْنَ ۖ وَلَنْجَعَلَهُ آيَةً لِلنَّاسِ وَرَحْمَةً مِنَّا ۖ وَكَانَ أَمْرًا مُفْضِيًّا فَحَمَّلَهُ فَانْتَبَدَتْ بِهِ مَكَانًا فَصَيَّا

19:16-22 And remember Mary in this Book (the Quran) when she retreated from her family to a place in the east. She placed a screen (to separate herself) from them. Then We sent to her Our *rooh* and he (i.e., the angel) appeared to her as man in all respects. She said: "I seek refuge in Most Gracious (Allah) from you (i.e., the angel in human male form), if you fear Allah." He (i.e., the angel in human male form) said: "Indeed I am only a messenger from your Lord to gift to you a pure son." She said: "How can I have a son as no man has (ever) touched me and I have not been an unchaste (woman)?" He (i.e., the angel in human male form) said: "It is like that. Your Lord says, "It is a simple thing for Me and (We wish) to make him (i.e., her son Jesus) a sign to mankind and a Mercy from Us." It is a matter ordained." So she conceived him (i.e., her son Jesus) and she retired with him to a remote place.

وَمَرْيَمَ ابْنَتَ عِمْرَانَ الَّتِي أَحْخَسَتْ فَرْجَهَا فَنَفَخْنَا فِيهِ مِنْ رُوحِنَا وَصَدَقَتْ بِكَلِمَاتِ رَبِّهَا وَكُشِّيَّهُ وَكَانَتْ مِنَ الْغَائِتِينَ

66:12 And Mary the daughter of Imran, who guarded her genital organ; and We breathed into it (i.e., her genital organ)

from Our *rooh*; and she testified to the truth of the Words of her Lord and of His Revelations, and was one of the devout (servants).

These verses indicate that it is from the *rooh* Allah sent with an angel (messenger) into Mary's genital organ, Prophet Jesus Christ was created (see chapter 9 for a detailed discussion of *rooh*). Evidently, the biosoftware (*rooh*) transmitted by the angel materialized as a cell (zygote) carrying the biosoftware, which then developed into Prophet Jesus Christ. The entire phenomenon can be scientifically described as teleportation event in which intangible (*ghayb*) biological information transmitted by God transformed into visible (*shahdat*) form, the zygote carrying the biosoftware (of Prophet Jesus Christ), in the genital tract of Mary.

Teleportation involves what is called “quantum entanglement”, a less understood concept of entwining two or more particles without physical contact. In 2004, physicists in Austria [58] and in the US [59] independently demonstrated quantum teleportation with atoms. In 2006, Eugene Polzik and his team at the University of Aarhus in Denmark, successfully conducted a teleportation experiment involving a microscopic atomic object containing thousands of billions of atoms [60]. They teleported the information to a distance of half a metre. For the first time, it involved teleportation between light and matter, two different objects. The creation of a zygote cell in Mary's genital organ from the divine *rooh* transmitted into it can be likened to teleportation phenomenon.

The PBC or the first cell with divine biological program necessary for the creation of millions of species would have been formed on Earth in the same way as the creation of zygote in Mary's womb from the *rooh* (biological information) sent by Allah. The appearance of the PBC on Earth thus marked biogenesis – origin of life or more correctly appearance of biological information – on this planet. The arrival of the divine bioprogram is the landmark event that provided the

source of biological information vital for the evolution of diverse species. That was the defining moment of the bioworld on this planet. Life did not (and could not) jump-start from nonlife based on chemical principles through a hypothetical emergent phenomenon as is believed and propagated by the scientific community with no proof whatsoever for such phenomenon. Life appeared only when the biological information (the divine bioprogram) was made available on the earth by Allah. It was a one-time event.

The Quran further reveals that Allah created everything from water (Q. 21:30; 24:45).

اَوْلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَبْعًا فَقَسَّمْنَاهُمَا ۝ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ
شَيْءٍ حَيًّا ۝ اَفَلَا يُؤْمِنُونَ

21:30 Do not the unbelievers see that the skies and the earth were joined together (as one unit) before We clove them asunder? We made from water every organism. Will they not believe then?

وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِنْ مَاءٍ ۝ فَمِنْهُمْ مَنْ يَعْشِي عَلَى بَطْلِيهِ وَمِنْهُمْ مَنْ يَعْشِي عَلَى رَخَائِينَ وَمِنْهُمْ مَنْ
يَعْشِي عَلَى اَرْبَعٍ ۝ يَنْكُلُ اللَّهُ مَا يَشَاءُ ۝ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ

24:45 And Allah created every organism from water. Among them are those that move on their bellies, those that walk on two legs and those that walk on four (legs). Allah creates what He pleases. Verily, Allah has power over all things.

In the light of these Quranic revelations it is justifiable to assume that the PBC would have been formed in an aqueous milieu (like that of womb). There are no two opinions among biologists as to the most probable location for the origin of life; it is water. Alfred Russel Wallace emphasized at the beginning of the twentieth century that the first requirement for life is liquid water; without it, as far as we know, life is impossible [61]. In a discussion of the origin of life, George Wald concluded that life arose in the sea: "Here were the necessary salts and water. The latter is not only the principal component

of organism, but prior to the formation provided a medium which could dissolve molecules of the widest variety and ceaselessly mix and circulate them” [62].

The essentiality of an aqueous milieu has been recognized in science only for the origin of life but not for the subsequent evolution of diverse organisms. The Quran differs in this respect and asserts that all the biospecies on the earth arose from water (Q. 21:30). It also explicitly states about the creation of animals from water (Q. 24:45). The divine statements apply to all living beings from unicellular organisms like bacteria to multicellular organisms like plants and animals but not human species as it is clearly stated that the first human being Adam was created by Allah from clay through a special process (Q. 15:28-29).

c) Programmed evolution of biological species from PBC

The organic evolution might have got off from a single cell as is generally believed. But, contrary to the current belief, *the first cell formed on this planet could not have been a species but a cell (PBC), which carried the divine bioprogram (rooh) necessary for the evolution of the innumerable diverse species.* Woese [63] proposed the “universal ancestor” concept to look at the rooting of the evolutionary tree. The ancestor according to this model, could not have been a particular organism, a single organismal lineage. It was communal, a loosely knit, diverse conglomeration of primitive cells that evolved as a unit, and it eventually developed to a stage where it broke into several distinct communities, which in turn became the three primary lines of descent. The primary lines, however, were not conventional lineages. Each represented a progressive consolidation of the corresponding community into a smaller number of more complex cell types, which ultimately developed into the ancestor(s) of that organismal domain. The concept of PBC comes very close to the “universal ancestor” concept.

It may be noted that the PBC which started the organic evolution is the counterpart of the big bang singularity (abiogenesis or origin of the chemical information) that started the inorganic evolution, and zygote (carrying biomemome) that started the development of a human individual in the mother's womb. The PBC with a built-in program as the driving force can explain the phenomenon of evolution of biospecies consistent with natural evidence.

Let us now examine the probable biomimetic pathway on the lines of ontogeny through which the PBC could have produced millions of microbioprograms each representing a species (Fig. 10.2). For convenience in illustration, the taxonomic classification system is taken as example. The execution of the bioprogram carried in the PBC might have initially produced mother cells representing evolutionary lineages (domains of life). As per the modern phylogenetic classification, there are three domains namely, Bacteria, Archaea (microbes living in extreme environments) and Eukarya (or sometimes termed Eukaryota) [64]. Each of the domain mother cells produced kingdom mother cells. For example, the three kingdoms – animals, plants and fungi – are just three of about a dozen extant major branches of the eukaryote domain [31]. Each of these mother cells might have undergone further differentiation of the biosoftware in successive steps creating different lineages in accordance with the program to produce ultimately specified number of end cells under a kingdom. Each end cell carried the microbioprogram of a species, which served as the source of biological information for the creation of intraspecific variation among its members. In this way, programmed evolution of species can be broadly understood.

The number of steps indicated in the biosoftware differentiation process (Fig. 10.2) discussed above is only arbitrary and is intended to explain the process. The number of

steps through which the differentiation process might have taken place would be as specified in the program.

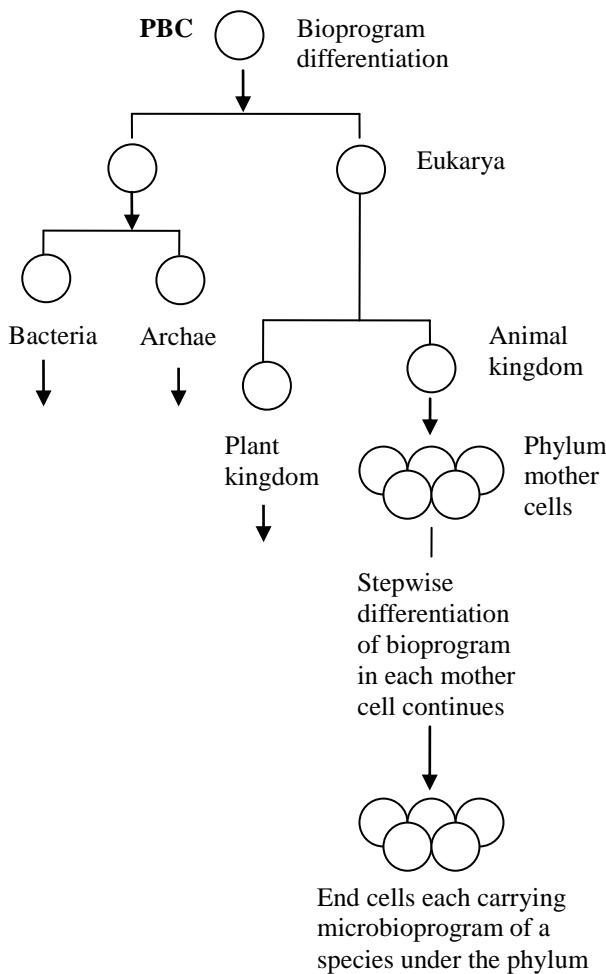


Fig. 10.2. Creation of microbiopograms of diverse species from a common biomeme pool through programmed biosoftware differentiation

PBC – Primordial biochip. Note that the number of differentiation steps, number of mother cells, number of end cells shown are arbitrary.

With the production of the end cells the programmed evolution of biological species is essentially complete. Going by the Quranic revelation (Q. 21:30; 24:45 quoted above), the entire process from the origin of PBC to the programmed evolution of end cells carrying the microbioprograms of millions of species would have occurred in an aqueous milieu (like the womb). It would not have required so much space or quantity of water. Nor would it have taken a long time either, if the speed with which natural biosoftware engineering processes and cell division occur is any indication. The end cells produced by the animal mother cell might have been in the form of eggs while those originated from the other mother cells might have been in the form of single cells, spores, seeds, etc. Whatever form in which they emerged, these cells might have been dispersed over the water and land areas by natural processes resulting in their widespread distribution on the earth. The development of the first individuals from the end cells representing species might have taken place on different time schedules as programmed. The event marked the appearance of the respective species on Earth. It is this sequence that is reflected in the fossil record. Depending on the species, sexually dimorphic, polymorphic, asexual and other forms of individuals would have developed from the end cells, which through further multiplication increased their population and perpetuated their species.

Biomemetics thus distinguishes species based on their microbioprograms, individuals based on their biomemomes, and tissues based on their operamemomes.

The theory of programmed evolution proposed here differs in several respects from the traditional theories of origin of life and biological evolution based on Darwinism. These are:

- Life did not originate as emergent phenomenon from non-living substances.

- The first cell formed on Earth was not an organism but a cell carrying the divine bioprogram necessary to create the diverse species specified in it.
- The divine bioprogram, the source of biological information on this planet, was the driving force behind organic evolution.
- Creation of diverse species is creation of diverse biomemome packages (microbioprograms) from a common biomeme pool (the bioprogram) through biosoftware engineering processes.
- The organisms that developed from the microbioprograms were in perfect forms. There were no intermediate forms between any two species.
- Programmed evolution does not assume a common ancestor organism for all the species.
- Programmed evolution is a deterministic phenomenon. The species created are in accordance with the divine biosoftware to suit the multifarious purposes for which they are created by Allah on Earth, the human robot testing laboratory.

The proposed theory of programmed evolution of species driven by divine bioprogram is fully supported by natural evidences and experimental findings as given below.

- a) Programmed evolution does not predict intermediate stages to create fully developed organism. It is creation in one go through a programmed evolutionary process. Therefore the theory is consistent with the lack of intermediate or transitional forms in the fossil record.
- b) Geological records indicate sudden appearance of new species punctuated by long periods of stasis (Punctuated Equilibrium). Darwin's theory fails to explain this natural evidence of appearance of full-fledged species. The proposed

theory of programmed evolution, however, allows such pattern in the appearance of species on Earth. According to Douglas Futuyma, a prominent evolutionary biologist, “Organisms either appeared fully developed or they did not. If they did not, they must have developed from preexisting species by some process of modification. If they did appear in a fully developed state, they must indeed have been created by some omnipotent intelligence.” [65].

c) Almost all groups at all taxonomic levels first appear in the fossil record as ‘type’ forms, and then ‘explode’ into a large number of diverse lineages with a mix of related but not identical potentials [66, 67, 68]. This pattern is suggestive of partitioning of a very large common bioinformation pool with a large number of alternate morphological potentials. But no known mechanism is so far available for generating such information-dense primordial source. According to Grasse, evolving species acquire a new store of genetic information through “a phenomenon whose equivalent cannot be seen in the creatures living at the present time (either because it is not there or because we are unable to see it)” [69]. These observations are fully consistent with the proposed theory of programmed evolution because it recognizes the intangible divine bioprogram stored in the PBC as the source of biological information and the driving force behind the evolution of species.

d) Insofar as chromosomes form the storage device of the cell (biochip) and the bioprogram is stored as biomemes in different sectors of the chromosomes of the PBC, microbioprograms specific to different species can be created from the parent source through natural biosoftware engineering mechanisms followed by cell division to assemble and reorganize the resulting biomimetic packages into viable sets of instructions on the chromosomes in a programmed manner. In this way ‘new’ biosoftware (microbioprogram) can be created. This aspect is the most important and unique feature of

the theory of programmed evolution as it describes how new biosoftware can be created from an original biomeme pool through natural biosoftware engineering processes. The current scientific theories are silent about the source of biological information. Further, biologists consider phenomena like crossing over (recombination), chromosomal aberrations, etc., which create new chromosome compositions and hence bioinformation content, not as programmed mechanisms but as random phenomena, errors and mistakes.

e) The theory of programmed organic evolution based on the differentiation of an original bioprogram and reorganisation of biomemes into viable sets of millions of microbioprograms predicts extensive mixing of chromosomal regions and the possibility of finding identical program bits in the microbioprograms of the species. Physically these program bits will be represented by identical chromosomal sectors, which store them. Since DNA is part of the chromosomal material, the existence of identical sequences in the genomes of different species is a reflection of the existence of identical chromosomal sectors in them. This can be taken as confirmatory proof of the biosoftware engineering processes that occurred during the programmed evolution of microbioprograms from the original biomeme pool in the PBC. Studies relating to molecular evolution provide considerable evidence of chromosome rearrangement, shuffling, reorganisation, etc., during the evolution of species. These findings support the proposed theory of programmed evolution. Little wonder Philippe and Forterre [51] found the phylogenies as highly confusing due to the combining effects of gene duplication, gene loss, lateral gene transfer, etc. Experimental evidence for the occurrence of biosoftware engineering processes can also be obtained from several studies in comparative genomics. Wide variations are observed in karyotypes (number, size and shape of chromosomes in a somatic cell) of organisms. Comparison of karyotypes within and between species reveals that the differences are due to

chromosome rearrangements. These rearrangements had played a major role in organic evolution [70]. Cases of genes in the same phylogenetic clade occurring in different chromosomal regions and genes belonging to distantly related phylogenetic clades occurring very closely in a chromosomal region are quite common [71]. These observations were explained as the result of several chromosomal rearrangements occurred at the regions of these genes and the shuffling of genes (physically chromosomal regions) contained in different genomic clusters. Further it is now well recognized that horizontal gene transfer (or lateral gene transfer) had taken place during evolution. The horizontal gene transfer is a prediction of the proposed theory of programmed evolution involving natural biosoftware engineering processes. The phenomenon of horizontal gene transfer goes against the vertical evolutionary pathway implied in the Darwinian model. It is the non-genealogical transmission of genetic material from one organism to another [72]. There are now several attempts to find explanation for this phenomenon and fit it in the Darwin's theory of evolution [73] but to no avail. All these findings do support creation of biological species on this planet through programmed evolution.

Biomimetic classification of species

Since an organism is natural biocomputer or biorobot, it has biosoftware and an ensemble of appropriate hardware capable of executing the program. The hardware (cell structures) are produced based on the biosoftware. The biosoftware at the level of species is referred to as microbioprogram. The computer concept permits us to classify the species based on their biosoftware and system configuration. Biological species may be broadly grouped into the following classes.

Biochip: Species comprising unicellular organisms like bacteria, amoebae, etc., are examples of this category. These biosystems are characterised by a single biochip. The

microbioprogram and the hardware required to execute the program are carried in that single biochip. The system memory stores the microbioprogram. The biosystem has only limited number of functions to perform and is totally ‘unconscious’ in its activities.

Multiple-biochipped decentralized biosystem: The multicellular plant species are included in this category. The Class-2 biosystems are unconscious systems like the Class-1 systems. They also function based on the microbioprogram stored in the cell memory (the chromosome). The system does not have a central processing unit.

Multiple-biochipped centrally controlled unconscious biosystem: These include the animal species. Their internal functioning as well as external activities are fully controlled by a central processing unit (CPU) located in their brains. An animal system carries out both internal and external activities in response to stimuli transmitted through sensory organs. The internal activities are the house-keeping biological activities occurring inside the biosystem that are responsible for the moment-to-moment existence and sustenance of the biosystem. For example, the activities of cardiovascular system, digestive system (energy generation), nervous system (communication network and control), reproductive system, etc., are internal activities. On the other hand, tasks such as movement from one place to another, etc., are externally executed activities. The CPU controls both internal functions and external activities in accordance with the microbioprogram. The system is unconscious of its existence (see chapter 11).

Multiple-biochipped conscious free-willed biosystem: This special class of biosystem comprises only one species, *Homo sapiens*. In addition to CPU, human biosystem has another processor, the mind (*qalb*), bestowed freewill, consciousness and intelligence (see chapter 11). The presence of mind distinguishes human species from the rest of the species.

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11. MAN – ALLAH'S INTELLIGENT, CONSCIOUS AND FREE-WILLED ROBOT

Man is a new phenomenon in the history of planet Earth bringing to the world thought, language, social relations and civilizations, and exerting an active influence on nature. Human race thus stands out from the rest of several millions of living species. Being the only species bestowed with intelligence, consciousness and freewill, man alone is capable of appreciating the world around him. No other species can.

Evolutionists assume man originated by chance in continuation of the evolution of animal species. Chimpanzee is supposed to be the closest animal ancestor of man. Since the current taxonomy of biological species gives more weight to comparative anatomy, *Homo sapiens* is included as a member of genus Homo, of subfamily Homininae, of family Hominidae, of order Primata, of class Mammalia, of subphylum Vertebrata, of phylum Chordata, of kingdom Animalia. Controversies do exist regarding the validity of the placement of human species in animal kingdom. As early as 1864, Armand Quatrefages de Breau, the famous French anthropologist, had expressed strong views against this placement [1]. Quatrefages singled out man in a special, independent kingdom. He gave more importance to such criteria as language, conscious activity and social life than to anatomy.

Creation of human species

Holy Quran describes the creation of Adam, the first member of human species, as a single step process and not through evolution from an existing animal species. Allah created first the male member, Adam. He was created from clay (Q. 15:28-29). The location of creation of Adam appears to be God's abode in the presence of angels as can be inferred

from verse 2:30. After moulding clay into human shape, God breathed into it from His *rooh* to create Adam.

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيقَةً فَالْأُولَا أَجْعَلُ فِيهَا مِنْ يُفْسِدُ فِيهَا
وَيَسْفِلُ الدَّمَاءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ

2:30 Behold! Your Lord said to the angels: I am going to create a vicegerent on earth. They said: Will You place therein one who will make mischief therein and shed blood while we do chant Your praises and glorify Your holiness? He (Allah) said: I know what you do not know.

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي خَالِقٌ بَشَرًا مِنْ صَلْصَالٍ مِنْ حَمِّا مَسْنُونٍ فَإِذَا سَوَّيْتُهُ وَنَفَخْتُ
فِيهِ مِنْ رُوحِي فَقَعُوا لَهُ سَاجِدِينَ

15:28-29 Behold! Your Lord said to the angels: I am about to create a man from sounding clay (made) from sticky mud. When I have fashioned him and breathed into him from My *rooh*, you fall down in obeisance to him.

Based on the computer model of biological organism, the phrase, “breathed into it (clay mould) from My *rooh*” can be interpreted as the process of installing the biosoftware of human species in the clay model to transform it into a living human individual. The word *rooh* used in this context refers to biological software (see chapter 9). The Quran further reveals that the first female member (Eve) was created from Adam’s *nafs* (the *rooh* breathed into the clay model) and from them, the entire humanity (Q. 4:1, 39:6).

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا
رِجَالًا كَثِيرًا وَنِسَاءً وَاتَّقُوا اللَّهَ الَّذِي سَأَلَوْنَ بِهِ وَالْأَرْحَامَ إِنَّ اللَّهَ كَانَ عَلَيْكُمْ رَقِيبًا

4:1 O mankind! Fear your Lord who created you from a single soul (*nafs*) and from that, He created its mate, and from them both He (created and) spread plenty of men and women. Be conscious of Allah about whom you ask each other and (be

also conscious of) the family relations. Verily, Allah is watching you.

خَلَقْنَاكُم مِّنْ نَفْسٍ وَاحِدَةٍ ثُمَّ جَعَلْنَا رُوْجَهَا وَأَنْزَلْنَاكُم مِّنَ الْأَنْعَامِ تَمَانِيَةً أَزْوَاجٍ
يَخْلُقُكُمْ فِي بُطُونِ أُمَّهَاتِكُمْ خَلْقًا مِّنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ ثَلَاثٍ دِلْكُمُ اللَّهُ رَبُّكُمْ لَهُ
الْمُلْكُ لَا إِلَهَ إِلَّا هُوَ فَإِنَّ تُصْرِفُونَ

39:6 He created you (all) from a single soul; then He created from it its mate; and he sent down from the cattle eight pairs; He develops you in your mothers' wombs in stages one after another in three veils of darkness. That is Allah – your Lord; to Him belongs (all) dominion. There is no God but He; then how do you get misled (from the truth)?

These verses indicate a very important fact about humanity. It is from a single bioprogram (i.e., the *nafs* of Adam) the entire humanity with individuals varying widely in their physical and mental capabilities is created. In other words, Adam's *nafs* serves as the common memetic pool or the source of biological information required for creating billions of human beings varying widely in their characteristics. Adam's *nafs* can therefore be considered as the microbioprogram of human species. It is the Quran that reveals to us the source of biological information required to create huge variability in human population. The issue is beyond the scope of science.

Since it was from Adam's *nafs*, the female member (Eve) was created, it can be inferred that the male biosoftware carries information needed to create female also. In reality this is reflected in the chromosome composition of male and female sexes. The message conveyed through verses 4:1 and 39:6 therefore permits us to determine the karyotype of Eve in relation to Adam. The human biosoftware is stored on 23 pairs of chromosomes of which 22 pairs are autosomes and one pair sex chromosomes. Female member has two X chromosomes whereas the male has one X chromosome and one Y chromosome as sex chromosomes indicating that biological

information relating to female characteristics is stored on X chromosome and that relating to male is stored on Y chromosome. Thus XX combination determines the femaleness and XY combination determines the maleness. This also shows that only male member has the full complement of chromosomes of the species. Thus the *nafs* of Adam which forms the microbioprogram of human species (i.e., the source of biological information of mankind) is stored on 22 pairs of autosomes and one pair of X and Y chromosomes. Adam's karyotype may be designated as (22 autosome pairs)_A plus (one XY pair)_A, where subscript A stands for Adam. Since it was from Adam's *nafs* Eve was created, the karyotype of Eve can be written as (22 autosome pairs)_A plus X_AX_A. It is from this human couple, generations of mankind arose and spread as different communities worldwide.

Human robot system

In the Quran Allah describes man as His robot. Allah created man to serve Him. Man is addressed by Allah as “*abd*” meaning servant or robot.

وَمَا خَلَقْتُ الْجِنَّ وَالْإِنْسَنَ إِلَّا لِيَعْبُدُونِ

51:56 I created *jinn* and man only to serve Me.

Human biosystem is endowed with unique features to enable man to serve Allah. These are mind, memory, faculties of seeing and hearing, ability to read and write, etc. Through several verses in the Quran Allah gives a good account of these attributes of human robot system, which distinguish man from the rest of His creations. All these features, as we shall see, agree well with the divine purpose of creating man and also justify the need to test human robots before deploying them as His servants.

a) *Qalb* (Mind) – the conscious free-willed processor

The part of human biosystem that is bestowed with discretionary freedom or freewill is *qalb*. The word *qalb* (pl.

quloob) used in the Quran means mind. The various features of human mind are also dealt in sufficient detail in the Quran. These are discussed below. From these revelations and based on the computer model of human being, the *qalb* is described here as the freewilled, intelligent and conscious processor of human biosystem. It is the only component in the whole universe that is bestowed with the freedom to act on its will.

Human mind acts as input port: Human mind acts as an input port for divine messages transmitted by special *rooh* (Jibreel) to prophets (see also chapters 15 and 16). Satan also puts evil suggestions onto the mind of man.

فُلَّ مَنْ كَانَ عَدُوًّا لِجِبْرِيلَ فَإِنَّهُ نَزَّلَهُ عَلَىٰ قَلْبِكَ يَأْذِنُ اللَّهُ مُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ وَهُدًى
وَبُشْرَىٰ لِلْمُؤْمِنِينَ

2:97 Say (O Muhammad!): Whoever is an enemy of Jibreel, (let him understand) that certainly it was that (Jibreel) which transmitted the (revelation) onto your mind by Allah's order confirming the (revelations) that came before it and as guidance and glad tidings to the believers.

وَإِنَّهُ لَنَذِيرٌ رَبُّ الْعَالَمِينَ نَزَّلَ بِهِ الرُّوحُ الْأَمِينُ عَلَىٰ قَلْبِكَ لِتَكُونَ مِنَ الْمُنذِرِينَ

26:192-194 Verily this (the Quran) is a revelation from the Lord of the worlds. The *Rooh-ul-Ameen* (Jibreel) descended with it onto your (Prophet Muhammad's) mind to make you one of the warners.

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ مِنْ رَسُولٍ وَلَا نَبِيٌّ إِلَّا إِذَا تَمَّىٰ النَّحْيُ السَّيِّطَانُ فِي أُمَّتِيهِ فَيُنَسِّخُ اللَّهُ
مَا يُلْفِي الشَّيْطَانُ ثُمَّ يُحَكِّمُ اللَّهُ آيَاتِهِ ۝ وَاللَّهُ عَلِيمٌ حَكِيمٌ

22:52 Never did We send before you (Prophet Muhammad) an apostle or a prophet but when he recited (a revelation), the Satan would put (evil suggestion) into what he recited. But Allah removes what the Satan put in, then Allah establishes His revelations. And Allah is All-Knowing, Wise.

وَيَا آدُم اسْكُنْ أَنْتَ وَزَوْجُكَ الْجَنَّةَ فَكُلَا مِنْ حَيْثُ شِئْتُمَا وَلَا تَقْرَبَا هَذِهِ الشَّجَرَةِ فَتَكُونُوا مِنَ الظَّالِمِينَ قَوْسُوسَ هُمَا الشَّيْطَانُ لِيُبَدِّي هُمَا مَا وُرِيَ عَنْهُمَا مِنْ سَوْا هِمَا وَقَالَ مَا نَهَا كُمَا رَبُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مَلَكِيْنِ أَوْ تَكُونَا مِنَ الْخَالِدِينَ وَفَاسِمَهُمَا إِلَيْ لَكُمَا لَمِنَ النَّاصِحِينَ

7:19-21 (Allah said): O Adam! Dwell you and your wife in the garden and eat from it as you wish but do not approach this Tree, then you will become transgressors. Then Satan began to whisper suggestions to them in order to expose to them their nudity which was hidden from them. It (Satan) said: Your Lord forbade you this Tree lest you should become angels or immortals. And to both of them he swore: I am indeed one of the sincere well-wishers of you both.

Mind is conscious, intelligent and free-willed processor: It is involved in thinking, understanding, learning, etc. (Q. 7:179, 22:46, 47:24, 47:29, 59:14). All these are conscious information processing phenomena in one way or the other. Allah has also given human mind the liberty to take decision and act on its own (Q. 17:84, 76:3, 50:37).

وَلَقَدْ ذَرَانَا لِجَهَنَّمَ كَثِيرًا مِنَ الْجِنِّ وَالْإِنْسَنِ ۖ هُمْ قُلُوبٌ لَا يَفْقَهُونَ بِهَا وَلَهُمْ أَعْيُنٌ لَا يُبْصِرُونَ بِهَا وَلَهُمْ آذَانٌ لَا يَسْمَعُونَ بِهَا ۗ أُولُئِكَ كَالْأَنْعَامِ بَنْ هُمْ أَضَلُّ ۗ أُولُئِكَ هُمُ الْغَافِلُونَ

7:179 We have made many of the *jinns* and human beings for Hell. They have minds with which they do not understand, they have eyes with which they do not see and they have ears with which they do not hear. They are like cattle; nay more misguided. They are the heedless people.

أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ فَتَكُونَ هُمْ قُلُوبٌ يَعْقُلُونَ بِهَا أَوْ آذَانٌ يَسْمَعُونَ بِهَا ۗ فَإِنَّهَا لَا تَعْمَلُ الْأَبْصَارَ وَلَكِنْ تَعْمَلُ الْقُلُوبُ الَّتِي فِي الصُّدُورِ

22:46 Had they not travelled through the earth so that they would have minds with which they could understand and ears with which they could hear? Truly it is not their eyes that are blind but their minds that are in their memories (*sudoor*, plural of *sadr*).

أَفَلَا يَتَبَرَّوْنَ الْقُرْآنَ أُمَّ عَلَى قُلُوبٍ أَفَقَالُهَا

47:24 Do they not then earnestly seek to understand the Quran or are there locks on (their) minds?

أُمَّ حَسِيبَ الدِّينِ فِي قُلُوبِهِمْ مَرْضٌ أَنْ لَنْ يُخْرِجَ اللَّهُ أَصْعَانَهُمْ

47:29 Or do those with disease in their minds think that Allah will not bring to light all their rancour?

لَا يُعَاتِلُونَكُمْ جَمِيعًا إِلَّا فِي قُرَىٰ مُخْصَّةٍ أَوْ مِنْ وَرَاءِ حُدُرٍ ۝ بِأَسْبُدِهِمْ شَدِيدٌ ۝
تَحْسِبُهُمْ جَيْعًا وَقُلُوبُهُمْ شَائِئٌ ۝ ذَلِكَ بِأَنَّهُمْ قَوْمٌ لَا يَعْقِلُونَ

59:14 They will not fight you collectively, except in fortified towns or from behind walls. Their enmity among themselves is strong. You would think they were united, but their minds are divided. That is because they are a people who do not think.

فُلُّ كُلُّ يَعْمَلٍ عَلَى شَاكِلَتِهِ فَرِزُّكُمْ أَعْلَمُ بِمَنْ هُوَ أَهْدَى سَيِّلًا

17:84 Say: Everyone acts according to his own disposition. But your Lord knows best who is best guided on the path.

إِنَّا هَدَيْنَاهُ السَّبِيلَ إِمَّا شَاكِرًا وَإِمَّا كُفُورًا

76:3 We (Allah) showed him the (right) way; either he can be grateful or ungrateful.

إِنَّ فِي ذَلِكَ لَذِكْرًا لِمَنْ كَانَ لَهُ قَلْبٌ أَوْ أَلْقَى السَّمْعَ وَمُو شَهِيدٌ

50:37 Verily in that is scope for thinking for the one who has a mind or who listens and is a witness.

Mind creates feelings in human being: The Quran attributes several kinds of feeling to mind.

وَإِذْ قَالَ إِبْرَاهِيمُ رَبَّ أَرْبَيْ كَيْفَ تُحْيِي الْمَوْتَىٰ ۖ قَالَ أَوْمَئِنْ ۖ قَالَ بَلَىٰ وَلَكِنْ لِيَطْمَئِنَّ قَلْبِي ۖ قَالَ فَعُذْ أَرْبَعَةً مِنَ الطَّيْرِ فَصَرَهُنَّ إِلَيْكَ ثُمَّ أَجْعَلْتَ عَلَىٰ كُلِّ جَبَلٍ مِنْهُنَّ جُزْءًا ثُمَّ أَدْعَهُنَّ يَا تَيَّابَكَ سَعِيًّا ۗ وَاعْلَمْ أَنَّ اللَّهَ عَزِيزٌ حَكِيمٌ

2:260 Behold! Abraham said: My Lord! Show me how You give life to the dead. He said: Have you not believed then? He said: Yea! But to give solace to my mind. Allah said: Catch four birds and draw them near to you. Then (after cutting), put a piece of them on each hill and call them. They will come to you running. Then know that Allah is Mighty, Wise.

وَمَا جَعَلَ اللَّهُ إِلَّا بُشِّرَىٰ وَلَتَطْمَئِنَّ بِهِ قُلُوبُكُمْ ۚ وَمَا النَّصْرُ إِلَّا مِنْ عِنْدِ اللَّهِ ۚ إِنَّ اللَّهَ عَزِيزٌ حَكِيمٌ

8:10 Allah made it only glad news to console your minds. There is no help except from Allah. Verily Allah is Mighty, Wise.

وَمَا جَعَلَ اللَّهُ إِلَّا بُشِّرَىٰ لَكُمْ وَلَتَطْمَئِنَّ قُلُوبُكُمْ بِهِ ۚ وَمَا النَّصْرُ إِلَّا مِنْ عِنْدِ اللَّهِ الْعَزِيزِ الْحَكِيمِ

3:126 Allah made it glad news for you to give solace to your minds. There is no help except from Allah, the Mighty, the Wise,

وَأَصْبَحَ فُؤَادُ أُمِّ مُوسَىٰ فَارِغاً ۖ إِنْ كَادَتْ لَتَبْرِي بِهِ لَوْلَا أَنْ رَأَطْنَا عَلَىٰ قَلْبِهَا لِتَكُونَ مِنَ الْمُؤْمِنِينَ

28:10 And there came to be a void in Moses's mother's feeling. She was about to disclose his (case), had We not strengthened her mind so that she remained a (firm) believer.

يَا نِسَاءَ النَّبِيِّ لَسْتُمْ كَاحِدٍ مِنَ النِّسَاءِ ۖ إِنْ اتَّقْيَنَّ فَلَا تَخْصَعْنَ بِالْقَوْلِ فَيَطْمَعَ الَّذِي يِ فِي قَلْبِهِ مَرْضٌ وَقُلْنَ قَوْلًا مَعْرُوفًا

33:32 O wives of the Prophet (Muhammad)! If you are God-fearing, you are not like other women. So be not complaisant in

your talk, as those in whose mind is a disease might desire (for you); but you speak well mannerly.

إِذْ جَاءَ رَبَّهُ يَقْلُبُ سَلِيمٍ

37:84 Behold! (Prophet Abraham) approached his Lord with a sound mind.

وَاعْتَصَمُوا بِحَبْلِ اللَّهِ جَمِيعًا وَلَا تَنَرَّقُوا ۝ وَادْكُرُوا نِعْمَتَ اللَّهِ عَلَيْكُمْ إِذْ كُثُّمْ أَعْدَاءَ فَاللَّهُ
بَيْنَ قُلُوبِكُمْ فَأَصْبَحْتُمْ بِنِعْمَتِهِ إِخْوَانًا وَكُثُّمْ عَلَىٰ شَفَاعًا حُمْرَةٌ مِّنَ التَّارِ فَانْقَدَّكُمْ مِّنْهَا ۝
كَذَلِكَ يُبَيِّنُ اللَّهُ لَكُمْ آيَاتِهِ لَعَلَّكُمْ تَهَتَّدُونَ

3:103 All of you in unison hold the rope of Allah (the Quran) firmly and do not get divided among yourselves. And remember Allah's favour on you while you were enemies. Then He joined your minds (in love) so that by His mercy you became brethren. You were on the edge of the Fire pit (because of your wrongdoing); then He saved you from it. Thus Allah makes His verses (the Quran) clear to you so that you may be guided.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَكُونُوا كَالَّذِينَ كَفَرُوا وَقَالُوا لِإِخْرَاجِهِمْ إِذَا ضَرَبُوا فِي الْأَرْضِ أَوْ كَانُوا
غَزَّى لَوْ كَانُوا عِنْدَنَا مَا مَأْتُوا وَمَا قُلُّوا لِيَحْجَلَ اللَّهُ ذُلِّكَ حَسْرَةٌ فِي قُلُوبِهِمْ ۝ وَاللَّهُ يُحْكِي
وَمُبَيِّنٌ ۝ وَاللَّهُ إِمَّا تَعْمَلُونَ بِصَيْرَ

3:156 O believers! Be not like the unbelievers who say about their brethren (if they die) while they are travelling on the earth or engaged in fighting, "If they had stayed with us, they would not have died or been killed." (That is for) Allah to make it regret in their minds. It is Allah who gives life and death, and Allah sees well all that you do.

قَالُوا نُرِيدُ أَنْ نَأْكُلَ مِنْهَا وَتَطْمِئِنَ قُلُوبُنَا وَنَعْلَمَ أَنْ قَدْ صَدَقْنَا وَنَكُونَ عَلَيْهَا مِنَ
الشَّاهِدِينَ

5:113 They said: "We only wish to eat from it for our mental satisfaction and to know that you have indeed told us the truth.

And we ourselves (want to) be the witnesses to it (i.e. the food plate from the sky)."

فَاتُولُهُمْ يُعَذِّبُهُمُ اللَّهُ يَأْيِدِكُمْ وَيُخْزِهِمْ وَيُنْصُرُكُمْ عَلَيْهِمْ وَيَسْفِي صُدُورَ قَوْمٍ مُؤْمِنِينَ
وَيَنْهَا بِعَيْظَ قُلُوبِهِمْ ۝ وَيَتُوبُ اللَّهُ عَلَىٰ مَنْ يَشَاءُ ۝ وَاللَّهُ عَلِيهِ حَكِيمٌ

9:14-15 Fight them and Allah will punish them through your hands. And He will humiliate them and help you against them and console the memories of believing people and remove the anger of their minds. Allah will turn (mercifully) to whom He pleases. And Allah is All-Knowing, Wise.

وَلَا تَنْقُعُ الشَّقَاعَةُ عِنْدَهُ إِلَّا لِمَنْ أَذَنَ لَهُ ۝ حَتَّىٰ إِذَا فُزِعُ عَنْ قُلُوبِهِمْ قَالُوا مَاذَا قَالَ رَبُّكُمْ ۝ قَالُوا الْحَقُّ
۝ وَمَنْ هُوَ الْعَلِيُّ الْكَبِيرُ ۝

34:23 No intercession other than to whom He has permitted will be successful with Him. Thus when tension is removed from their minds, they will say: What did your Lord say? They will say: The Truth. He is the Supreme, the Great.

وَإِذَا ذُكِرَ اللَّهُ وَحْدَهُ اسْمَأَرْتُ قُلُوبَ الَّذِينَ لَا يُؤْمِنُونَ بِالْآخِرَةِ ۝ وَإِذَا ذُكِرَ الَّذِينَ مِنْ
دُونِهِ إِذَا هُنْ يَسْتَبِّشُونَ

39:45 When Allah alone is mentioned, the minds of those who do not believe in the Hereafter will get dejected; but when (gods) other than He are mentioned, behold, they become happy!

هُوَ الَّذِي أَنْزَلَ السَّكِينَةَ فِي قُلُوبِ الْمُؤْمِنِينَ لِيَرْدَأُوا إِيمَانًا مَعَ إِيمَانِهِمْ ۝ وَلَلَّهِ جُنُودُ
السَّمَاوَاتِ وَالْأَرْضِ ۝ وَكَانَ اللَّهُ عَلِيمًا حَكِيمًا

48:4 It is He who sent down tranquility into the minds of the believers in order to increase their belief. And to Allah belong the armies of the skies and the earth. And Allah is Omniscient, the Wise.

إِذْ جَعَلَ الَّذِينَ كَفَرُوا فِي قُلُوبِهِمُ الْحُجْمَيْةَ اجْهَالِيَّةً فَأَنْزَلَ اللَّهُ سَكِينَتَهُ عَلَى رَسُولِهِ وَعَلَى الْمُؤْمِنِينَ وَأَلْزَمَهُمْ كُلَّمَةَ التَّقْوَىٰ وَكَانُوا أَحَقُّ بِهَا وَأَهْلَهَا ۝ وَكَانَ اللَّهُ بِكُلِّ شَيْءٍ عَلِيمًا

48:26 When the nonbelievers harboured in their minds disdain – the disdain of the ignorance – Allah sent down His tranquility on His messenger and on the believers, and made them stick to the command of God-consciousness' (*kalimata altaqwa*). They were the most deserving for it and its right people. And Allah has full knowledge of all things.

ثُمَّ قَنَّبَنَا عَلَى آثَارِهِمْ بِرُسُلِنَا وَقَنَّبَنَا بِعِيسَى ابْنِ مَرْيَمَ وَآتَيْنَاهُ الْإِنجِيلَ وَجَعَلْنَا فِي قُلُوبِ الَّذِينَ اتَّبَعُوهُ رَأْفَةً وَرَحْمَةً وَرَهْبَانِيَّةً ابْنَدَعُوهَا مَا كَبَّنَاهَا عَلَيْهِمْ إِلَّا ابْتِغَاءِ رِضْوَانِ اللَّهِ فَمَا رَعَوْهَا حَقَّ رِعَايَتِهَا ۝ فَآتَيْنَا الَّذِينَ آمَنُوا مِنْهُمْ أَجْرَهُمْ ۝ وَكَثِيرٌ مِنْهُمْ فَاسِقُونَ

57:27 Thereafter, We followed them up with (many of) Our apostles. We sent after them Jesus the son of Mary and gave him the *Injeel* and We put in the minds of those who followed him compassion and mercy. But monasticism was their invention. We did not prescribe it for them; (We prescribed) only seeking the good pleasure of Allah. But they did not observe it (i.e., the prescribed) the way it should have been observed. Then We gave the believers among them their reward; but most of them were rebellious transgressors.

هُوَ الَّذِي أَخْرَجَ الَّذِينَ كَفَرُوا مِنْ أَهْلِ الْكِتَابِ مِنْ دِيَارِهِمْ لِأَوْلَى الْخَسْرَ ۝ مَا ظَنَّتُمْ أَنْ يَخْرُجُوا ۝ وَظَلُّوا أَنَّهُمْ مَانِعُهُمْ حُصُونُهُمْ مِنَ اللَّهِ فَأَتَاهُمُ اللَّهُ مِنْ حِيثُ لَمْ يَحْسُبُوا ۝ وَقَدَّفَ فِي قُلُوبِهِمُ الرُّعْبَ ۝ يُخْرِجُونَ بِيُوْنَهُمْ بِأَيْدِيهِمْ وَأَيْدِي الْمُؤْمِنِينَ فَاعْتَرُوا يَا أُولَى الْأَبْصَارِ

59:2 It is He who got out the unbelievers among the People of the Book from their homes in the first eviction bid. You (Prophet Muhammad) did not think they would go out. And they thought that their fortresses would defend them from Allah. But Allah approached them in a manner they could not

even think of and cast terror into their minds. Thus they were demolishing their houses with their own hands and (with) the hands of the believers. (That is) a lesson to be learnt, O people with eyesight!

وَالَّذِينَ جَاءُوا مِنْ بَعْدِهِمْ يَقُولُونَ رَبَّنَا اغْفِرْ لَنَا وَلِلْخُوَانِيَّ الَّذِينَ سَيَقُولُونَ بِالْإِيمَانِ وَلَا يَجْعَلْ
فِي قُلُوبِنَا غُلَالًا لِلَّذِينَ آمَنُوا رَبَّنَا إِنَّكَ رَءُوفٌ رَّحِيمٌ

59:10 And those who came after them. They say: Our Lord! Forgive us and those of our brethren who went before us believing. And do not make any ill-feeling in our minds towards those who believe. Our Lord! Surely You are Kind, Merciful.

قُلُوبٌ يَوْمَئِذٍ وَاجْفَةٌ

79:8 That Day, some minds will tremble with fear.

نَارُ اللَّهِ الْمُوَقَّدَةُ الَّتِي تَطَلِّعُ عَلَى الْأَفْئِدَةِ

104:6-7 (It is) the Fire (i.e., the wrath) of Allah kindled, which reaches up to (the faculty of) feeling.

مُهْطِعِينَ مُشْعِيِّ رُؤُسِهِمْ لَا يَرْتَدُ إِلَيْهِمْ طَرْبُهُمْ ۝ وَأَفْئِدَتُهُمْ هَوَاءٌ

14:43 As they hurry along with their heads raised up, their eyelids not returning to them (i.e., kept open), and their (faculty of) feeling void!

رَبَّنَا إِلَيْنَا أَسْكَنْتُ مِنْ ذُرْرَتِي بِوَادٍ عَيْرٍ ذِي رَزِّعٍ عِنْدَ بَيْتِكَ الْمُحَرَّمَ رَبَّنَا لِيَقِيمُوا الصَّلَاةَ
فَأَجْعَلْ أَفْئِدَةً مِنَ النَّاسِ تَهُوِي إِلَيْهِمْ وَأَرْثُرُهُمْ مِنَ الشَّمَراتِ لَعَلَّهُمْ يَشْكُرُونَ

14:37 O our Lord! I have put up some among my progeny in an uncultivated valley close to Your Sacred House (Masjidul Haram). O our Lord! That is to enable them to establish the Prayer. So make (the faculty of) feeling of some people (there) compassionate towards them (i.e., his progeny) and feed them with fruits so that they may be grateful.

وَلِتَصْعَى إِلَيْهِ أَفْئِدَةُ الَّذِينَ لَا يُؤْمِنُونَ بِالْآجْرَةِ وَلِيَرْضُوْهُ وَلِيَقْتَرُفُوا مَا هُمْ مُفْتَرُوْنَ

6:113 (That is) to make (the faculty of) feeling of those who do not believe in the Hereafter incline towards it and to satisfy them with it, and (also) to let them continue to earn what they have been earning (i.e., evil).

وَنُقْلِبُ أَفْقَدَتْهُمْ وَأَبْصَارَهُمْ كَمَا لَمْ يُرْمِنُوا بِهِ أَوَّلَ مَرَّةٍ وَنَذَرُهُمْ فِي طُفْقَانِهِمْ يَعْمَلُونَ

6:110 We will make their (faculty of) feeling and their sights vacillate as in the first instance when they refused to believe in it and We will leave them free to wander blindly in their trespasses.

مَا كَذَبَ الْفُؤَادُ مَا رَأَىٰ

53:11 (Prophet Muhammad's faculty of) feeling had not falsified what he saw.

وَقَالَ الَّذِينَ كَفَرُوا لَوْلَا نُزِّلَ عَلَيْهِ الْقُرْآنُ جُنَاحًا وَاحِدَةً ۝ كَذِيلَكَ لِتُنْبَتِ بِهِ فُؤُادُكَ ۝
وَرَتَنَاهُ تَرَيْلًا

25:32 The unbelievers said: Why is the Quran not sent down to him (i.e., Prophet Muhammad) in full as one (single revelation)? It is like that (i.e., it is revealed in installments) to strengthen your (faculty of) feeling with it and We have recited it to you unhesitatingly (in stages).

وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهِ عِلْمٌ ۝ إِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادُ كُلُّ أُولَئِكَ كَانَ عَنْهُ مَسْتُوْلًا

17:36 And do not pursue anything about which you have no knowledge. Indeed every act of hearing, seeing and feeling will be enquired into (on the Day of Reckoning).

وَكُلُّ نَفْصُ عَيْنِكَ مِنْ أَنْبَاءِ الرُّسُلِ مَا نُبَثِّ بِهِ فُؤُادُكَ ۝ وَجَاءَكَ فِي هُذِهِ الْحَقُّ وَمَوْعِظَةٌ
وَذَكْرٌ لِلْمُؤْمِنِينَ

11:120 All that We relate to you from the stories of the apostles is what can make your (faculty of) feeling firm. Through this (Quran) has come to you the truth, an exhortation and a Reminder to the believers.

The Arabic word “*fuad*” (pl. “*afidat*”) is translated as “feeling and understanding” [5]\, which are conscious perceptions. The connection of *fuad* with *qalb* (mind) is also made clear in verse 28:10 quoted above. Therefore, these may be considered as attributes of the *qalb*. To sum up, the *qalb* (mind) is a processor that has the ability to learn, think and understand, to impart self-consciousness (self-awareness or “I” feeling) and feelings including pain and ego to the individual, to exercise freewill and decide course of action by the individual, and to act as input port to receive information.

b) *Sadr* – memory of human biosystem

At several places in the Quran mention has been made of human *sadr* as hardware component with the characteristics of memory where information on conscious activities (i.e., originating from mind) is stored. These are:

- i) *Sadr* as the organ that stores information (Q. 40:19, 3:118, 39:7, 35:38, 31:23, 29:10, 17:51)

يَعْلَمُ حَائِنَةً الْأَعْيُنِ وَمَا تُخْفِي الصُّدُورُ

40:19 He (i.e., Allah) knows deception by eyes and what the memories conceal.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَتَّخِذُو بِطَانَةً مِنْ دُونِكُمْ لَا يَأْلُونَكُمْ حَبَالًا وَدُوَّا مَا عَيْتُمْ قَدْ بَدَتِ
الْبُعْضَاءُ مِنْ أَفْوَاهِهِمْ وَمَا تُخْفِي صُدُورُهُمْ أَكْبَرُ ۝ قَدْ بَيَّنَاهُ لَكُمُ الْآيَاتِ ۝ إِنْ كُنْتُمْ
تَعْقِلُونَ

3:118 O believers! Do not take people other than yours as intimate friends. They will not fail to inflict loss on you. They only desire your ruin. Their mouths have disclosed hatred and what their memories conceal is bigger. We have made plain to you the verses (of the Quran), if you think and understand.

إِنْ تَكْفُرُوا فَإِنَّ اللَّهَ عَيْنٌ عَنْكُمْ ۝ وَلَا يَرَضِي لِعِبَادِهِ الْكُفْرُ ۝ وَإِنْ شَكُرُوا يَرَضِي لَكُمْ ۝ وَلَا تَرِزُّ وَارِزَةٌ وَرَزْ أُخْرَىٰ ۝ ثُمَّ إِلَى رَبِّكُمْ مَرْجِعُكُمْ إِنَّمَا كُنْتُمْ تَعْمَلُونَ ۝ إِنَّ اللَّهَ عَلِيمٌ بِذَاتِ الصُّدُورِ

39:7 If you reject, truly Allah has no need of you and He does not like ingratitude from His servants. If you are grateful, He is pleased with you. No bearer of burdens can bear the burden of another. In the end your return is to your Lord. Then He will inform you of all that you did (in this life). Verily He knows well what is (stored) in the memories.

إِنَّ اللَّهَ عَالِمٌ عَيْنِ السَّمَاوَاتِ وَالْأَرْضِ ۝ إِنَّ اللَّهَ عَلِيمٌ بِذَاتِ الصُّدُورِ

35:38 Verily Allah is knower of the mystery of the skies and the earth. Indeed He has full knowledge of what is (stored) in the (human) memories.

وَمَنْ كَفَرَ فَلَا يَخْرُنَكُمْ كُفْرُهُ ۝ إِنَّا مَرْجِعُهُمْ فَنْبَيِّهُمْ إِنَّمَا عَمِلُوا ۝ إِنَّ اللَّهَ عَلِيمٌ بِذَاتِ الصُّدُورِ

31:23 But if any rejects Faith, let not his rejection grieve you. Their return is to Us; then We will inform them about their deeds. Verily, Allah knows well what is (stored) in the memories.

وَمِنَ النَّاسِ مَنْ يَقُولُ آمَنَّا بِاللَّهِ فَإِذَا أُوذِيَ فِي اللَّهِ جَعَلَ فِتْنَةَ النَّاسِ كَعَدَابِ اللَّهِ وَلَئِنْ جَاءَ نَصْرٌ مِنْ رَبِّكَ لَيَقُولُنَّ إِنَّا كُنَّا مَعَكُمْ ۝ أَوْلَيَسَ اللَّهُ بِأَعْلَمُ إِنَّمَا فِي صُدُورِ الْعَالَمِينَ

29:10 There are, among people, those who say, “We believe in Allah”; but if they happen to suffer in (the cause of) Allah, they will take the persecution by the people for Allah’s punishment. And if help comes from your Lord, they are sure to say, “We have been with you”. Is not Allah who knows best what is (stored) in the memories of people of the world?

أَوْ خَلُقًا إِمَّا يَكْبُرُ فِي صُدُورِكُمْ ۝ فَسَيَقُولُونَ مَنْ يُعِيدُنَا ۝ قُلِ الَّذِي فَطَرَكُمْ أَوَّلَ مَرَّةً ۝ فَسَيَعْصِيُّونَ إِلَيْكَ رُؤُوسَهُمْ وَيَقُولُونَ مَتَى هُوَ ۝ قُلْ عَسَى أَنْ يَكُونَ قَرِيبًا

17:51 Or anything, which in your memories is the most difficult (to be resurrected), (yet you will be resurrected)! Then they will ask: Who will return us (to a new creation)? Say: The One who created you first time. Then they will nod their heads towards you (mockingly) and ask: When will that be? Say: Maybe, it will happen quite soon!

ii) *Sadr* – from where recorded information is retrieved (Q. 100:10)

وَحُصِّلَ مَا فِي الصُّدُورِ

100:10 And that which is (stored) in the memories is made manifest.

iii) *Sadr* is where divine revelations are stored (Q. 7:2, 29:49)

كِتَابٌ أُنزَلْ إِلَيْكَ فَلَا يَكُنْ فِي صَدْرِكَ حَرَجٌ مِّنْهُ لِتُنذِيرَ بِهِ وَذِكْرِي لِلْمُؤْمِنِينَ

7:2 (This is) a Book (the Quran) revealed to you. So let your memory have no difficulty on that account. You warn (the people) with this (Quran) and it is a Reminder to the believers.

بَلْ هُوَ آيَاتٌ بَيِّنَاتٌ فِي صُدُورِ الَّذِينَ أَوْتُوا الْعِلْمَ ۝ وَمَا يَجْحَدُ بِآيَاتِنَا إِلَّا الظَّالِمُونَ

29:49 Nay, these are clear messages in the memories of those endowed with knowledge. And only the wrongdoers reject Our verses.

iv) *Sadr* into which Satan, man and *jinn* can transmit information (Q. 114:1-5)

قُلْ أَعُوذُ بِرَبِّ النَّاسِ مَلِكِ النَّاسِ إِلَهِ النَّاسِ مِنْ شَرِّ الْوَسْوَاسِ الْخَنَّاسِ الَّذِي يُوَسْوِسُ فِي صُدُورِ النَّاسِ مِنَ الْجِنَّةِ وَالنَّاسِ

114:1-5 Say: I seek refuge in the Lord of mankind, Master of mankind, God of Mankind, from the evil of the retreating whispers – (of the one) that (i.e., the Satan) whispers into the human memories (and of the whispers) from the *jinns* and mankind.

v) *Sadr* is where information on various aspects like distress, fear, desire, needs, pride, rancour, doubts, etc. is stored (Q. 15:97, 4:90, 59:13, 59:9, 40:80, 40:56, 15:47, 7:43, 10:57, 9:14-15)

وَلَقَدْ تَلَمَّ أَنَّكَ يَضْبِيقُ صَدْرُكَ إِمَّا يَقُولُونَ

15:97 We certainly know how distressed your memory is because of what they say.

إِلَّا الَّذِينَ يَصِلُونَ إِلَى قَوْمٍ بَيْتُكُمْ وَبَيْتُهُمْ مِيشَاقٌ أَوْ جَاءُوكُمْ حَسْرَثٌ صُدُورُهُمْ أَنْ
يُعَاتِلُوكُمْ أَوْ يُقَاتِلُوكُمْ فَوْلَادُهُمْ ۝ وَلَوْ شَاءَ اللَّهُ لَسَطَّلَهُمْ عَلَيْكُمْ فَلَقَاتُوكُمْ ۝ فَإِنْ اعْتَرُلُوكُمْ
فَلَمْ يُعَاتِلُوكُمْ وَاللَّهُ أَعْلَمُ بِكُمُ السَّلَامُ فَمَا جَعَلَ اللَّهُ لَكُمْ عَلَيْهِمْ سَيِّلًا

4:90 Except those who join a group with whom you have a treaty or those who approach you with their memories restraining them from fighting you or fighting their own people. If Allah had wished, He would have given them power over you and they would have fought you. If they withdraw from you without fighting and bring peace offer to you, then Allah has not made any way (i.e., reason) for you (to fight) against them.

لَا نَشْئُ أَشَدُ رَهْبَةً فِي صُدُورِهِمْ مِنَ اللَّهِ ۝ ذَلِكَ بِأَنَّهُمْ قَوْمٌ لَا يَفْقَهُونَ

59:13 Fear of you is stronger in their memories than the (fear) of Allah. That is because they are a people who do not understand.

وَالَّذِينَ تَبَوَّءُوا الدَّارَ وَالْإِيمَانَ مِنْ قَبْلِهِمْ يُجْبُونَ مَنْ هاجَرَ إِلَيْهِمْ وَلَا يَجِدُونَ فِي صُدُورِهِمْ
حَاجَةً مِمَّا أُوتُوا وَيُؤْتِيُونَ عَلَىٰ أَنْعُسِهِمْ وَلَوْ كَانَ كِيمْ خَصَاصَةً ۝ وَمَنْ يُوقَ شَحَّ نَعْسِهِ
فَأُولَئِكَ هُمُ الْمُغْلِبُونَ

59:9 And those (*Ansars*) who arranged their (i.e., for *Muhajirs*) abode and (embraced) the Faith prior to them (i.e., their arrival). They (*Ansars*) love those who migrated to them, and they (*Ansars*) will not find in their memories a desire for what is given to them (i.e., *Muhajirs*). And even if they are

faced with poverty, they are more concerned (about *Muhajirs*) than themselves. Whoever guards his soul from thriftiness, they are the successful ones.

وَلَكُمْ فِيهَا مَنَافِعٌ وَلَتَبْلُغُوا عَلَيْهَا حَاجَةً فِي صُدُورِكُمْ وَعَلَيْهَا وَعَلَى الْفُلْكِ تُحَمَّلُونَ

40:80 And you have other advantages in them (cattle). And you can meet any need (kept stored) in your memories about them. And on them and on ships you are carried (for travel).

إِنَّ الَّذِينَ يُجَادِلُونَ فِي آيَاتِ اللَّهِ بِعَيْنِ سُلْطَانٍ أَتَاهُمْ إِنْ فِي صُدُورِهِمْ إِلَّا كَثِيرٌ مَا هُمْ
بِالْغَيْرِيْهِ فَاسْتَعِدْ بِاللَّهِ إِنَّهُ هُوَ السَّمِيعُ الْبَصِيرُ

40:56 Those who dispute about the signs of Allah without any authority given to them, they have in their memories nothing but high self-esteem, which they will never attain. Therefore you seek refuge in Allah. Verily He hears and sees (all things).

وَنَزَعْنَا مَا فِي صُدُورِهِمْ مِنْ غِلَّ إِخْوَانًا عَلَى سُرُورٍ مُنَقَّابِيْنَ

15:47 And We will remove (delete) from their memories any lurking rancor. (They will be) brothers facing each other on raised couches.

وَنَزَعْنَا مَا فِي صُدُورِهِمْ مِنْ غِلَّ بَخْرِيْ مِنْ تَحْتِهِمُ الْأَنْهَارُ وَقَالُوا الْحَمْدُ لِلَّهِ الَّذِي هَدَانَا
هَذَا وَمَا كُنَّا لِنَهْتَدِي لَوْلَا أَنْ هَدَانَا اللَّهُ لَقَدْ جَاءَتْ رُسُلٌ رَبَّنَا بِالْحُقْقَ وَنُودُوا أَنْ
تَلْكُمُ الْجَنَّةُ أَوْ رُشْمُوهَا إِمَا كُنْتُمْ تَعْمَلُونَ

7:43 And We will remove (delete) from their memories whatever ill-feeling there is. Rivers will flow beneath them and they will say: Praise be to Allah who guided us to this (felicity); we would not have found true guidance if Allah had not guided us. Indeed apostles of our Lord came to us with truth.” And it will be called out to them: “That is the Garden! You are made its heirs for your deeds (of righteousness).

يَا أَيُّهَا النَّاسُ قَدْ جَاءَكُمْ مَوْعِظَةٌ مِنْ رَبِّكُمْ وَشَفَاءٌ لِمَا فِي الصُّدُورِ وَهُدًى وَرَحْمَةٌ
لِلْمُؤْمِنِيْنَ

10:57 O mankind! You have received a direction (the Quran) from your Lord and a solution to the (doubts) in your memories. And (the Quran is) a guidance and mercy to the believers.

قَاتُلُوهُمْ يُعَذِّبُهُمُ اللَّهُ بِأَيْدِيهِمْ وَيُخْزِهِمْ وَيُنَصِّرُهُمْ عَلَيْهِمْ وَيَشْفِ صُدُورَ قَوْمٍ مُّؤْمِنِينَ
وَيَدْهُبُ عَيْظَ قُلُوبِهِمْ ۝ وَيَتُوبُ اللَّهُ عَلَىٰ مَنْ يَشَاءُ ۝ وَاللَّهُ عَلِيمٌ حَكِيمٌ

9:14-15 Fight them and Allah will punish them through your hands. And He will humiliate them and help you against them and clear (doubts from) the memories of believing people and remove the anger of their minds. Allah will turn (mercifully) to whom He pleases. And Allah is All-Knowing, Wise.

vi) *Sadr* can be expanded (Q. 94:1, 39:22, 20:25, 16:106, 6:125)

Expansion of memory implies increased storage of information relating to Allah's guidance in the Scripture, which will enhance one's faith. To the people of Muhammadan era, it is the knowledge of the Quran.

أَمْ نَسْرَحْ لَكَ صَدْرَكَ

94:1 Have We not expanded your memory for you (Prophet Muhammad)?

أَفَمِنْ شَرَحَ اللَّهُ صَدْرَهُ لِإِسْلَامٍ فَهُوَ عَلَىٰ نُورٍ مِّنْ رَّبِّهِ ۝ فَوَلِيَ الْفَاقِيْسَةَ قُلُوبُهُمْ مِّنْ ذِكْرِ
اللَّهِ ۝ أَوْلَيْكَ بِي ضَلَالٍ مُّبِينٍ

39:22 Is the one whose memory Allah has expanded towards Islam (and) thus he received enlightenment from his Lord (like a hard-minded one)? Woe to those whose minds are hardened against the remembrance of Allah. They are clearly in error.

قَالَ رَبٌ اشْرَحْ لِي صَدْرِي

20:25 (Prophet Moses) said: O my Lord! Expand my memory for me.

فَمَنْ يُرِدُ اللَّهُ أَنْ يَهْدِيهِ يَشْرُحْ صَدْرَهُ لِلإِسْلَامِ ۝ وَمَنْ يُرِدُ أَنْ يُضْلِلَ يَجْعَلْ صَدْرَهُ ضَيِّقًا حَرْجًا كَأَنَّا يَصَّعِّدُ فِي السَّمَاءِ ۝ كَذَلِكَ يَجْعَلُ اللَّهُ الرَّجْسَ عَلَى الَّذِينَ لَا يُؤْمِنُونَ

6:125 Whomsoever Allah likes to guide, He expands his memory towards Islam; and whomsoever He intends to leave astray, He makes his memory shrunken and narrow (so that believing in Islam will be) like a difficult climb towards the sky. Thus Allah imposes penalty on the unbelievers.

vii) *Sadr* can be made to shrink (Q. 6:125 quoted above, 11:12, 26:13)

Shrunken memory refers to a *sadr* sparsely filled with Allah's revelations. It is also the memory expanded with unbelief as described in the verse 16:106.

فَلَعْلَكَ تَارِكٌ بَعْضَ مَا يُوحَى إِلَيْكَ وَضَائِقٌ بِهِ صَدْرُكَ أَنْ يَقُولُوا لَوْلَا أُنْزِلَ عَلَيْهِ كُنْزٌ أَوْ جَاءَ مَعَهُ مَلَكٌ ۝ إِنَّمَا أَنْتَ نَذِيرٌ ۝ وَاللَّهُ عَلَىٰ كُلِّ شَيْءٍ وَكِيلٌ

11:12 Because they say why not a treasure is sent down to him (Prophet Muhammad) or an angel comes with him, you (Prophet Muammad) may (be tempted to) exclude some portion of what is transmitted to you and your memory may shrink on account of that. But you are only a warner. And Allah is responsible for all things.

وَيَضْيقُ صَدْرِي وَلَا يُنْطَلِقُ لِسَانِي فَأَرْسِلْ إِلَىٰ هَارُونَ

26:13 My (Prophet Moses) memory will become shrunken and my tongue will become rigid. So send for Harun.”

مَنْ كَفَرَ بِاللَّهِ مِنْ بَعْدِ إِيمَانِهِ إِلَّا مَنْ أَكْرَهَ وَقَبْلَهُ مُطْمَئِنٌ بِالإِيمَانِ وَلَكِنْ مَنْ شَرَحَ بِالْكُفْرِ صَدْرًا فَعَاهِمْ عَصَبَ مِنَ اللَّهِ وَلَمْ عَذَابٌ عَظِيمٌ

16:106 Whoever, after his belief, disbelieves in Allah – except the one under compulsion with his mind remaining firm in Faith – and who expands (i.e., fills) his memory with unbelief, on them is wrath of Allah and they have a dreadful penalty.

All these verses are in one way or the other suggestive of information storage in *sadr*. Therefore *sadr* is the organ or tissue that stores information (on its chromosomes) about the conscious activities (i.e., information originating from *qalb*) of man.

Allah knows what is on one's *qalb* and in *sadr*: Allah informs us that He knows everything that is on one's mind and what is stored in memory. None can hide anything from Him.

أُولَئِكَ الَّذِينَ يَعْلَمُ اللَّهُ مَا فِي قُلُوبِهِمْ فَأَعْرِضْ عَنْهُمْ وَعِظَمُهُمْ وَقُلْنَ كُلُّمْ فِي أَنفُسِهِمْ قَوْلًا
بِلِيهِا

4:63 (Allah) knows what is in their minds. So you (Prophet Muhammad) keep away from them and advise them and speak to them a word to reach their very souls.

There are also several verses that inform us that Allah knows all the information stored in the memory (*sadr*).

قُلْ إِنْ تُخْفِوْ مَا فِي صُدُورِكُمْ أَوْ تُبَدِّدُوْ يَعْلَمُهُ اللَّهُ ۖ وَيَعْلَمُ مَا فِي السَّمَاوَاتِ وَمَا فِي
الْأَرْضِ ۖ وَاللَّهُ عَلَىٰ كُلِّ شَيْءٍ قَوِيرٌ

3:29 Say: Whether you hide what is (stored) in your memory or reveal it, Allah knows it all. He knows what is in the skies and what is in the earth. And Allah has power over all things.

هُمْ أَنْزَلُ عَلَيْكُمْ مِنْ بَعْدِ الْعَمَّ أَمْنَةً نُعَسَا يَعْشَى طَائِفَةً مِنْكُمْ ۖ وَطَائِفَةً قَدْ أَهْمَتُهُمْ
أَنفُسُهُمْ يَظْهُونَ بِاللَّهِ عَيْرَ الْحَقَّ ظَلَّ الْجَاهِلَةُ ۖ يَقُولُونَ هَلْ نَأَنَا مِنَ الْأَمْرِ مِنْ شَيْءٍ ۖ
قُلْ إِنَّ الْأَمْرَ كُلُّهُ لِلَّهِ ۖ يُخْفِوْنَ فِي أَنفُسِهِمْ مَا لَا يُبَدِّلُونَ لَكَ ۖ يَقُولُونَ لَوْ كَانَ لَنَا مِنَ
الْأَمْرِ شَيْءٌ مَا قُلْنَا هَاهُنَا ۖ فَإِنْ لَوْ كُثُرْتُمْ فِي بَيْوَتِكُمْ لَبَرَزَ الَّذِينَ كُثِيبَ عَلَيْهِمُ الْفَتْنَاءِ إِلَى
مَضَاجِعِهِمْ ۖ وَلَيَسْتَلِي اللَّهُ مَا فِي صُدُورِكُمْ وَلَيُمَحْصَّنَ مَا فِي قُلُوبِكُمْ ۖ وَاللَّهُ عَلَيْمٌ بِدِيَارِ
الصُّدُورِ

3:154 Then after (the spell) of grief, He sent down on you a protective slumber, (which) gripped a group among you while another group became worried about themselves. They had

false views about Allah – the views of the ignorant times (*jahiliyyat*). They said: Do we have any role to play in this matter? You say: (None has any role); the whole affair is Allah's. They keep to themselves what they do not reveal to you. They say: If we had anything to do with the matter, we would not have been killed here. Say: Even if you had remained in your homes, those for whom death was decreed would have gone to the place of their death. (All these were) for Allah to test what is in your memories and purify what is in your minds. And Allah knows well what is (stored) in your memories.

إِذْ يُرِيكُمُ اللَّهُ فِي مَنَامِكُمْ قَلِيلًا ۝ وَلَوْ أَرَأَكُمْ كَثِيرًا لَقَسِّلْتُمْ وَلَتَنَازَعْتُمْ فِي الْأَمْرِ وَلَكِنَّ اللَّهَ سَلَّمَ ۝ إِنَّ اللَّهَ عَلَيْمٌ بِدَارِ الصُّدُورِ

8:43 (Remember) Allah showed you the enemy as few (in number) in your dream. Had He shown you their number more, you would have shown cowardice and dissented in the matter (i.e., whether to fight or not). But Allah saved (you). Indeed He knows what is (stored) in the memories.

هَا أَئْتُمْ أُولَاءِ الْجُبُونَهُمْ وَلَا يُحِبُّونَكُمْ وَتُؤْمِنُونَ بِالْكِتَابِ كُلِّهِ وَإِذَا لَفُوتُمْ قَاتُلُوا آمِنًا وَإِذَا خَلُوا عَصُّوا عَلَيْكُمُ الْأَنَاءِ مِنَ الْغَيْظِ ۝ قُلْ مُؤْمِنُوا بِعِظِّيْظِكُمْ ۝ إِنَّ اللَّهَ عَلَيْمٌ بِدَارِ الصُّدُورِ

3:119 Ah! You are those who love them, but they do not love you. And you believe in the whole of the Book. When they meet you, they say, “We have believed”. But when they are alone, they bite off their fingertips in their rage for you. Say: Die with you rage. Allah knows well what is (stored) in the memories.

وَادْكُرُوا نِعْمَةَ اللَّهِ عَلَيْكُمْ وَمِنَّا فِي الدُّنْيَا وَأَتَعْكُمْ بِهِ إِذْ قُلْتُمْ سَمِعْنَا وَأَطْعَنَا ۝ وَاتَّعُوا اللَّهَ ۝ إِنَّ اللَّهَ عَلَيْمٌ بِدَارِ الصُّدُورِ

5:7 And remember the favour of Allah on you and His covenant, which He ratified with you when you said, “We hear

and we obey". And fear Allah. Verily Allah knows well what is (stored) in your memories.

أَلَا إِنَّهُمْ يَسْتَوْنَ صُدُورُهُمْ لِيَسْتَخْفُوا مِنْهُ ۝ أَلَا حِينَ يَسْتَعْشُونَ شَيَاهُمْ يَعْلَمُ مَا يُسْرُونَ
وَمَا يُعْلِمُونَ ۝ إِنَّهُ عَلِيمٌ بِذَاتِ الصُّدُورِ

11:5 Is it not that they fold up their memories to hide from Him? Ah! Even when they cover themselves with their garments, He knows what they conceal and what they reveal. Indeed He knows well what is (stored) in the memories.

وَأَسْرُوا قَوْلَكُمْ أَوْ اجْهَرُوا بِهِ ۝ إِنَّهُ عَلِيمٌ بِذَاتِ الصُّدُورِ

67:13 And whether you speak quietly or loudly, certainly He knows what is (stored) in the memories.

يَعْلَمُ مَا فِي السَّمَاوَاتِ وَالْأَرْضِ وَيَعْلَمُ مَا تُسْرُونَ وَمَا تُعْلِمُونَ ۝ وَاللَّهُ عَلِيمٌ بِذَاتِ
الصُّدُورِ

64:4 He knows what is in the skies and the earth, and He knows what you conceal and what you reveal. And Allah knows well what is (stored) in the memories.

يُولِجُ اللَّيْلَ فِي النَّهَارِ وَيُوْلِجُ النَّهَارَ فِي الْلَّيْلِ ۝ وَهُوَ عَلِيمٌ بِذَاتِ الصُّدُورِ

57:6 He merges the night with the day and He merges the day with the night. And He has full knowledge of what is (stored) in human memories.

أَمْ يَقُولُونَ افْتَرَى عَلَى اللَّهِ كَذِبًا ۝ فَإِنْ يَشَاءُ اللَّهُ يَجْعَلُ عَلَى قَلْبِكَ ۝ وَيَعْلَمُ اللَّهُ الْبَاطِلَ
وَجَعِلَ الْحَقَّ بِكَلِمَاتِهِ ۝ إِنَّهُ عَلِيمٌ بِذَاتِ الصُّدُورِ

42:24 Or do they say he (i.e., Prophet Muhammad) has fabricated a lie about Allah? But if Allah had so wanted, He would have sealed your mind. And Allah would delete the lie and confirm the truth with His Words. Verily He knows well what is (stored) in the memories.

وَرِبُّكَ يَعْلَمُ مَا تُكِنُ صُدُورُهُمْ وَمَا يُعْلِمُونَ

28:69 And your Lord knows what their memories conceal and what they reveal.

وَإِنْ رَبَّكَ لَيَعْلَمُ مَا تُكِنُّ صُدُورُهُمْ وَمَا يُعْلِنُونَ

27:74 And verily your Lord knows what their memories hide and what they reveal.

These verses also make it clear that *sadr* is the memory where all information on the conscious activities (i.e., decisions taken as well as activities ordered by the *qalb*, observations, experience, etc.) is stored. The information must have been stored on the chromosomes of memory cells by the same mechanism as biosoftware is stored. Allah knows all the information stored in human memory even if the person does not reveal it. This is reminded through several verses quoted above. This means one can hide nothing from Allah.

c) Mechanism of real-time recording in *sadr*

Insofar as the Quran informs us that one's conscious actions during the test life (present life) are recorded in real time, and that the dossier of all the deeds will be handed over to the individual on the Day of Judgement, there must be mechanism and provision available in human biosystem for accomplishing this task. To that end, the Quran reveals that there are two guards over every human being for recording his activities in real time.

إِذْ يَكَلِّفُ الْمُتَّلَقِّيَانِ عَنِ الْأَيْمَنِ وَعَنِ الشَّمَائِلِ قَعِيدُ مَا يَلْفِظُ مِنْ قَوْلٍ إِلَّا لَدَيْهِ رَقِيبٌ عَتِيدٌ

50:17-18 Behold, two recipients receive one sitting on the right and the other on the left (of a person). Not a word does he utter without a sentinel ready by his side (to record it).

وَإِنَّ عَلَيْكُمْ لَحَافِظِينَ كَرِامًا كَاتِبِينَ يَعْلَمُونَ مَا تَعْمَلُونَ

82:10-12 And verily there are guards over you, honourable recorders (to write down your deeds). They know all that you do.

The two guards or sentinels who do the recording are generally interpreted by the religious scholars as angels. Based on the computer model, it can be understood as biomemes (programs) to do the recording. Hence ‘honourable recorders’, ‘guards’ or ‘sentinels’ mentioned in the verses quoted above can be thought of as programs available in the human biosoftware responsible for recording conscious activities of a person in his memory (*sadr*) in real time. That is, these programs save the information on conscious activities of the individual in his *sadr*. The mentioning of two ‘sentinels’, one on left and the other on right, agrees well with the mode of functioning of the brain. The brain can be divided into two symmetrical halves, the left and the right hemispheres, joined together in the middle. Although these two hemispheres look identical morphologically, they are not functionally similar. Each half of the brain controls the contralateral half of the body; i.e., the left hemisphere controls the right hand side of the body and the right hemisphere controls the left hand side of the body. Therefore, the Quranic revelation of two sentinels one on the left and the other on the right can be interpreted as the two programs present in the brain cells (one program in each hemisphere of the brain) to record (save) in the *sadr* (memory) the conscious activities carried out by right hand side and left hand side of the body. Nothing will be left out. Everything in which mind is involved will be recorded in one’s *sadr*. The information stored in *sadr* therefore constitutes one’s record of conscious activities during his test life.

d) Information stored in *sadr* – record of one’s test performance

The memory (*sadr*) stores information on all activities an individual consciously performs during his test life on this earth. The information retrieved from *sadr* therefore provides the complete record of one’s deeds. It is this dossier that is handed over to the individual on the Day of Judgement. The following verses permit us to draw such a conclusion.

إِنَّ الْإِنْسَانَ لِرَبِّهِ لَكَوُدٌ وَإِنَّهُ عَلَى ذَلِكَ لَشَهِيدٌ وَإِنَّهُ لَحَبَّ الْحَيْرِ لَشَدِيدٌ أَفَلَا يَعْلَمُ إِذَا بُعْثَرَ
مَا فِي الْفُؤُورِ وَخُصْلَانِ مَا فِي الصُّدُورِ إِنَّ رَبَّهُمْ يَهُمْ يَوْمَئِذٍ حَسِيرٌ

100:6-11 Truly, man is ungrateful to his Lord. And to that (fact) he bears witness (by his deeds). And violent is he in his love for wealth. Does he not know when that which is (locked up) in (human) *sadr*(s) is made manifest – that their Lord had been well-acquainted with them that Day (Day of Judgement)?

وَكُلُّ إِنْسَانٍ أَلْزَمَنَاهُ طَائِرَهُ فِي عُقُولِهِ ۝ وَنُخْرِجُ لَهُ يَوْمَ الْقِيَامَةِ كِتَابًا يَلْقَاهُ مُمْشُورًا افْرًا كِتَابَكَ
كَفَى بِنَفْسِكَ الْيَوْمَ عَلَيْكَ حَسِيبًا

17:13-14 Every man's fate We have fastened on his own neck. On the Day of Judgment We will bring out for him a book (i.e., record or dossier), which he will find wide open. (He will be told): "You read your record; sufficient are you today to assess your account."

يَوْمَئِذٍ تُعْرَضُونَ لَا تَخْفَى مِنْكُمْ حَافِظَةٌ

69:18 That Day you shall be brought to judgement. Not an act of yours that you hide will be hidden.

Besides *sadr*, tissues of other organs of the body also store information (on their chromosomes) relating to their activities, as it is mentioned in the Quran that body parts will stand witness for the actions of the individual suggesting that information on the activities carried out by each organ of the body is available.

الْيَوْمَ تَخْتَمُ عَلَى أَفْوَاهِهِمْ وَتُكَلِّمُنَا أَيْدِيهِمْ وَتَشَهَّدُ أَرْجُلُهُمْ إِمَّا كَانُوا يَكْسِبُونَ

36:65 That Day We shall seal their mouths. But their hands will speak to us, and their feet bear witness, to all that they did.

حَتَّىٰ إِذَا مَا جَاءُوهَا شَهَادَةً عَلَيْهِمْ سَمَعُهُمْ وَأَنْصَارُهُمْ وَجْلُودُهُمْ إِمَّا كَانُوا يَعْمَلُونَ وَقَالُوا
جَلْلُودُهُمْ لَمْ شَهَدُوكُمْ عَلَيْنَا ۝ قَالُوا أَنْطَقُنَا اللَّهُ الَّذِي أَنْطَقَ كُلَّ شَيْءٍ وَهُوَ حَلَقُكُمْ أَوْلَ مَرَّةٍ
وَإِلَيْهِ تُرْجَعُونَ وَمَا كُنْتُمْ تَسْتَرِيُونَ أَنْ يَشَهَّدَ عَلَيْكُمْ سَمَعُكُمْ وَلَا أَنْصَارُكُمْ وَلَا حُلُودُكُمْ

وَلَكِنْ ظَنَّتُمْ أَنَّ اللَّهَ لَا يَعْلَمُ كَثِيرًا مِمَّا تَعْمَلُونَ وَذَلِكُمْ ظَنُّكُمُ الَّذِي ظَنَّتُمْ بِرِبِّكُمْ أَرْدَأْكُمْ فَأَصْبَحْتُمْ مِنَ الْخَاسِرِينَ

41:20-23 At length, when they reach the (Fire), their hearing, their sight, and their skins will bear witness against them, as to (all) their deeds. They will say to their skins: Why you bear witness against us? They will say: (Allah) has given us speech; (He) Who gives speech to everything: He created you for the first time and to Him you are to return. You did not seek to hide yourselves, lest your hearing, your sight, and your skins should bear witness against you! But you did think that Allah knew not many of the things that you used to do! But this thought of yours which you did entertain concerning your Lord, has brought you to destruction, and (now) you have become those utterly lost!

This implies that the chromosomes in human body cells have excess memory space over and above that is required for storing the biosoftware. The chromosomes in the cells of various tissues of the organs must be storing information on the biochemical reactions pertaining to the activities carried out by the respective organs. Retrieval of that information can produce the record of those activities. It is presumed that irrespective of the genre (e.g., biological software, acquired information, etc.), information is stored on the chromosome by the same mechanism although we cannot say what the mechanism is.

e) Locations of mind (*qalb*) and memory (*sadr*)

Where are the *qalb* and *sadr* located? The Quran reveals that the *qalb* is located in *sadr*.

أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ فَتَكُونَ لَهُمْ قُلُوبٌ يَعْقُلُونَ بِهَا أَوْ آذَانٌ يَسْمَعُونَ بِهَا ۝ فَإِنَّهَا لَا تَعْمَلُ الْأَبْصَارُ وَلَكِنْ تَعْمَلُ الْقُلُوبُ الَّتِي فِي الصُّدُورِ

22:46 Had they not travelled through the earth so that they would have minds with which they could understand and ears with which they could hear? Truly it is not their eyes that are blind but their minds that are in their memories.

Since *qalb* is situated in *sadr*, if we can find out the location of one, the location of the other can also be found out. The Quran throws some light on the location of *sadr*.

وَكُلُّ إِنْسَانٍ الْرُّقْنَاهُ طَائِرٌ فِي عُنْقِهِ وَتُخْرِجُ لَهُ يَوْمَ الْقِيَامَةِ كِتَابًا يَلْقَاهُ مَنْشُورًا

17:13 Every man's fate We have fastened on his own neck: On the Day of Judgment We shall bring out for him a scroll, which he will see spread open.

This verse associates one's fate with the scroll (record of one's activities) to be produced on the Day of Judgement. One's fate, whether he will go to Heaven or Hell, is determined by this record. Therefore, it can be deduced that the 'fate' implies the record of one's activities. Since the Quranic verses 100:6-11 (quoted above) reveal that it is *sadr* that forms the dossier of a person, the revelation that "Every man's fate We have fastened on his neck" (Q. 17:13) points to the location of *sadr* somewhere in the neck region. It may be the lower part of the brain that is indicated in the verse. In that case, the probable location of *sadr* will be cerebellum (Fig. 11.1). This, in turn, would suggest that the *qalb*, which resides in the *sadr*, is also situated in cerebellum. Thus we may consider cerebellum as the most probable location of *qalb* and *sadr*. Mind may be thought of as separate organ situated in the memory tissue.

Going by this reasoning, the cerebellum must be a hub of information processing and transmission of commands for voluntary (conscious) activities. The available literature on cerebellum does give some indication of that. The cerebellum is located in the hindbrain at the base of the skull nearest to the neck. It is also called "little brain". The cerebellum contains nearly 50% of all neurons in the brain, although it constitutes about 10% of total brain volume.

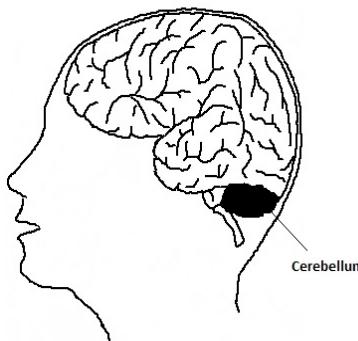


Fig. 11.1. Cerebellum – probable location of mind (*qalb*) and memory (*sadr*)

The cerebellum receives about 200 million input fibers; in contrast, the optic nerve is composed of a mere one million fibers [6]. It coordinates voluntary movements (e.g. walking, posture and speech) and is important for learning motor (skilled) behaviours [7]. These are conscious voluntary activities commanded by the *qalb*. The cerebellum is comparable with a powerful computer, capable of making contributions to both motor dexterity and mental prowess of humans. It handles an enormous amount of information received by it and after processing sends out decisions (output information) to various other regions of the brain, telling them what to do and when to do it [8]. All these tasks compare well with the functions of the *qalb* and are therefore suggestive of the location of *qalb* in cerebellum. More studies are however required to confirm the exact location of human mind and memory.

In the translations of the verses quoted above, I have given meanings of the words *qalb* and *sadr* as mind and memory respectively. The messages carried in those verses permit us to assign those meanings to these words scientifically. The literal meaning of the word ‘*qalb*’ is heart and that of ‘*sadr*’ is chest. In his Quran translation, Yusuf Ali

translates the word *sadr* as breast. Occasionally *qalb* is also translated as mind. It may be noted that people irrespective of the language they speak generally refer to mind as heart. It could be in common parlance the words *qalb* and *sadr* are used in the Quran. Nevertheless the descriptions and functions of ‘*qalb*’ and ‘*sadr*’ given in the Quran do indicate that *qalb* is mind, and *sadr* is memory. In reality heart is not mind. If that were not the case, a heart-transplanted patient would be living with the mind of another person (the donor), and a patient implanted with total artificial heart would be living without mind! This is not true. If heart is mind, a person put on artificial heart will not be able to perform mental activities and experience feelings. But in reality the individual does perform mental activities and experience feelings. Therefore, the current understanding of the words *qalb* and *sadr* as heart and chest needs change for the better. These words have to be taken to mean mind and memory respectively. The computer model of human biosystem helps to understand the implied meanings of these words in the Quran as well as the divine purposes of these organs in relation to human robot testing.

It may be noted that mind is the only part in the human body that is conscious and every other part is unconscious. It is the only thing in the whole universe that is bestowed with freedom to take decision and act on its own. No other thing in the whole universe is created that way. The rest of the universe functions as programmed by Allah. (It is however not known whether *jinn* has mind. Nothing is mentioned about this in the Quran.)

f) Faculties of seeing and hearing

Since man alone has mind, he alone can generate conscious perception and experience. Seeing and hearing are conscious perceptions. Feel of touch, smell and taste are also conscious perceptions. The Quran unambiguously states that Allah made faculties of hearing, seeing and feeling *only* for man. No other species has these faculties. In other words, these

are unique features of *Homo sapiens*. This will be made clear from the following verses.

فُلْ هُوَ الَّذِي أَنْشَأَكُمْ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْقَدَةَ ۖ فَلَيْلًا مَا تَشْكُرُونَ

67:23 Say: It is He who created you and made for you (the faculties of) hearing, seeing and feeling. Little thanks it is you give.

إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْشَاجَ نَبْتَلِيهُ فَجَعَلْنَاهُ سَيِّعًا بَصِيرًا

76:2 Verily We created man from a mixed drop in order to test him. So We gave him faculties of hearing and sight.

وَلَقَدْ مَكَّنَاهُمْ فِيمَا إِنْ مَكَّنَاهُمْ فِيهِ وَجَعَلْنَا لَهُمْ سَمْعًا وَأَبْصَارًا وَأَفْقَدَهُمْ فَمَا أَنْعَنْهُمْ سَمْعُهُمْ وَلَا أَبْصَارُهُمْ وَلَا أَفْقَدُهُمْ مِنْ شَيْءٍ إِذْ كَانُوا يَعْمَلُونَ بِآيَاتِ اللَّهِ وَحَاقَ بِهِمْ مَا كَانُوا بِهِ يَسْتَهِزُونَ

46:26 And We had given them (certain) conveniences which We had not given to you and We had endowed them with (faculties of) hearing, seeing and feeling. But their (faculties of) hearing, seeing and feeling did not benefit them at all as they went on denying the verses of Allah. And they were (completely) encircled by what they had been mocking at.

أَفَرَأَيْتَ مَنْ اخْتَدَ إِلَهُ هُوَهُ وَأَضْلَلَ اللَّهُ عَلَىٰ عِلْمٍ وَخَتَمَ عَلَىٰ سَمْعِهِ وَقَلْبِهِ وَجَعَلَ عَلَىٰ بَصَرِهِ غِشاًوَهُ فَمَنْ يَهْدِيهِ مِنْ بَعْدِ اللَّهِ ۚ أَفَلَا تَدَكَّرُونَ

45:23 Did you see the one who took his lust as his god? Allah has left him astray deliberately and sealed his hearing and his mind, and put a cover on his sight. Then who can guide him after Allah (has left him astray)? Will you not then think?

ثُمَّ سَوَّاهُ وَنَفَّحَ فِيهِ مِنْ رُوحِهِ ۖ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْقَدَةَ ۖ فَلَيْلًا مَا تَشْكُرُونَ

32:9 Then He fashioned him (i.e., Adam) in due proportion and breathed into him from His *rooh*. And He made for you

(the faculties of) hearing, seeing and feeling. Little thanks it is you give!

وَهُوَ الَّذِي أَنْشَأَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْقَادَ ۝ قَلِيلًا مَا تَشْكُرُونَ

23:78 It is He who made for you (the faculties of) hearing, seeing and feeling. Little thanks it is you give!

وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهِ عِلْمٌ ۝ إِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادَ كُلُّ أُولَئِكَ كَانَ عَنْهُ مَسْتُحْلِمًا

17:36 And do not pursue anything about which you have no knowledge. Indeed every act of hearing, seeing and feeling will be enquired into (on the Day of Reckoning).

حَتَّىٰ إِذَا مَا جَاءُوهَا شَهِدَ عَلَيْهِمْ سَمْعُهُمْ وَأَبْصَارُهُمْ وَجُلُودُهُمْ إِمَّا كَانُوا يَعْمَلُونَ

41:20 When they reach near the (Fire), (the faculties of) their hearing and their sight, and their skins will bear witness over them about their deeds.

وَمَا كُنْتُمْ تَسْتَرِيُونَ أَنْ يَشْهَدَ عَلَيْكُمْ سَمْعُكُمْ وَلَا أَبْصَارُكُمْ وَلَا جُلُودُكُمْ وَلَكِنْ ظَنَّتُمْ أَنَّ اللَّهَ لَا يَعْلَمُ كَثِيرًا بِمَا تَعْمَلُونَ

41:22 You did not hide yourself (thinking) that your hearing, your sight, and your skins will bear witness over you! But you thought that Allah did not know most of the things that you were doing!

وَاللَّهُ أَخْرَجَكُمْ مِنْ بُطُونِ أُمَّهَاتِكُمْ لَا تَعْلَمُونَ شَيْئًا وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْقَادَ ۝ لَعَلَّكُمْ تَشْكُرُونَ

16:78 It is Allah who brought you out from your mothers' wombs when you knew nothing. And He gave you (the faculties of) hearing, sight and feeling so that you become grateful (to Him).

فُلُونَ مَنْ يَرْزُقُكُمْ مِنَ السَّمَاءِ وَالْأَرْضِ أَمَّنْ يَمْلِكُ السَّمْعَ وَالْأَبْصَارَ وَمَنْ يُخْرِجُ الْحَيَّ مِنَ الْمَيِّتِ وَيُخْرِجُ الْمَيِّتَ مِنَ الْحَيَّ وَمَنْ يُدَبِّرُ الْأَمْرَ ۝ فَسَيَقُولُونَ اللَّهُ ۝ فَقُلْ أَفَلَا تَتَّقُونَ

10:31 Ask (them): Who gives you sustenance from the sky and from the earth or who controls (the faculties of) hearing and the sight? And who produces the living from the dead and the dead from the living? And who regulates all affairs? Then they will say, “Allah”. Say: Do you not then fear (Him)?

فُلَّا أَرَأَيْتُمْ إِنَّ أَحَدًا اللَّهُ سَمْعُكُمْ وَأَبْصَارُكُمْ وَخَتَمَ عَلَىٰ قُلُوبِكُمْ مَنْ إِلَّا اللَّهُ عَيْنُهُ اللَّهُ يَأْتِيْكُمْ بِهِ
۝ انْظُرْ كَيْفَ نُصَرِّفُ الْآيَاتِ ثُمَّ هُنْ يَضْلِلُونَ

6:46 Say: You see, if Allah took away (the faculties of) your hearing and your sight and sealed up your minds, then which god other than Allah can restore them to you? See how We explain the revelations; yet they turn away.

يَكَادُ الْبَرْقُ يَخْطُفُ أَبْصَارَهُمْ ۝ كُلَّمَا أَضَاءَ لَهُمْ مَسْوِيْهِ وَإِذَا أَظْلَمَ عَلَيْهِمْ قَامُوا ۝ وَلَوْ
شَاءَ اللَّهُ لَذَهَبَ بِسَمْعِهِمْ وَأَبْصَارِهِمْ ۝ إِنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

2:20 The lightning grows to almost snatching away their eyesight. Every time they are given light, they walk in it and when it was made dark to them, they would stand still. And if Allah had willed, He would have removed their faculties of hearing and sight. Verily, Allah has power over all things.

خَتَمَ اللَّهُ عَلَىٰ قُلُوبِهِمْ وَعَلَىٰ سَمْعِهِمْ ۝ وَعَلَىٰ أَبْصَارِهِمْ غِشَاوَةٌ ۝ وَلَهُمْ عَذَابٌ عَظِيمٌ

2:7 Allah has put a seal on their minds and on their hearing. And a veil is there on their eyes. They have a great penalty.

g) Ability to speak and write

The Quran further reveals that man is given the ability to speak and write. These are the two means of communication between human individuals. This means that Adam's *nafs*, the source of biological information to human species, contains programs for speech and writing. The verse 55:4 informs that Allah taught man to speak.

عَلِمَهُ الْبَيَان

55:4 He taught him to speak.

The Quran also informs that Allah taught man how to write (Q. 96:3-5).

أَفْرًا وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلِمَ بِالْقَلْمَنِ عَلِمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ

96:3-5 Read! And your Lord is most generous, who taught (the use of) the pen; taught man what he did not know.

These abilities are also unique to human species. The Quran informs us that Allah has designed a number of languages for man.

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَخَلْقُ الْمُتَّكَبِّرِينَ وَالْوَانِكُمْ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ
لِّلْعَالِمِينَ

30:22 And among His signs are the creation of the skies and the earth, and the variations in your languages and your colours. Verily in that are signs for those with knowledge.

It is with the help of language man communicates with one another. Speaking and writing are two modes of communication, and language forms the software for both these processes.

Comparison of human and animal biosystems

From the foregoing, it is evident that Allah has endowed human biosystem with several unique features and skills. These include mind, memory, language, faculties of seeing, hearing and feeling, abilities to speak and write, consciousness, intelligence and freewill. Human mind and memory have been the subjects of intensive research in science. As yet we do not have definite information on these most vital components of human biosystem. There is no single explanation for the phenomenon of mind. The contemporary views about mind in neuroscience, psychology, philosophy and cybernetics are different. They all have different interpretations of mind and consciousness. Although we consider consciousness, thinking power, reasoning, perception,

judgement, etc., as mental faculties, we have not been able to generate definite information on these aspects in science. Further it is still debated whether mind is physical or not. It is again the Quran that provides us with important information on both mind and memory.

It is the Quran that reveals to us human mind is physical and is located in the memory tissues. The Quran further reveals to us that conscious perception, information processing, freewill, understanding, and generation of feelings, etc., are its attributes. Equally important is the revelation that human memory is where real-time recording of the conscious activities of a human individual is going on. It forms the repertoire of one's activities carried out at the behest of mind and constitutes the record of one's performance during the test life for evaluation on the Day of Judgement. Although memory is distinguished as short-term, long-term, etc., in science, the Quran informs us that all our conscious activities are permanently stored in memory and the entire information is retrieved at death as it forms the record of one's performance during his test life.

It is generally believed that if the organ(s) required for some function is available in an organism it will be able to carry out that function. For example, explanations and interpretations made by evolutionists from fossil records bank on such assumption. If a fossil shows structures relating to wings, it will be interpreted that the organism is capable of flight. This is far from true. We all have two hands but not all of us are ambidextrous. That is, not all of us can use both hands equally well. Most of us use right hand for most purposes. Very few people use both right and left hands equally well indicating they have programs for the functioning of both hands. This means separate programs are required for development of a structure and its functioning. If the program for development of a structure is available in a biosystem, the structure will develop. But it will not function unless the

program for its functioning is available in the biomemome. This is quite similar to the functioning of computer hardware. In a computer system mere availability of hardware is not enough for its functioning. Unless the system has the necessary software installed in it, hardware will not function. Take the case of a printer connected to a computer. The printer will not work just because it is connected to the computer. It will work only if appropriate software package for its functioning is available in the computer. The computer model also helps to explain scientifically the unique features of human biosystem revealed through the Quran.

The Quranic statement of “Allah taught man how to speak and how to write” (Q. 55:4, 96:3-5 quoted above) must be seen as allegorical expression of installing the required software for these tasks. “Teaching a computer system” means “installation of appropriate software” in the system. If you have installed the print software in your PC, you can say you have taught the system how to print. Thus the word “teach” in the Quran denotes installation of appropriate program in human biosystem. This means that Adam’s *nafs* does contain all the programs necessary for performing tasks like speaking, writing, etc.

The verse on teaching how to speak has much wider connotation. It implies that whatever languages man should speak were also uploaded in Adam’s bisystem. One estimate shows human beings can learn more than 10,000 languages! In other words, that many languages are included in Adam’s *nafs*. Man cannot invent a language other than what is given in Adam’s *nafs*. The development of language is quite like the development of science and technology through discoveries and inventions (see chapter 12). When a language is invented (developed), it provides information about its alphabets, words, meaning, grammer, etc. Subsequently, when we learn a language we are effectively installing in our *sadr* a software for communication.

Similarly Allah has also taught us how to read (Q. 96:3). All these verses about “teaching” imply that Allah had included the appropriate programs in the human biosoftware (i.e., Adam’s *nafs*). That is why human beings are able to speak, read and write.

The transformation of information stored in our memory from its intangible form into tangible form by the human biosystem can also be understood in comparison with computer or robot system. The information we store on the hard disk of a computer exists in intangible form (in machine language). We install appropriate software (also in machine language) in the computer to transform the intangible information stored as file on the hard disk into tangible audio or visual form in a language our mind can process. That way our mind understands that information. In the human biosystem, information is downloaded from the *sadr* onto the *qalb* of the individual in tangible form in the language(s) installed (learned) in the system. Similarly, voice box of a person produces signals (information) which can be transformed using the audio biomemes in the biosoftware into tangible sound frequency in the language one knows. Likewise while writing, appropriate program comes into operation to transform the intangible information stored in *sadr* into visual form, i.e., in the form of alphabets of a language. If it is drawing, the hand will be creating the tangible picture on a paper. The hand is literally producing a tangible hard copy of the intangible information stored in one’s memory. We can say while writing and drawing, hand functions like a printer. The meaning of “Allah taught us to read, write and speak” can be explained in this way in the light of computer analogy.

If we examine human body in the light of these unique features, it will be possible to understand the kind of biosystem Allah has created to serve Him. Human mind can choose what it wants and direct the system to act. These are the voluntary actions of the individual. Therefore it goes without saying that

every individual has to be tested for his willingness to obey Allah (i.e., His instructions in the Scripture) before he is chosen to serve Him. It is to this test man is subjected to in this life. One has to prove himself to Allah that he is His obedient servant. The test is in fact the test of mind.

Since Allah has given mind only to man, which imparts consciousness, it follows that animals are unconscious beings. Further as already discussed, Allah has given the faculties of seeing and hearing only to man (see Q. 67:23 quoted above). That would mean animals do not see as we see and hear as we hear even though they have eyes and ears (Q. 7:179).

وَلَقَدْ ذَرَانَا لِجَهَنَّمَ كَثِيرًا مِنَ الْجِنِّ وَالإِنْسَنِ ۖ هُمْ قُلُوبٌ لَا يَفْقَهُونَ بِهَا وَلَهُمْ أَعْيُنٌ لَا يُبْصِرُونَ بِهَا وَلَهُمْ آذَانٌ لَا يَسْمَعُونَ بِهَا ۗ أُولَئِكَ كَالْأَنْعَامُ ۚ بَلْ هُمْ أَضَلُّ ۗ أُولَئِكَ هُمُ الْغَافِلُونَ

7:179 We have made many of the *jinns* and human beings for Hell. They have minds with which they do not understand, they have eyes with which they do not see and they have ears with which they do not hear. They are like cattle; nay more misguided. They are the heedless people.

The same message is conveyed in a different way through verse 25:44 also.

أَمْ تَحْسِبُ أَنَّ أَكْثَرَهُمْ يَسْمَعُونَ أَوْ يَعْقِلُونَ ۗ إِنْ هُمْ إِلَّا كَالْأَنْعَامُ ۚ بَلْ هُمْ أَضَلُّ
سَيِّلًا

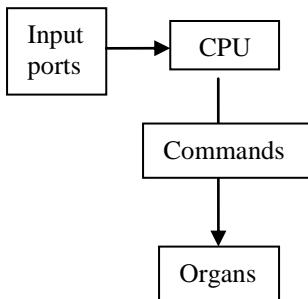
25:44 Or do you think that most of them do listen or understand? They are only like cattle; nay, they are farther off the (righteous) path.

How can these messages be explained? A comparison of human and animal biosystems in the light of computer model would help explain these messages in the right perspective. It may be noted that biosoftwarewise and hence biohardwarewise (i.e., phenotype), man and animal are two distinctly different

biosystems. Since the animal biosystem does not have a conscious processor (mind), all its functions are unconscious ones. In other words, an animal has only an unconscious Central Processing Unit (CPU) to direct and control its functions. The functions include both internally executed house-keeping functions (biological activities like digestion, blood circulation, etc.) as well as externally performed activities (e.g., movement, eating, etc.). On the other hand, human biosystem has both CPU that controls house-keeping or life-sustaining activities and mind that controls voluntary or conscious activities. Since house-keeping functions going on inside human biosystem are controlled by the CPU, man is not aware of them. He is aware of only those activities directed by mind. In fact it is mind itself and no other part of the body that is conscious of the activities performed as per its directives. In view of the differences in the processors, the mechanisms involved in the functioning of animal and human biosystems will also be different. The Quranic revelations such as “animal does not see or hear as man does” must be therefore examined and explained in the light of the differences in system configuration revealed through the Quran.

Although animals have external data input ports like eye, ear, etc., the signals coming through them from outside are processed by the CPU and not by mind and hence do not result in conscious perception of the environment (Fig. 11.2). A signal arising from inside or outside of the system is an abioswitch that actuates the biomeme(s) concerned in the cells. The CPU processes it in accordance with the biosoftware and gives orders to appropriate hardware component (organ) for action. This is an action performed unconsciously as in man-made robot. The animals are thus comparable to man-made robots in their mode of functioning. They do not feel or experience anything (i.e., conscious perception) and are not aware of themselves as well as their surroundings. The performance of the animal biosystem is purely mechanical.

Animal biosystem



Human biosystem

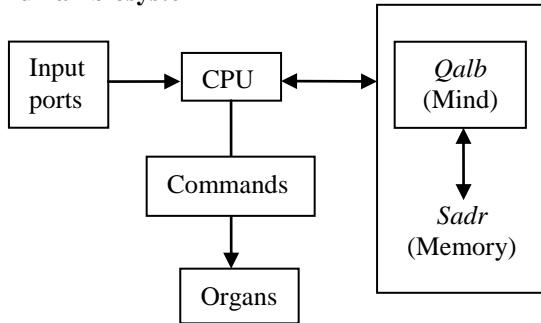


Fig. 11.2. Contrast between animal and human biosystems

The universe is nothing but information – the divine instructions carried by the energy. The world around us is basically without sound, colour, taste, size, etc. If a flower appears to us as beautiful (a mental feeling or experience) it is our mind that creates that image and feeling based on our biosoftware. The natural things are intrinsically neither good nor bad, neither beautiful nor ugly, neither sweet nor bitter. It is human mind that confers these characteristics to the outside

world in accordance with the biosoftware. Allah designed the human biosoftware (Adam's *nafs*) and mind that way.

A signal received from the environment through an input port acts as abioswitch, which activates the biomeme(s) concerned in the body cells. It is then processed by the mind (and not by the CPU) in accordance with the actuated program resulting in conscious perception. Thus conscious perception occurs only in human beings and man alone perceives the world with colour, sound, etc., and no other species does. The Quranic message mentioned above that Allah made faculties of hearing, seeing, feeling and understanding only for man (Q. 67:23) points to that. The Quran (Q. 7:179) further implies that mere possession of organs like eye and ear is not enough to provide the system with faculties of seeing and hearing. Animal has organs like eye and ear but they do not see or hear as we do (Q. 7:179; 25:44).

All cases of conscious perception are effectively mental constructs like the creation process itself; i.e., transformation of intangible (*ghayb*) information into tangible (*shahadat*) form. The mind also distinguishes between the internally inputted signals and externally inputted information (through five sensory organs) in their mode of projection. While internally inputted signal (e.g., pain signal) is transformed into conscious perception with respect to the point of origin of that signal inside the body, the externally inputted signal is transformed into tangible form with respect to its location of origin outside of the biosystem.

Let us take an example. Consider an object, which we see as red. In reality the object is not red. It only emits or reflects electromagnetic radiation in the wavelength region of about 600 nm. The electromagnetic radiation is a signal carrying divine information. This signal enters the human biosystem through eyes, acts as abioswitch and actuates specific biomeme(s) which is processed by the mind to create red image on the mental screen. Thus we see it as red. To put it

differently, if the signal has been specified for actuating the biomeme for green colour, mind would have created green image of the object. Audio signals entering through ears also undergo similar pathways. Take another example, the taste we experience when a substance comes into contact with the cells of our tongue or the so-called taste buds. The abiomemes (chemical structures) in the food substance we eat actuate specific biomemes in the tongue cells and they come into operation. The mind processes it and experiences the taste in accordance with the biosoftware. The biomemes included in human biosoftware must be inconceivably large. Just think of the ranges in colour, smell, taste, sound, pain, feelings we experience, to mention but a few! Further Allah has fixed in our biosoftware thresholds and maxima for the signals that create all these experiences. For instance, there is minimum intensity (threshold value) required for the sound wave to create audibility in man although this value may vary slightly from individual to individual. What does this indicate? This indicates that the audibility and the sound volume we experience depend on the specific biomemes in our biosoftware. For instance if the threshold value for the auditory signal creates a thousand-fold more volume, we would have heard a sound thousand times louder than what we experience now. Coupled with that, it would have also permitted a lot of noise (background interference) to become audible. We should therefore realize that all these aspects are so finely and meticulously taken care of by the Omnipotent Creator in designing Adam's *nafs* – the source of bioinformation in human species. The Quranic message that Allah made faculties of hearing, seeing, feeling and understanding only for man can be explained that way.

Information is stored in our memory in intangible form (as in computer hard disk) and not in any human language. During thought process the intangible information is transmitted down to the mind in tangible form in a chosen language. Obviously there should be a program to translate

information into one's chosen language as well as to decide and regulate the flow of information onto the mind. This program may be referred to as 'guidance program' that controls the flow of both *a priori* (that reached via germ line) and *a posteriori* (acquired through experience) information stored in the memory of the individual (see also chapters 12 and 16).

Any information or signal 'viewed' by the *qalb* (i.e., transmitted to mind) is a conscious activity and any action commanded by the *qalb* is also a conscious activity. It is mind that takes decision to act as it is bestowed with freewill. The decision is transmitted to the CPU which, in turn, activates the concerned tissues/organs for action (Fig. 11.2). If nothing is communicated, no action will result. The decision taken by mind (whether it is for an action or for no action) also forms a conscious activity.

The computer concept also allows us to define the phenomenon of sleep. Sleep may be thought of as the result of temporary cessation of transmission of biomimetic information (resulting from the actuation of biomemes by abiomemes) to the mind. Signals arising from both inside (e.g., pain) and outside of the system (audio, olfactory, tactile and taste) are cut off from mind. Since eyes are closed during sleep, light cannot enter them. Even if eyes are open during sleep, the light that enters them cannot reach mind. This is a temporary functional and not physical severance of the connection with mind. Since no signal reaches the mind, it remains in an unconscious state oblivious of the external world while the house-keeping functions will go on uninterrupted as they are carried out by CPU. The biosystem is in 'sleep' mode.

Although the processor mind is cut off from all these signals, it is still functionally connected to *sadr*. Both *a priori* and *a posteriori* kinds of data and information can get transmitted from memory to mind in sleep. This results in the production of dream. Dream is a mental construct generated from the stored data and information transmitted from the

memory (*sadr*) much like the computer projects a video clip on its monitor from the data stored on its hard disk. When it is awake (i.e., when sensory organs are functionally connected to mind), mind generates the image, sound, etc. about the world around it directly from the data (signals originating from outside of the biosystem) received by it via sensory organs (eyes, ears, etc.).

Cartesians consider animals as ‘mere automata’ that lack minds. This view of Descartes, seventeenth century French philosopher and mathematician, is based on the failure of animals to use language conversationally or reason generally. On this basis he claimed that nothing in animal behaviour requires a non-mechanical (mental) explanation; hence he saw no reason to attribute possession of mind to animals [9]. According to Carruthers [10, 11], all animal behaviour can be assimilated to the non-conscious activities of humans such as driving while distracted. An example of ‘action under unconsciousness’ in human beings is ‘sleepwalking or somnambulism’. Sleepwalking is a common arousal disorder especially in children. The activities of sleepwalkers are not limited to walking alone; they may perform several complex activities such as cooking and eating food, getting into automobiles, washing clothes, feeding pets, physical and verbal attack of others, etc. Somnambulists are usually unaware of their activities. After waking up also, most people cannot recollect even the conversations they had with others [12]. In sleep, as already mentioned, the processor mind (*qalb*) is functionally severed from outside world and no signal from outside reaches it. Obviously the activities of somnambulist are unconscious activities and can be attributed to CPU. They are comparable with the house-keeping functions carried out by the CPU. The human biosystem operates like animal biosystem during sleepwalking with CPU in full control. Since *qalb* is not involved, these activities are not saved in the memory (*sadr*). As a result, the individual cannot remember (retrieval of information to *qalb* from *sadr*) them also.

Only humans are unquestionably regarded to possess a ‘theory of mind’ (ToM). An individual is said to have ToM if it acts as if it understood that other individuals have mental states and if it is able to interpret these states in the appropriate context and intentionally modify its behaviour accordingly [13].

Certain animals can be trained to perform tasks that are not governed by their bioprograms. The famous story of the dog that Ivan Pavlov trained to salivate upon sounding a bell just prior to bringing food to it falls in this category. In the normal course (before training), the dog would not have salivated upon hearing the bell. It would salivate only at the sight of the food in accordance with its biosoftware. During training, the bell-food connection formed a rule and it is saved in its memory (random access memory). Subsequently, when it heard the sound of the bell, the CPU responded in accordance with the new rule by sending commands for salivation in anticipation of the food. This is not a conscious learning process but is one of conditioned reflex. True, an animal also stores in its memory the information it receives from the environment. Such information as permitted for storage by the biosoftware of the animal is required for the analysis of the environment around it by the CPU and hence for its very existence.

The Quranic revelation of absence of feelings (*afidat*) in animals (Q. 67:23) has more significance than meets the eye particularly in respect of pain, which is also a conscious perception or experience. We think of animal system much like ours and hence we believe that they also have feelings as we do. But the Quran does not say so. The activities of an animal can be likened to the activities of a somnambulist. An animal is mere automata like our robot and does not experience feelings including pain. Animal does not have mind to create feeling, a conscious experience. A striking observation in this regard is that the male and female members of an animal species do not

exhibit any sign of sexual arousal or attraction towards the opposite sex although they are fully naked. They are sexually activated only for the purpose of reproduction as prescribed in their biosoftware and they do it unconsciously like programmed robots. A dog when beaten produces crying sound and runs away. We attribute its response (crying and fleeing) to the pain it felt because we interpret it from human angle. That is not correct. We should realize that such responses can be created even without experiencing pain. For example, we often see persons watching a tragedy scene in a film get tears in their eyes. This is because the signals emanating from the scene create sorrowful feeling in them as they think that actors involved have suffered a lot, but in reality they had not. An animal's case is similar to that. An animal's outward expressions by way of crying, running, etc., are not because it felt pain but because it is programmed that way. Our robots can also be programmed to create such responses when beaten. That does not mean the robots feel pain. Thus based on the Quranic revelation it can be inferred that since animals do not have *qalb*, they do not have consciousness and hence do not experience feelings including pain. Most Merciful Allah's permission (Q. 5:1, 5:3) to kill animals (barring the banned ones) by pronouncing His name for our food and other purposes (e.g., animal sacrifice in hajj) must be viewed in this light.

يَا أَيُّهَا الَّذِينَ آمَنُوا أَوْفُوا بِالْعَهْدِ إِنَّ حَلَّتْ لَكُمْ بِهِمْ الْأَنْعَامُ إِلَّا مَا يُشَاءُ عَلَيْكُمْ عَيْرٌ
خُلُلٌ الصَّيْدٌ وَأَنْتُمْ حُرُمٌ إِنَّ اللَّهَ يَحْكُمُ مَا يُبَيِّنُ

5:1 O believers! ... Lawful to you (for food) are animals with the exceptions mentioned to you. Hunting is forbidden while you are in sacred pilgrimage (*hajj* or *umrah*). Verily Allah directs what He intends.

حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالدَّمُ وَلَحْمُ الْخِنْزِيرِ وَمَا أَهْلَأَ لِغَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِقَةُ وَالْمَوْقُوذَةُ
وَالْمُرَدَّدَةُ وَالنَّطِيحَةُ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا ذَكَرْتُمْ وَمَا دُبِّغَ عَلَى النُّصُبِ وَأَنْ تَسْتَعْسِمُوا

بِالْأَرْذَامِ ۝ ذُلِّكُمْ فِسْقٌ ۝ الْيَوْمَ يَعْسُنُ الَّذِينَ كَفَرُوا مِنْ دِينِكُمْ فَلَا تَحْشُوْهُمْ وَاحْتَسُونَ ۝
 الْيَوْمَ أَكْمَلْتُ لَكُمْ دِينَكُمْ وَأَتَتْمَثَ عَلَيْكُمْ نِعْمَتِي وَرَضِيَتْ لَكُمُ الْإِسْلَامَ
 دِينًا ۝ فَمَنِ اضطُرَّ فِي مُحْمَصَةٍ غَيْرَ مُتَحَاجِنٍ لِأُثْمٍ ۝ فَإِنَّ اللَّهَ عَفُورٌ رَّحِيمٌ

5:3 Forbidden to you (for food) are dead meat, blood, pork, that on which a name other than Allah's has been invoked, that which has been killed by strangling or a violent blow or a headlong fall or gored to death or what is (partly) eaten by a wild animal unless it is slaughtered (pronouncing Allah's name before it dies); that which is sacrificed on stone (altars). And (forbidden) is also the division (of meat) by raffling with arrows; that is impiety.... But if anybody is forced by hunger with no inclination to transgress, (he is not at fault to eat the prohibited food). Allah is indeed Oft-Forgiving, Most Merciful.

Besides the permission given to man to kill animals, Allah has also made many animals food for other animals, which is reflected in prey-predator relationship.

Animals do not have feelings (*afidat*) including pain because they lack *qalb* (mind). If we extrapolate this argument a little further, it would seem likely that human infant is an “unconscious” biosystem like animal until the development of mind. Till then all its expressions and activities are unconsciously performed ones by the CPU. It does not have feelings including pain. The biprocessor model of human biosystem thus helps to explain these phenomena.

The foregoing discussion is centred round the uniqueness of human species conveyed by the Creator through the Quran. It is clear that man's uniqueness is due to his mind, which alone is bestowed with freedom to take decision and act. It is such a robot Allah has created to serve Him. Understanding the Quranic revelations about Allah's robot (Abdullah) scientifically makes it clear why Allah wants to test man for his obedience to Him.

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12. SIGNIFICANCE OF ADAM'S NAFS – MICROBIOPROGRAM OF *HOMO SAPIENS*

Adam's *nafs* has wide-ranging implications and significance in human biology and anthropology. Besides being the source of biological information for creation of vast biomimetic diversity in human population, it is also the source of Satan virus and *a priori* knowledge. It is this biomimetic source that controls every aspect of human being at the individual, societal and species levels.

Satan virus

Presently there is no clear understanding of Satan in the Muslim community. We also do not know how Satan influences our minds to mislead us from the path of Allah. Religious scholars use the terms “*Iblis*” and “Satan” synonymously implying Satan is *Iblis*. It is further supposed that Satan is everywhere round the clock misleading the entire people of the world (over seven billion) from the righteous path. It is also foolish to suppose that one *Iblis* is interacting twenty four hours with billions of human beings in the world simultaneously. What we should realize is Satan is not *Iblis*. They are different and have independent existence. Based on computer analogy, a possible explanation to this conundrum [1] is presented here.

Satan appeared on the scene after the creation of Adam as can be inferred from the Quranic revelations. We also get sufficient clue about the identity of Satan from the events that ensued creation of Adam.

وَإِذْ قُنَّا لِلْمَلَائِكَةِ اسْجَدُوا لِآدَمَ فَسَجَدُوا إِلَّا إِبْلِيسَ أَبَى وَاسْتَكْبَرَ وَكَانَ مِنَ الْكَافِرِينَ
2:34 And behold, We said to the angels: Bow down to Adam. And they all bowed down except *Iblis*. He refused and was haughty. He became one of the rejecters of Faith.

قَالَ مَا مَنَعَكَ أَلَا تَسْجُدَ إِذْ أَمْرَتُكَ ۝ قَالَ أَنَا خَيْرٌ مِّنْهُ خَلَقْتَنِي مِنْ نَارٍ وَخَلَقْتَهُ مِنْ طِينٍ
 قَالَ فَاهْبِطْ مِنْهَا فَمَا يَكُونُ لَكَ أَنْ تَتَكَبَّرَ فِيهَا فَأَخْرُجْ إِنَّكَ مِنَ الصَّاغِرِينَ قَالَ أَنْظُرْنِي
 إِلَى يَوْمِ يُبَيَّنُونَ قَالَ إِنَّكَ مِنَ الْمُنْظَرِينَ قَالَ فَمِمَا أَغْرَيْتَنِي لَا قَعْدَنَ لَهُمْ صِرَاطُكَ الْمُسْتَقِيمَ
 هُمْ لَا يَتَبَيَّنُونَ مِنْ بَيْنِ أَيْدِيهِمْ وَمِنْ خَلْفِهِمْ وَعَنْ أَيْمَانِهِمْ وَعَنْ شَمَائِلِهِمْ ۝ وَلَا يَجِدُ أَكْثَرُهُمْ
 شَاكِرِينَ قَالَ اخْرُجْ مِنْهَا مَذْءُومًا مَذْحُورًا ۝ لَمَنْ تَعْكِمْ مِنْهُمْ لَأَمَّا لَئَنَّ جَهَنَّمَ مِنْكُمْ
 أَجْمَعِينَ

7:12-18 (Allah) said: What prevented you from bowing down when I commanded you? He (*Iblis*) said: I am better than he (Adam). You created me from fire and him from clay. (Allah) said: Get you down from this. It is not for you to be arrogant here; get out for you are the meanest (of creatures). He (*Iblis*) said: Give me respite till the day they (human beings) are raised up (resurrected for judgement). (Allah) said: Be you among those who have respite. He (*Iblis*) said: Because You have misguided me, I will lie in wait for them (human beings) on Your straight way. Then I will assault them from before them and behind them, from their right and from their left; nor will You find in most of them gratitude (for Your Mercy). (Allah) said: Get out from this, disgraced and expelled. If any of them follow you, I will fill Hell with you all.

These verses reveal that when Allah ordered the angels to bow down to Adam following his creation, all the angels except *Iblis* bowed down. Allah asked him to explain his non-compliance. *Iblis* responded boastingly that he was much above man in status and that prevented him from prostrating before Adam. Allah asked him to get out from the divine abode. *Iblis* pleaded for respite till the Day of Judgement when all human beings are raised up again. Allah granted *Iblis* respite. *Iblis* then swore that since Allah misguided him, he would mislead all human beings from the divine path except the most sincere and pious ones. How does *Iblis* go about misleading man and what is his strategy are some of the

important questions that remain unanswered. The revelations following these verses shed light on these important issues. The points to be noted are indicated in boldface in parentheses and their explanations are given in subsequent discussion.

وَيَا آدُمْ اسْكُنْ أَنْتَ وَزَوْجُكَ الْجَنَّةَ فَكُلَا مِنْ حَيْثُ شَرِقْتُمَا وَلَا تَقْرَبَا هَذِهِ الشَّجَرَةَ فَتَكُونَا مِنَ الظَّالِمِينَ فَوَسْوَسَ لَهُمَا الشَّيْطَانُ لِيَبْدِي لَهُمَا مَا وُرِيَ عَنْهُمَا مِنْ سَوْأَتِهِمَا وَقَالَ مَا نَهَاكُمَا رِبُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مَلَكِينَ أَوْ تَكُونَا مِنَ الظَّالِمِينَ وَقَاسَهُمَا إِنِّي لَكُمَا لَمِنَ النَّاصِحِينَ فَدَلَّاهُمَا بِغَيْرِ فَلَمَّا ذَاقَا الشَّجَرَةَ بَدَثْ لَهُمَا سَوْأَتِهِمَا وَطَفِقَا يَخْصِفَانِ عَلَيْهِمَا مِنْ وَرَقِ الْجَنَّةِ ۖ وَنَادَاهُمَا رَبُّهُمَا أَلَمْ أَنْهَاكُمَا عَنْ تِلْكُمَا الشَّجَرَةِ وَأَفَلَمْ لَكُمَا إِنَّ الشَّيْطَانَ لَكُمَا عَدُوٌ مُّبِينٌ قَالَا رَبَّنَا ظَلَمْنَا أَنْفُسَنَا وَإِنْ لَمْ تَغْفِرْ لَنَا وَتَرْحَمْنَا لَنَكُونَنَّ مِنَ الظَّالِمِينَ قَالَ أَهْبِطُوا بَعْضُكُمْ لِيَعْضِ عَدُوٌ ۖ وَلَكُمْ فِي الْأَرْضِ مُسْتَقْرٌ وَمَتَاعٌ إِلَى حِينٍ قَالَ فِيهَا تَحْيَوْنَ وَفِيهَا تَمُوتُونَ وَمِنْهَا تُخْرَجُونَ

7:19-25 O Adam! You and your wife dwell in the Garden and enjoy (its good things) as you wish but do not approach this *Tree* or you run into harm and transgression. Then Satan (**not Iblis**) began to whisper suggestions to them to uncover their shame that was hidden from them (before). He (**it**) said: Your Lord only forbade you this *Tree* lest you should become angels or such beings as live for ever. And he (**it**) swore to both of them: I am indeed your sincere advisor. So by deceit he (**it**) brought their fall. When they tasted of the *Tree*, their shame became manifest to them and they began to sew together the leaves of the Garden over their bodies. And their Lord called to them: Did I not tell you that Satan (**not Iblis**) was an avowed enemy to you? They said: Our Lord! We have wronged our own souls. If You do not forgive us and bestow upon us Your Mercy, we shall be certainly be lost. (Allah) said: Get you down with enmity between yourselves. The earth will be your dwelling place and your means of livelihood for a term. He (Allah) said: Therein shall you live, and therein shall you die, and from there shall you be taken out (resurrection).

The first reference to Satan appears here. Allah asked Adam and Eve to live in the Garden. They were ordered by God not to touch the *Tree* there. That was the only directive Allah had given to test them. However, they were lured and misguided by the loathsome Satan (not *Iblis*) to disobedience. They fell an easy prey to Satan's temptations and failed in the test – they ate of the tree. That led to their ouster from the Garden to Earth. It is important to note that it was *Iblis* who vowed before Allah to mislead man. But it was not *Iblis* but Satan who put the misleading suggestions onto the minds of Adam and Eve. The Quran did not use the word *Iblis* after his conversation with Allah (i.e., after verse 7:18), but used the word "Satan" instead. The use of the word Satan in place of *Iblis* in the above verses (Q. 7:19-25) is glaring. It is because Satan is different from *Iblis*. If not, there is no need to introduce a different term. The ulema have not distinguished the two terms from each other. The situation has led to so much confusion in understanding the verses, which is reflected in Quran translations. For instance, Yusuf Ali commented: "*Iblis* in ii. 34 is apparently the Power of Evil, with the root idea of desperateness or rebellion. "Satan" in this verse (i.e., 2:36) is the Power of Evil, with the root idea of perversity or enmity." [2]. But such an interpretation is not consistent with the Quranic revelations and does not clarify what Satan is. A plausible explanation can be given based on the computer model of human biosystem [3]. Treating *Iblis* and Satan at par is not correct. They are physically different because Allah warned Adam and Eve of Satan and not *Iblis* as avowed enemy. Further Allah conversed with *Iblis* and not Satan.

It may be recalled here that the angels are at the command of Allah executing His orders through appropriate programs. Since *Iblis* was an angel at the time of creation of Adam, it may be presumed that *Iblis* was using Allah's programs. This is evident from the statement of *Iblis* that it is with Allah's permission and power he misleads human beings.

قَالَ فَإِنَّكَ مِنَ الْمُنْظَرِينَ إِلَى يَوْمِ الْوَقْتِ الْمَعْلُومِ قَالَ فَبِعِزْرِتِكَ لَا غُوَيْنَهُمْ أَجْمَعِينَ إِلَّا عِبَادُكَ مِنْهُمُ الْمُخْلَصِينَ قَالَ فَالْحُكْمُ وَالْحُقْقُ أَكُولُ لَأَمْلَأَنَّ جَهَنَّمَ مِنْكَ وَمِنْ تَبِعَكَ مِنْهُمْ أَمْعَينَ

38:80-85 (Allah) said: Respite then is granted to you (*Iblis*) till the Day of the Time Appointed. (*Iblis*) said: Then by Your (Allah's) Power, I (*Iblis*) will put them all in the wrong except Your sincere and purified servants among them. (Allah) said: Then it is just and fitting and I say what is just and fitting – That I will certainly fill Hell with you and those that follow you – everyone.

“Allah’s Power” mentioned in the above verses indicates Allah’s program or commands. Going by the computer model, the human robot system requires a program to make misleading suggestions to the processor mind. It may therefore be inferred from these verses that with Allah’s permission *Iblis* installed a suitable program in Adam’s biosystem. This program thus became part of Adam’s *nafs*. In computer parlance it was a virus program that was installed by *Iblis*. A computer virus is a small program designed to interfere with the functioning of the system the way its author wanted. Satan mentioned in the Quran may be understood as virus program. The intention of *Iblis* was to mislead man from Allah’s path. Satan virus does this job by interfering with the decision-making function of the human *qalb* (mind) by offering tempting (evil) suggestions to it (Q. 7:19-25). Since Eve was created from Adam’s *nafs*, the Satan virus also entered Eve’s biosoftware. Thus we find Satan putting suggestions onto the *qalbs* of Adam and Eve instead of *Iblis*. The virus analogy enables us to visualize how *Iblis* carries out his threat. The Satan is the tool of *Iblis* operating inside the human biosystem and not from outside as is believed now. It is through Satan virus and not by direct physical involvement *Iblis* who is given respite by Allah till the end of the world carries out his threat of misleading man from the divine righteous path. This view is further strengthened by the use of the word “command” (*amr*) in the following verse to

characterize the nature of action of Satan on human mind (my translation in boldface added).

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَتَّبِعُو حُطُوطَ الشَّيْطَانِ ۝ وَمَنْ يَتَّبِعُ حُطُوطَ الشَّيْطَانِ فَإِنَّهُ يَأْمُرُ
بِالْفَحْشَاءِ وَالْمُنْكَرِ ۝ وَلَوْلَا فَضْلُ اللَّهِ عَلَيْكُمْ وَرَحْمَةً مَا زَگٰ مِنْكُمْ مِنْ أَحَدٍ أَبَدًا وَلَكِنَّ
اللَّهُ يُنَزِّكُ مَنْ يَشَاءُ ۝ وَاللَّهُ سَمِيعٌ عَلِيمٌ

24:21 “O you who believe! Follow not the footsteps of Satan. If any will follow the footsteps of Satan, he (**it**) will (but) command what is shameful and wrong....”

It is also noteworthy that *Iblis* says it is because Allah misled him, he is misleading Allah’s servants – human beings. The entire episode involving *Iblis* that took place in the divine abode following creation of Adam must be seen as part of Allah’s scheme for installing Satan virus to make human robot testing efficient. Since Satan is a program, the pronoun “it” is the appropriate one and not the pronoun “he” that is used in translations to refer to Satan. This correction is indicated by giving “it” in boldface in parentheses in the translations of the verses quoted.

Satan virus being a small program exists as stored information on the chromosome. This virus program is present in each and every cell of human body as it is copied during cell division. In this way it enters gametes and germ line. Thus every human individual carries Satan virus in his biomemome. It is this extremely powerful virus program installed by *Iblis* in Adam’s biosystem to mislead man from Allah’s path that is referred to in the Quran as Satan and an avowed enemy of mankind.

That *Iblis* is not Satan is further evident from the use of plural term of Satan – *shayateen* – at many places in the Quran whereas the term “*Iblis*” is not used in plural. Consider for instance verse 7:30.

فِيْقَأَ هَدَىٰ وَفِيْقَأَ حَقَّ عَلَيْهِمُ الضَّلَالُ ۝ إِنَّهُمْ أَخْذُوا الشَّيَاطِينَ أَوْلِيَاءَ مِنْ دُونِ اللَّهِ
وَكَسَبُوْنَ آثَارَهُمْ مُهْتَدُوْنَ

7:30 Some He (Allah) has guided. Others have (by their choice) deserved the loss of their way. In that they took the evil ones (*shayateen*) in preference to Allah for their friends and protectors and think that they receive guidance.

Based on the traditional view, the verse would appear to convey the existence of so many Satans or *Iblis* although it is not possible to explain how a large number of *Iblis* can arise. As already mentioned, every human being carries Satan virus. An individual by virtue of his freewill can either follow Allah's directions or Satan's. An individual who obeys Satan's directions and acts accordingly is therefore referred to as Satan in the Quran. The plural *shayateen* is used in the Quran to describe a group of such people. Obviously they will also be friends with one another. It is to be realized that mere presence of this virus program in the body does not make a person Satan but the individual must be following the evil path consequent to his surrender to the virus program. If that were not the case, all of us would have been Satans (*shayateen*) as we all carry Satan virus or to use the computer jargon, we are all 'infected' with it. Consider a situation in which a person meets a group of individuals (Satans) who have gone astray from Allah's path. He will be influenced not only by the Satan virus in his biosystem but also by the viruses residing in the people of that group. That group can function as a collection of Satans or *shayateen*. The person *does not see* the virus in others. He takes them as friends. In the traditional view, we have to suppose many *Iblis* to match the term "shayateen" which is clearly wrong. The following verses (Q. 7:27, 6:112) make it further clear that the word *shayateen* refers to the misled human beings and not many *Iblis*.

يَا أَيُّهَا آدَمُ لَا يَقْتَنِسْكُمُ الشَّيْطَانُ كَمَا أَخْرَجَ أَبَوَيْكُمْ مِّنَ الْجَنَّةِ يَنْزَعُ عَنْهُمَا لِيَاسْهُمَا لِرَبِّهِمَا سَوَآهِمَا ۝ إِنَّهُ يَرَاكُمْ هُوَ وَقَبْلُهُ مِنْ حَيْثُ لَا تَرَوْهُمْ ۝ إِنَّا جَعَلْنَا الشَّيْطَانَ أُولَئِكَ لِلَّذِينَ لَا يُؤْمِنُونَ

7:27 O children of Adam! Let not Satan seduce you, in the same manner as He got your parents out of the Garden, stripping them of their raiment, to expose their shame: for he (**it**) and his (**its**) tribe watch you from a position where you cannot see them: We made the evil ones (*shayateen*) friends to those without faith.

وَكَذَلِكَ جَعَلْنَا لِكُلِّ نَبِيٍّ عَدُوًا شَيَاطِينَ الْإِنْسِ وَالْجِنِّ يُوحِي بِعَضُّهُمْ إِلَى بَعْضٍ رُّخْفَ
الْقَوْلُ عُرُواً وَلَوْ شَاءَ رَبُّكَ مَا فَعَلُوهُ فَلَأَرْهُمْ وَمَا يَفْتَنُونَ ۝

6:112 Likewise we made for every messenger an enemy – evil ones (*shayateen*) among men and jinns, inspiring each other with flowery discourses by way of deception. If your Lord has so planned they would not have done it. So leave them and their inventions alone.

وَلَقَدْ صَدَقَ عَلَيْهِمْ إِبْلِيسُ ظَلَّهُ فَاتَّبَعُوهُ إِلَّا فَرِيقًا مِّنَ الْمُؤْمِنِينَ ۝

34:20 And on them did *Iblis* prove true his idea and all except the believers followed him.

The verse (Q. 34:20) indicates the success of *Iblis*'s idea of diverting people from Allah's path. The use of the word *Iblis* in this verse is not in contradiction with the virus analogy because whoever succumbed to the lure of Satan in effect followed *Iblis*.

The use of the word "Satan" instead of "*Iblis*" may not be changing the implied message in a verse but it does affect our perception of *Iblis* and Satan. From several verses, we can understand that Satan virus influences human mind in a variety of ways. This is also evident from the statement of *Iblis* during his conversation with Allah (Q. 7:12-18 quoted above) that he will assault them from before them and behind them, from their

right and from their left. In these verses, *Iblis* is telling Allah that he will mislead Allah's servants. This may be taken to mean that he misleads man with the help of his tool, Satan virus. Satan is a powerful program capable of diverting man from Allah's path. See also the following verses.

إِنْ يَدْعُونَ مِنْ دُونِهِ إِلَّا إِنَّا ثَاوَانِ يَدْعُونَ إِلَّا شَيْطَانًا مَرِيدًا لَعْنَهُ اللَّهُ ۝ وَقَالَ لَأَنْجَدْنَ مِنْ عِبَادِكَ تَصِيبًا مَفْرُوضًا وَلَا ضِلَالَ لَهُمْ وَلَا مُنِيبَهُمْ فَلَيَتَتَكَبَّرُ آذَانَ الْأَنْعَامِ وَلَا مُرْتَهِنُهُمْ فَلَيَعْيَرُنَ خَلْقَ اللَّهِ ۝ وَمَنْ يَتَّخِذِ الشَّيْطَانَ وَلِيًّا مِنْ دُونِ اللَّهِ فَقَدْ حَسِرَ حُسْرَانًا مُبِينًا يَعِدُهُمْ وَعَنِيهِمْ ۝ وَمَا يَعِدُهُمُ الشَّيْطَانُ إِلَّا غُرُورًا أُولَئِكَ مَأْوَاهُمْ جَهَنَّمُ وَلَا يَجِدُونَ عَنْهَا حِيَصًا

4:117-121 They invoke, besides Him, only female (deities). They only invoke the arrogant Satan! Allah had cursed it. And it said: "I will take a fixed share from Your servants. I will mislead them and I will create in them false desires. I will order them; then they will slit the ears of cattle. I will order them; then they will deface Allah's creations." Whoever takes Satan for a protector forsaking Allah, he has indeed sustained a clear loss. The Satan makes promises to them and creates in them false desires; but Satan's promises are nothing but deception. Their abode is Hell and they will find no place (to escape) from it.

There is also another important message Allah conveys through the events (Q. 7:12-25 quoted above) that led to the expulsion of Adam and Eve from the Garden to Earth. It may be noted that Allah ordered the first human couple not to approach the Tree in the Garden but Satan persuaded them with luring suggestions to furtively make them violate Allah's order. This led to their tasting of the Tree, which, in turn, made their shame manifest that was hidden from them. And they started covering (their genitals) with leaves (Q. 7:19-22). It may be understood from these verses that it is their tasting of the tree that created feeling of shyness about their genitals. This means perhaps what they ate would have triggered the biomeme(s) in

their biosystem into operation to create shy feeling. Although the sex organs were there on their body, they were not shy of them prior to tasting of the tree. The feeling of shyness developed only after they tasted of the Tree. It marked the origin of shyness about sex organs in human beings. The message in the verses can be understood that way.

Failure of Adam and Eve in the test necessitated their further testing as well as generations of human beings created by Allah from them in order to select the obedient ones. The episode thus makes it clear how and why feeling of shyness about sex organs coupled with sexual urge and pleasure are created in human species. It also shows how strong and efficient Satan virus is to mislead man. The human couple could not even obey Allah's just one instruction because of its interference! Here again we should realize that the test in the Garden was only a prelude to the elaborate test programme Allah has planned and arranged on Earth with billions of biomimetically varying human beings. It is through sexual reproduction Allah is creating biomimetically different human beings with widely varying potentials.

Human biodiversification

Verse 4:1 states that it is from a single *nafs* (the *rooh* that was breathed into the clay model to create Adam) all the men and women are created.

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِّنْ نَفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً ۚ وَاتَّقُوا اللَّهَ الَّذِي تَسْأَلُونَ بِهِ وَالْأَرْحَامَ ۚ إِنَّ اللَّهَ كَانَ عَلَيْكُمْ رَقِيبًا

4: 1 O mankind! Fear your Lord who created you from a single *nafs* and from that, He created its mate, and from them both He (created and) spread plenty of men and women. Be conscious of Allah about whom you ask each other and (be also conscious of) the family relations. Verily, Allah is watching you.

The verse reveals that the microbioprogram of *Homo sapiens* is Adam's *nafs*. In other words, the source of biological information to create biodiversity in human species is Adam's *nafs*.

At several places in the Quran, human individual is mentioned on the basis of biosoftware as *nafs* (pl. *anfus* or *nufusoos*).

عَلِمَتْ نَفْسٌ مَا قَدَّمَتْ وَأَخْرَثْ

82:5 (Then) each soul (*nafs*) will know what (deeds) it has advanced and (what deeds it has) put off.

عَلِمَتْ نَفْسٌ مَا أَخْضَرْ

81:14 (Then) each soul (*nafs*) will know what it has brought (i.e., good and evil).

وَجَاءَتْ كُلُّ نَفْسٍ مَعَهَا سَائِقٌ وَشَهِيدٌ

50:21 Every soul (*nafs*) will come with an escort and a witness.

الْيَوْمَ تُنَجِّي كُلُّ نَفْسٍ بِمَا كَسَبَتْ لَا ظُلْمَ الْيَوْمَ إِنَّ اللَّهَ سَرِيعُ الْحِسَابِ

40:17 That Day every soul (*nafs*) will be rewarded what it earned. There will be no injustice that Day. Indeed Allah is swift in taking account.

إِنَّا أَنْزَلْنَا عَلَيْكَ الْكِتَابَ لِلنَّاسِ بِالْحَقِّ فَمَنِ اهْتَدَى فَإِنَّفْسِيهِ وَمَنْ ضَلَّ فَإِنَّمَا يَضْلِيلُ عَلَيْهَا وَمَا أَنْتَ عَلَيْهِم بِوَكِيلٍ

39:41 Verily We have sent down the Book (i.e., the Quran) to you (Prophet Muhammad) in truth for mankind. Then whoever attains guidance (from it) benefits his own soul (*nafs*) and whoever strays (from it) does so against it (i.e., his own soul). You are not given the responsibility over them.

Referring of an individual by *nafs* (biomemome or the biosoftware of the individual) as given in these verses is indeed the correct and accurate method. It is also the accurate

expression of one's identity because the biomemome (*nafs*) of an individual remains unchanged throughout his life starting from zygote stage but his phenotype is dynamic. It changes with time as the execution of the biomemome proceeds until death. Therefore phenotype at any given instant does not describe or represent an individual for the whole period of life from the time of formation of zygote to death. Evidently, the identity of an individual can be best described by his *nafs* (biosoftware), which is static. The use of the term “*nafs*” in the Quran to mean a human individual is therefore the most appropriate expression. Allah alone knows the *nafs* of a human being. We have absolutely no knowledge of that.

Human beings are created by Allah with varying physical and mental potentials. This is expected because if human beings are identical in their characteristics and behaviour (i.e., clones with identical biosoftware) it is enough to test just one individual. But Allah's intention is to create a large number of diverse *nafs* to produce diverse human phenotypes with varying potentials. Allah is creating such large population of varying phenotypes from a single *nafs* – Adam's *nafs* – the microbioprogram of human species. The entire population of mankind originates from a single biosoftware. Therefore every human individual is Adam's offspring. At several places, the Quran reminds us of this fact by addressing mankind as children of Adam (see verse 7:27 quoted above). However there is one exception. Prophet Jesus Christ does not belong to Adam's lineage. He was created from a separate *rooh*.

وَمِنْهُمْ ابْنَتَ عِمْرَانَ الَّتِي أَخْصَنْتُ فَرِجْعَهَا فَنَفَخْنَا فِيهِ مِنْ رُوحِنَا وَصَدَقَتْ بِكَلِمَاتِ رَبِّهَا
وَكُنْتُمْ وَكَانُتْ مِنَ الْفَانِتِينَ

66:12 And Mary the daughter of Imran, who guarded her genital organ; and We breathed into it (i.e., her genital organ) from Our *rooh*; and she testified to the truth of the Words of

her Lord and of His Revelations, and was one of the devout (servants).

إِنَّ مَثَلَ عِيسَىٰ عِنْدَ اللَّهِ كَمَثَلَ آدَمَ ۖ خَلَقَهُ مِنْ تُرَابٍ ثُمَّ قَالَ لَهُ كُنْ فَيَكُونُ

3:59 Indeed the similitude of Jesus before Allah is that of Adam; He created him (Adam) from dust, then said to it, “Be” and he (Adam) came into being.

Therefore Prophet Jesus Christ is not a member of Adam’s lineage. He was not created from Adam’s *nafs* (see chapter 10 for a detailed account of the creation of Prophet Jesus). He was created from a special *rooh*. His death is also a special phenomenon (see chapter 17).

Although biology deals with human reproduction and multiplication, the issue of source of biological information required for bringing about the huge diversity observed in human biosystem in a highly regulated manner cannot be addressed in science. It is through Quran Allah reveals to us the source of biological information for human biodiversification.

In human beings, not only are the phenotypic attributes numerous, their variation is also much larger than in other species. For instance height in human beings varies from about three feet to over seven feet. The dynamic phenotype that develops from a biomemome is also unique. Every human individual can be identified by face. This is also the case with every other character. This specificity arising from one’s *nafs* is taken advantage of for biometric identification of human individuals. Fingerprint, palm vein pattern, capillary blood vessel pattern in the eye (retina scan), etc., have already become accepted biometric signatures for identification of individuals. On the other hand, in other species intraspecific variability is limited. Take the case of an animal. If you look at a herd of sheep of the same age, they will all appear alike in their looks as well as in their behaviour.

Human species is so programmed by Allah that its members become distinct diversity groups such as ethnic, racial, cultural, linguistic, etc.

يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُم مِّنْ ذَرَّةٍ وَأَنْثَى وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارُفُوا ۝ إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَنْقَاصُكُم ۝ إِنَّ اللَّهَ عَلِيمٌ حَسِيرٌ

49:13 O mankind! We created you from a male and female, and made you into nations and tribes, that you may know each other. Verily the most honored of you in the sight of Allah is the one who is most deeply conscious of Him. And Allah has full knowledge and is well acquainted (with all things).

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَالْخِلَافُ الْسِّتَّةُ كُمْ وَالْوَانُكُمْ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِلْعَالَمِينَ

30:22 And among His signs is the creation of the heavens and the earth, and the variations in your languages and your colors; verily in that are signs for those who have knowledge.

With wide-ranging characters, skills and talents, human biodiversity profile is unwieldy and overwhelming to say the least. No two individuals including the so-called ‘identical twins’ (monozygotic twins) are identical. Each human being is unique in each phenotypic attribute and is not repeated in time and space. This holds true for the past, present and future human populations. Such is the magnitude of variability existing in human race. And the source of biological information responsible for this scale of diversity is Adam’s *nafs* – the microbioprogram of human species. Another notable aspect of human biodiversification process is that it is an ongoing process. As a result we find more and more variations enhancing the physical and mental potentials emerge in time and space as specified in Adam’s *nafs*. This is reflected in the advancement of every field of human activity. It is not possible to say whether *Homo sapiens* has attained the maximum potentials physically and mentally; perhaps still more

wonderful show of human potential in both physical and mental abilities is yet to come. What we observe now is the scale of human biodiversity created so far.

All the biological differences among individuals and variations among individuals and populations (e.g., cultural, linguistic, ethnic, etc.) occur in accordance with the human biodiversification software provided in Adam's *nafs*. The mechanism of creating variations among individuals in a programmed manner can be understood scientifically from the various phenomena involved.

Allah informs us that following the creation of Adam and Eve as discussed above, further multiplication of human beings is effected through "water" (Q. 32:7-8; 25:54; 35:11).

الَّذِي أَحْسَنَ كُلَّ شَيْءٍ خَلْقَهُ ۖ وَبَدَا خَلْقُ الْإِنْسَانِ مِنْ طِينٍ فَمَ جَعَلَ نَسْلَةً مِنْ سَلَالَةٍ
مِنْ مَاءٍ مَهِينٍ

32:7-8 He who made all His creations the best and He originated the creation of man from clay, then made his progeny from a quintessence of an insignificant water.

وَهُوَ الَّذِي خَلَقَ مِنَ الْمَاءِ بَشَرًا فَجَعَلَهُ نَسِبًا وَصَهْرًا ۚ وَكَانَ رَبُّكَ قَدِيرًا

25:54 It is He who created man from water; then He established family and marital relationships. And your Lord has power (over all things).

وَاللَّهُ خَلَقَكُمْ مِنْ تُرَابٍ فَمِنْ نُطْفَةٍ فَمَ جَعَلَكُمْ أَرْوَاحًا ۖ وَمَا تَحْمِلُ مِنْ أثْنَىٰ وَلَا تَضَعُ
إِلَّا بِعِلْمِهِ ۖ وَمَا يُعَمَّرُ مِنْ مُعَمَّرٍ وَلَا يُنْفَصُ مِنْ عُمُرِهِ إِلَّا فِي كِتَابٍ ۚ إِنَّ
ذَلِكَ عَلَى اللَّهِ يَسِيرٌ

35:11 And Allah created you from dust; then from a sperm-drop; then He made you mates. And no female conceives or delivers without His knowledge. No man is granted extension of life nor is his lifespan shortened except in accordance with (what is given) in a Record. All that is easy for Allah.

إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْسَاجٍ نَبْتَلِيهُ فَجَعَلْنَاهُ سَمِيعًا بَصِيرًا

76:2 Verily We created man from a mixed drop in order to test him. So We gave him faculties of hearing and sight.

The term “water” used in these verses must not be taken in the usual sense of the word as used in verses 21:30 and 24:45 relating to the creation of other organisms discussed in chapter 10. The “water” mentioned in the above verses refers to the semen containing sperms (Q. 25:54; 32:8) or a mixture of both male and female gametes (Q. 76:2). The verses are suggestive of the sexual reproduction involved in the multiplication process.

Allah further informs us of the love and affection He created between spouses and for children.

وَمِنْ آيَاتِهِ أَنْ خَلَقَ لَكُمْ مِنْ أَنفُسِكُمْ أَزْوَاجًا لِتَسْكُنُوا إِلَيْهَا وَجَعَلَ بَيْنَكُمْ مَوَدَّةً وَرَحْمَةً ۝
إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

30:21 And among His signs is the creation of your spouses from among yourselves so that you find solace with her. And He gave between you love and mercy. Verily in that are signs for those who think.

الْمَالُ وَالْبُنُونَ زِينَةُ الْحَيَاةِ الدُّنْيَا ۝ وَالْبِرَاقِيَّاتُ الصَّالِحَاتُ خَيْرٌ عِنْدَ رَبِّكَ شَوَّالًا وَخَيْرٌ أَمَّا

18:46 Wealth and children are adornment of the life of this world. But the good (deeds) that last are better for reward with your Lord and better to hope for.

From these messages, it can be deduced that desire and love for the opposite sex, pleasure in sex, desire and love for children, care of children by the parents, care of parents by the children, etc., are attributes prescribed for human beings to encourage them to reproduce. Without these pleasures, human attitude towards procreation will be rather negative since man is endowed with discretionary freedom. Equally important is man’s insatiable desire to live and live longer. These features

of human biosystem must be seen as part of Allah's strategy for creating huge population of human beings for testing.

Human beings inherit their physical and mental characteristics and abilities, develop language and culture, and exist as distinct races as stipulated in Adam's *nafs*. Human biodiversification process can be understood as biomemetically programmed phenomenon to create diverse phenotypes, biomemetic lineages representing races, nations, tribes, etc. The phenomenon is natural demonstration of how varied phenotypes (human individuals) are produced from diverse biosoftware created from a single original source of biological information (Adam's *nafs*) through natural biosoftware engineering mechanisms. (It is reminded here that creation of diverse biological species through programmed evolution was also discussed earlier on similar lines. See chapter 10.) Appropriate natural biosoftware engineering mechanisms play a major role in shuffling, redistributing and reorganizing the biomemetic package during meiosis to produce biomemetically varying gametes. During fertilization, male and female gametes unite to produce the biosoftware of the offspring (next generation). Transmission of bioinformation in this way to the offspring preserves the Adam-Eve lineage and its continuity over generations. It is these lineages that, in turn, represent diverse ethnic groups, races, cultures, etc. along the timeline prescribed in Adam's *nafs* (Fig. 12.1).

During meiosis (see Fig. 9.5 in chapter 9) biomemetic changes occur through a process called 'crossing over' in which segments of non-sister chromatids of a homologous pair of homologous dyads are exchanged (see Fig. 9.6 in chapter 9). This swapping of chromosome portions leads to alteration of bioinformation content in the resulting chromosomes. The 'crossing over', as any other bioprocess, is a programmed phenomenon. It is responsible for the production of the next generation biosoftware in human species. It is this process that leads to biodiversification in human populations in time and

space in a programmed manner. Since scientists do not view this natural process as mechanism designed and programmed to accomplish the divine objective of creating biodiversity, they consider this and other similar process as random phenomena or errors and mistakes.

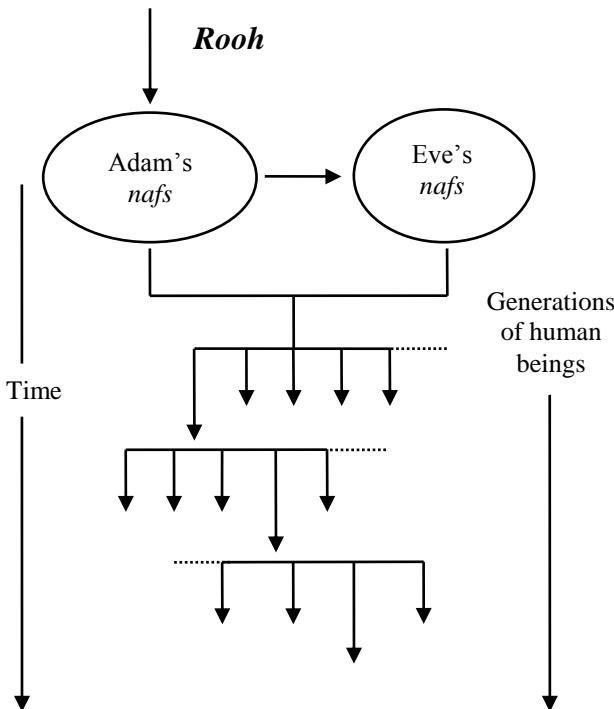


Fig. 12.1. Illustration of human biodiversification process as memetically programmed phenomenon originating from Adam's *nafs*

Note: Biomemetic changes occur in each generation through biosoftware engineering processes particularly via cross over during gametogenesis.

Mere production of gametes slated for the next generation is not enough. The male gametes (sperms) and female gametes (eggs) so produced must also meet their right partners and fuse to form the zygotes to produce the intended biomemomes and from them the human individuals via

ontogenetic development (Fig. 12.2). To that end Allah informs us:

اللَّهُ يَعْلَمُ مَا تَحْمِلُ كُلُّ أُنثَىٰ وَمَا تَغْيِضُ الْأَرْجَامُ وَمَا تَزَدُّدُ ۖ وَكُلُّ شَيْءٍ عِنْدَهُ بِقُدْرَاتٍ

13:8 Allah knows what every female (womb) bears, 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.

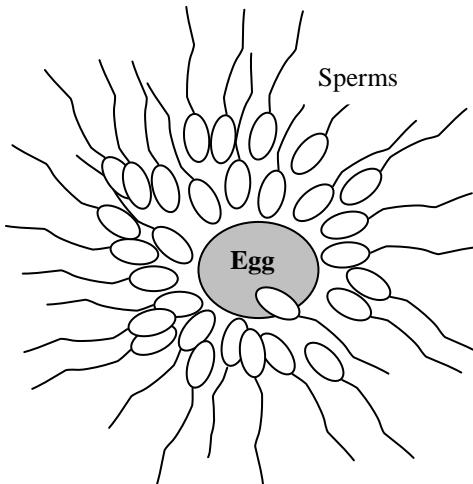


Fig. 12.2 A swarm of sperms surrounding the female egg about to be fertilized

The verse quoted above indicates that fertilization taking place in human biosystem is as programmed by Allah and therefore He knows what every female conceives. Spermatozoa normally encounter the egg at the fertilization site (in the Fallopian tube) within 24 hours after ovulation. A considerable fraction of the spermatozoa in the semen ejaculated into the female reproductive tract remains motionless in storage sites until ovulation, when the spermatozoa resume maximal motility and reach the fertilization site within minutes. “Sperms have the opportunity

to interact with many other kinds of cells in the female,” says Jerry Hedrick, a biochemist in the Division of Biological Sciences, UC Davis. “How egg and sperm recognize one another is a fundamental question in reproductive biology.” [4]. Although the nature of the signal for sperm movement is not known, there are indications to suggest that attraction of spermatozoa to a factor(s) released from the egg may be a key event in the fertilization process and may give insight into the mechanism underlying early egg-sperm communication [5]. This is indicative of some kind of chemical signaling for drawing the sperms towards the egg for fertilization. However, the exact mechanism involved in the fertilization process particularly the question of how only a single sperm is enabled to fertilize the ovum is not known. Allah says:

هُوَ الَّذِي يُصَوِّرُكُمْ فِي الْأَرْحَامِ كَيْفَ يَشَاءُ ۚ لَا إِلَهَ إِلَّا هُوَ الْعَزِيزُ الْحَكِيمُ

3:6 It is He Who shapes you in the womb as He likes.

This message implies that which sperm must fuse with which ovum has also been programmed so that the individual developed from the fusion becomes Allah’s choice. We do not have sufficient information on human fertilization to understand the mechanism involved in bringing together ‘biomimetically labelled’ pair (male and female) of gametes for their eventual union. Studies conducted with human beings in this area are scanty. Fertilization of female egg with male sperm is a highly controlled phenomenon as only one sperm out of millions in the ejaculated semen is capable of fertilizing the egg. Further once fertilized by a sperm, the zygote (fertilized egg) is inaccessible to another sperm. It is closed for ever. Evidently there is mechanism to guide sperm to the egg it has to fertilize. In other words, a sperm is programmed to fuse with certain egg and not at random.

The Quranic revelation is clear indication of the programmed biodiversification process taking place in human beings by which Allah creates diversity in human population as

He likes. Each human being represents a new biosoftware and a link in the biodiversification chain or the Adam-Eve lineage. The biosoftware of the individual also carries specific set of instructions for transmission to the next generation. In this way biodiversification process preserves the continuity and timeline of a common descent.

The essence of human biodiversification from a single (Adam's) *nafs* (Q. 4:1) is that the entire human attributes are biomemetically controlled by Allah. If you inherit the biomeme that creates the talent to sing, you become a singer; if you don't have that biomeme, you are not a singer. You cannot make yourself a singer. We (our phenotypes) are what Allah decides us to be. We are not what we wish to be. We also cannot choose our parents, place of birth, time of birth, year of birth, our children, our career, etc. No individual is responsible for his abilities and disabilities, his pluses and minuses. These are what Allah has given to him through the biosoftware he inherits. In spite of that, a person with some special ability boasts about it as if he is responsible for that. This is foolishness. We should not attribute development of any ability or otherwise to the individual. It is Allah Who creates those abilities and potentials in human beings and not the individuals. One should not feel superior or inferior to others in this regard. By creating large phenotypic (hardware) variability, Allah is testing individuals with wide-ranging physical and mental abilities. It is also demonstration of the potentials of human species. Further we should look at the phenotypic potentials of human beings as signs (*ayaat*) of Allah's power and wisdom (see chapter 13 for Allah's signs in detail). Allah says:

وَفِي الْأَرْضِ آيَاتٌ لِلْمُوقِيْنَ وَفِي أَنْفُسِكُمْ ۝ أَفَلَا تُبْصِرُوْنَ

51:20-21 On the earth are signs for the firm believers, and also in your own selves. Will you not then see?

وَفِي خَلْقِكُمْ وَمَا يُبْثِثُ مِنْ ذَائِتِ آيَاتٍ لِقَوْمٍ يُوْقِنُوْنَ

45:4 And there are signs for the firm believers in the creation of yourself and the organisms He disperses.

وَمِنْ آيَاتِهِ أَنْ خَلَقَ لَكُمْ مِنْ أَنفُسِكُمْ أَزْواجًا لِتَسْكُنُوا إِلَيْهَا وَجَعَلَ بَيْنَكُمْ مَوَدَّةً وَرَحْمَةً ۝
إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

30:21 And among His signs is the creation of your spouses from among yourselves so that you find solace with her. And He gave between you love and mercy. Verily in that are signs for those who reflect.

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَالْخَلَافُ الْسَّيِّئُمُ وَالْوَانِكُمْ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ
لِلْعَالَمِينَ

30:22 And among His signs is the creation of the skies and the earth, and the variations in your languages and your colours. Verily in that are signs for those with knowledge.

A priori knowledge and evolution of science and technology

Another event that took place after the creation of Adam is the uploading of knowledgebase in his biosystem. The Holy Quran narrates the story thus (emphasis in italics added).

وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيلًا ۝ قَالُوا أَجَعَلُ فِيهَا مَنْ يُفْسِدُ فِيهَا
وَيَسْفِدُ الدَّمَاءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۝ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ وَعَلَّمَ
آدَمَ الْأَنْسَاءَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَعَالَ أَنْبِيَاءُ بِإِسْمَاءٍ هُولَاءِ إِنْ كُنْتُمْ صَادِقِينَ
قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَمْتَنَا ۝ إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ قَالَ يَا آدُمَ أَنْبِيَاهُمْ
بِإِسْمَائِهِمْ ۝ فَلَمَّا أَنْبَاهُمْ بِإِسْمَائِهِمْ قَالَ أَمْ أَفْنِ لَكُمْ إِنِّي أَعْلَمُ غَيْبَ السَّمَاوَاتِ وَالْأَرْضِ
وَأَعْلَمُ مَا تُبَدِّلُونَ وَمَا كُنْتُمْ تَكْسِبُونَ

2:30-33 Behold! Your Lord said to the angels: I will create a vicegerent on the earth. They said: Will You place therein one who will make mischief therein and shed blood while we

celebrate Your praises and glorify Your holy (name)? He said: I know what you do not know. And *He taught Adam the names of all things*; then He placed them before the angels and said: Tell Me the names of these if you are right. They said: Glory to You, *of knowledge we have none except what You have taught us*. In truth it is You Who are perfect in knowledge and wisdom. He said: O Adam! Tell them their names. When he told them their names, God said: Did I not tell you that I know the secret of the sky and the earth, and I know what you reveal and what you conceal.

The verses reveal that the source of knowledge to both angel and human species is Allah. What Allah taught Adam constitutes the knowledge human species is entitled to get. The term “taught” may be interpreted as uploading knowledge in Adam’s biosystem. This forms the repertoire of every kind of knowledge including scientific and technological knowledge human species is entitled to get. At another place in the Quran, it is more explicitly stated that the quantum of knowledge communicated to human species is finite.

وَيَسْأَلُونَكَ عَنِ الرُّوحِ ۖ قُلِ الْرُّوحُ مِنْ أَمْرِ رَبِّيٍّ وَمَا أُوتِيْتُ مِنَ الْعِلْمِ إِلَّا قَلِيلًا
17:85 “...Of knowledge it is only a little that is communicated to you (O men!).”

Viewed from the divine angle, the knowledge gifted to us by Allah is qualitatively and quantitatively very little. The use of the phrase “names of things” in verses 2:30-33 is also suggestive of very little knowledge in the eyes of Allah. It is clear from the above verses that the source of knowledge is Allah. The knowledge Allah uploaded to Adam’s biosystem is the source of *a priori* knowledge or the knowledge one inherits at birth as distinct from that he gains from experience.

The knowledge gifted by Allah to Adam is transmitted down the germ line so that it reaches generations of mankind in a phased manner as programmed. This would mean besides

phenotypic characters human beings also receive knowledge at birth through germ line. Many philosophers have indicated the existence of *a priori* knowledge although its source has remained unknown. German philosopher Immanuel Kant proposed the *a priori* and *a posteriori* notions about knowledge. According to him, a proposition is knowable *a priori* if it is knowable independently of experience. A proposition is knowable *a posteriori* if it is knowable on the basis of experience [6]. Unlike the empiricists, Kant thinks that *a priori* knowledge is independent of the content of experience which is seated in one's cognitive faculties, not any particular experience. There has been a surge of interest in the proper explication of the notion of *a priori* [7]. It is knowledge gained deductively and not through empirical evidence. The knowledge of mathematics (as opposed to the knowledge created by mathematics) is *a priori*. Rationalists believe that there is *a priori* knowledge, whereas empiricists believe that all knowledge is ultimately derived from some kind of external experience. The Quranic message comes as confirmation of *a priori* proposition. It also reveals its source. Although the notions of *a priori* and *a posteriori* are very much alive in contemporary philosophy and science, there has been no systematic search to find out the source of *a priori* knowledge. Our experience tells that we can access information only if it is available in our memory. It is impossible for anyone to get new information through thought process if it is not available in his memory. The knowledge one brings with him at birth well before he experiences the outside world constitutes the *a priori* knowledge. The Quranic disclosure of the divine source of knowledge to human beings explains how we obtain knowledge of hitherto unknown things and phenomena. Advancement in science and technology as well as in other fields like arts, literature, etc., must be seen in this light as programmed release of knowledge by Allah. Scientists, technologists, novelists, poets, etc., are quite aware that scientific ideas or the subject matter to write as the case may be

flow into their minds at certain times of their life. They have no control over it.

The process of transmission of *a priori* knowledge can also be explained as biomimetic through germ line like the human biodiversification phenomenon. A computer or a robot can retrieve certain information only if that information is available in its memory. Likewise a human being can retrieve particular information only if it is available in his memory. Otherwise he cannot. For example only people who know your name, i.e., who have stored your name in their memories (*sadr*), can tell your name. This means only their minds can retrieve that information. To put it differently, even if the entire seven billion plus people now living in the world start thinking to find out your name, none will get it except those who know your name. That being the case how can anyone acquire new information about the universe or technology, if that information is not available in his memory? If a scientist wants to conduct an experiment, he should first get that idea. The idea may be what he derived from already available information in which case it is *a posteriori*. However on several occasions it can be new – not known yet. Idea or information of that kind cannot pop up on one's mind from thin air. It should have come from his memory. One strikes an idea when it is downloaded to his mind. (The reader may please note that the term “download” is also used in this book to mean the process of transmitting information stored in the memory (*sadr*) of an individual onto his mind (*qalb*) although the term is generally used in computer science to transfer files, programs, etc., to a computer from a server kept elsewhere). We call such events as intuition. We all experience this once in a while. Remember that our mind is constantly being bombarded with information (downloading process) we acquired from our experience (*a posteriori*) and also with new information (ideas), which we are not aware of until then. The new information also originates from our memory. It does not fall under the category of known (*a posteriori*) information which we store in our

memory. The new information arrived through germ line. The source of any information other than *a posteriori* is Adam's *nafs*. As the knowledge included in Adam's *nafs* is transmitted through germ line, its release to mankind in time and space depends on how it is programmed. Both biodiversification and transmission of *a priori* knowledge must be operating in tandem so that individuals with appropriate phenotypic attributes are created to receive certain knowledge. When certain knowledge reaches a zygote biomemetically through germ line, the individual developed from that zygote carries that knowledge. That knowledge gets stored in his memory during development. It will be downloaded onto his mind from the memory at the time stipulated in his biosoftware. Till then he will not be even aware of that knowledge. Once downloaded to the mind, it becomes a piece of known information and the individual can retrieve it from the memory any time he wants. Discovery of new information (knowledge) other than that is gained from experience happens in this way in every sphere of human activity as programmed by Allah in Adam's *nafs*. As the Quran puts it:

لِكُلِّ نَبِيٍّ مُّسْتَقْرٌ وَسَوْفَ تَعْلَمُونَ

6:67 For every message there is a pre-determined time and soon you will know it.

If the individual is not the person to release that knowledge, he will not have access to it. It will not get downloaded to his mind. He will remain unaware of that knowledge acting as mere vector to pass on that biomeme(s) to the next generation. Albert Einstein's miracle year came in 1905 when he was 26 years old and working as patent examiner in Bern, Switzerland, and *not as scientist working in a research institute or university*. He proposed that light, which in classical physics is a wave, could also be thought of as consisting of discrete bits of energy which he called quanta. The implied wave-particle duality of light became the cornerstone of the new quantum theory and this discovery earned him Nobel Prize. Einstein had

that information stored on his chromosomes right from the zygote stage. It reached his memory during development and got downloaded onto his mind at the time specified in his biosoftware – when he was 26 years old!

Another Quranic indication of the programmed release of knowledge is the inclusion of several verses of scientific merit in the Quran, which can be comprehended only with the help of scientific knowledge. The people of Prophet Muhammad's time would have understood those messages only in the literal sense and not as the people of modern era can comprehend them with the help of science. This means that Allah included those messages for the benefit of later generations of mankind when the required scientific knowledge is made available by Him (see chapter 4). Inclusion of such messages in the Quran is suggestive of the programmed future release of scientific knowledge relating to them through discoveries and inventions.

The timing of discoveries and inventions, and step by step upgradation of our knowledge is very much evident from the history of science. The discoveries did not happen in a random fashion. We find a sequence from less developed to more developed ones over time. The timelines of discoveries and inventions indicate that. This is illustrated with the example of superconductivity (Fig. 12.3). Superconductivity was discovered in 1911 by Kamerlingh Onnes. He found that mercury becomes superconducting at about 4 K. Since then, discoveries of superconducting materials with higher and higher transition temperatures (T_c) have been made [8, 9, 10, 11]. The world record of T_c of near 38°C (100 F or 311 K) as of 2013 is held by $\text{Tl}_5\text{Pb}_2\text{Ba}_2\text{SiCu}_8\text{O}_{16+}$ [8].

Many of the discoveries and inventions would also appear to us as ‘accidental’. That is, the discovery that happens unexpectedly when the scientist involved is not looking for it. This is suggestive of the programmed nature of release of knowledge through persons and at times pre-determined by

Allah. Louis Pasteur's discovery of cholera vaccine, Alexander Fleming's discovery of the first antibiotic penicillin, William Perkin's discovery of first artificial dye, Roy Plunket's discovery of Teflon, Friedrich August Kekule's discovery of the structure of benzene in a dream are, to name but a few, 'accidental' discoveries. In fact most of the major discoveries and inventions are 'accidental' ones. A couple of such discoveries are presented here in some detail for sample.

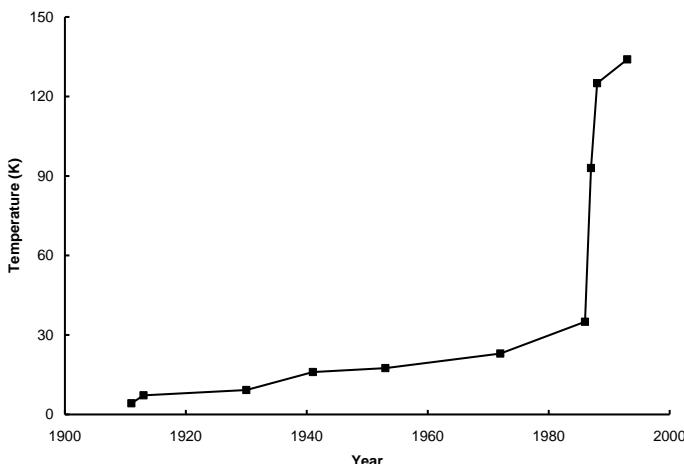


Fig. 12.3. Programmed release of knowledge about superconducting materials with higher transition temperatures

Source: <http://hoffman.physics.harvard.edu/research/SCintro.php> Accessed 11-12-06; http://www.sigmaaldrich.com/Area_of_Interest/Chemistry/Materials_Science/Energy_Source_Materials/Magnetic_Materials/Tutorial/Superconductivity.html Accessed 11-12-06; <http://hyperphysics.phy-astr.gsu.edu/hbase/solids/scex.html> Accessed 12-12-06; <http://superconductors.org/History.htm> Accessed 11-12-06

Kamerlingh Onnes's discovery of superconductivity mentioned above itself is one. Onnes studied the electrical behaviour of metals at low temperatures. Onnes cooled mercury to about 4 K when surprisingly, the metal became superconducting. This discovery earned him Nobel Prize in

1913. Superconductivity has been a Nobel-fertile field. The discoveries of superconducting substances in several cases have been serendipitous. In *Physics World* magazine of April 2001 issue, Colin Gough wrote about the discovery of superconducting magnesium diboride (MgB_2) thus: “One of the most bizarre aspects of this latest discovery is that magnesium diboride has been sitting on chemists’ shelves for almost 50 years. No one recognized that it was even an interesting metal – let alone a record-breaking superconductor.” [12].

One day Sir William Crookes (1832-1919) was passing a high voltage current through a discharge tube (later known as Crookes tube). He found that photographic plates kept nearby had become fogged. To prevent further fogging, he removed the box from there and kept it in another room. For some reason or the other, this strange phenomenon did not arouse the curiosity of that renowned scientist to probe further. Certainly, the time had not come for the discovery of X-rays or Crookes was not the person assigned that job by Allah. Shortly after that in 1885, Wilhem Konard Roentgen was using a Crookes tube for his experiments at the University of Wurzburg. He also happened to notice the same effect on photographic plates as Crookes observed. But this time the phenomenon aroused the curiosity of the observer. Roentgen preferred to cover the tube with black paper to prevent any light coming from it rather than removing the photographic plate from its place. To his great astonishment, the photographic plate still got fogged as mere covering of the tube was insufficient to prevent the rays coming from it. He thus discovered one of the most fascinating natural phenomena useful to mankind – the X-rays [13].

See what Anthony Hewish, the discoverer of the first pulsar in 1967 and Nobel laureate from Cambridge University, says about his discovery, “I only wish I could say that we were looking for pulsars at the time, but the truth is that my colleagues and I were studying quasars, the mysterious radio galaxies situated far beyond the confines of the Milky Way,

when the first pulsar unexpectedly placed its signature upon our records. By an extremely fortunate twist of fate, the new radio telescope that we were using was ideally suited to pick up the rapid succession of faint radio pulses that characterise these fascinating objects” [13].

What about the Nobel Prize itself? This prize was instituted by Alfred Nobel with the enormous fortune he could make from an accidental discovery. The Nobels were manufacturers of liquid nitroglycerine, a powerful explosive that is dangerous to handle. One day, Alfred Nobel, one of the sons, was lifting a bottle of nitroglycerine. As he did, he spilled some of it on a fine powder of kieselghur. Instead of exploding, it formed a paste with the powder. The mixture was still explosive but considerably safer to handle. Alfred Nobel thus discovered the dynamite that brought him a fortune.

The evolution of science and technology thus takes place as the result of programmed release of knowledge by Allah to the persons selected by Him. We call those persons scientists. What prophet is to religion Islam, scientist is to science. Divine information on language, new literary ideas, arts, etc., is also released through that process to the people selected for the purpose and those areas of human knowledge are also developed the same way. To put it differently, none will get information about a hitherto unknown phenomenon or new ideas unless God wills it (Q. 2:255).

وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمٍ إِلَّا مَا شَاءَ

2:255 “....Nor shall they obtain ought from His knowledge except as He wills....”

Here the statement “as Allah wills it” denotes “as Allah programmed it”. The world, however, do not accept the truth that the source of knowledge is Allah. They consider science and technology as well as other areas of knowledge as merely products of human intellect and effort. No person has any ability other than what Allah has given him. None can claim of

any ability as self-created. Any such claim or ego arises out of sheer ignorance of facts and consequent susceptibility to satanic influence. Unless one studies the Quran, he will not be able to understand and realize this. The Quran alone gives us information on the source of knowledge man receives. We are mere creations of Allah. We acquire our physical abilities (phenotype) from the divine program (biomemome) stored in a microscopic biochip (zygote). We also receive new knowledge that way from the zygote. We do not generate anything; the divine biosoftware does it.

An important purpose of giving us scientific and technological knowledge by Allah is to enable us to utilize the resources He has provided on Earth for our requirements (see chapter 13) during the test programme. Scientific knowledge also improves our comprehension of Allah's messages conveyed through the Quran (see chapter 4) and it makes us realize the infinite knowledge, wisdom and power of our Creator Allah.

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13. PLANET EARTH – HUMAN ROBOT TESTING LABORATORY

The universe we observe today is a fully developed system going through its post-development phase comparable to human life after attaining adulthood. The universe must be treated, studied, understood and taught as a system from the divine perspective. Through several verses the Quran reiterates that Allah created Earth and skies with purpose and also reveals what the purpose is (see chapter 5). The purpose of creating the universe is to provide infrastructure facility for human robot testing. The Quran invariably refers to the universe as “the skies and the earth” giving so much prominence to the earth because it is created by Allah as the laboratory facility to test human robots. The planet Earth is therefore so designed by Allah to serve as the habitat of man. The provisions given therein are to meet all the human requirements stipulated in the human biosoftware (Adam’s *nafs*). The present Earth is a simulated miniature replica of the final abode, Heaven, promised by Allah to the successful human robots.

The scientific community argues that the universe originated by chance with no purpose to serve. Earth is considered as just a planet like any other planet. Any view about the universe and human life disregarding divine purpose of creation will only prove to be erroneous and unscientific. Examination of the universe particularly Earth in the light of divine purpose will reveal close correspondence between the divine objective stated in the Quran and ground realities. This correspondence is yet another undeniable scientific proof of the divinity of the Quran and existence of God Almighty [1]. Such an examination will bring into focus how Earth and extraterrestrial space are designed and created to achieve the divine objective of testing human robots.

Design of Earth vis-à-vis the divine objective

Earth as the venue of human robot testing is central to the divine mission with His creations. A lot of information is now available on various aspects of Earth that will help understand the planet from the standpoint of divine mission [2, 3, 4]. NASA website also gives extensive information.

Studies in astronomy picked up momentum only during the last century. For centuries, astronomers believed that our galaxy, the Milky Way, made up the entire universe. Now we know ours is not the only galaxy; there are billions of galaxies spaced far between. The Quran reveals to us that the cosmic space surrounding Earth is organized into seven strata (see chapter 4). This aspect is yet to be studied however. Studies on the stratification of cosmos would certainly throw light on the organizational pattern and distribution of galaxies. A galaxy is a huge collection of millions of stars, dust and gas. The Milky Way is a spiral galaxy consisting of more than 100 billion stars. It is supposed to have come into existence ten to fifteen billion years ago. The earth is part of the solar system in the Milky Way. Solar system is situated on the outer edge of the Milky Way about 28000 light years from the galactic centre [2]. It takes 225 million years to complete one revolution around the Milky Way. Our sun, located centrally in the solar system, is a medium-sized yellow star. It makes up 99.8 per cent of the mass of the solar system. Its diameter is 1,390,000 km. Following the recent de-recognition of the planet Pluto, there are now eight planets belonging to the solar system. These are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Besides, it also has at least three dwarf planets (Pluto is now treated as a dwarf planet), more than 130 planetary satellites, a large number of asteroids (rocky objects in space ranging from a few meters wide to several hundred kilometers) and comets, and the interplanetary medium.

Earth is the fifth largest planet in the solar system which is situated third from the sun. Earth is supposed to have

come into existence 4.5 to 4.6 billion years ago. The earth weighs 5.972×10^{21} metric tons and orbits around the sun at an average distance of 149669180 km. While orbiting the sun the earth also rotates with a tilt of 23.5° on its axis. The duration to complete one full rotation (360°) is reckoned as one day. The rotational speed of the earth starts at zero at either geographic pole and increases toward the equator, where it reaches its maximum of about 1669 km per hour. It takes 365.2422 days to orbit the sun. This duration forms the basis of reckoning a year in Julian calendar as well as in Gregorian calendar. The earth pulls every object towards its centre. This gravitational force prevents every object from being thrown out into the space by its spin. Earth has a satellite, the moon. Its radius is 1738 km. The moon is at a distance of about 384000 km from the earth. The moon takes about 27.32 days to orbit Earth. Lunar calendar is based on cycles of the lunar phase. Hijri calendar followed by the Muslim community is a lunar calendar. As with the earth, the rotational speed starts at zero at either geographic pole and increases toward the lunar equator, where it reaches its maximum of about 16.7 km per hour. A characteristic feature of the components of the universe be it a satellite, planet, star or galaxy, is their constant motion in their prescribed orbits. This is highlighted in the Quran at several places.

اللَّهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِعَيْنِ عَمَدٍ تَرَوْنَهَا ۝ ۝ اسْتَوَى عَلَى الْعَرْشِ ۝ ۝ وَسَحَرَ الشَّمْسَ
وَالثَّمَرَ ۝ ۝ كُلُّ شَيْءٍ لِأَجْلٍ مُسَمًّى ۝ ۝ يُدَبِّرُ الْأَمْرَ يَعْصِلُ الْآيَاتِ لَعَلَّكُمْ بِإِلَقاءِ رَبْكُمْ
ثُوقُونَ

13:2 It is Allah who raised the skies without any visible pillars. He then established (Himself) on the Throne. He subjected the sun and the moon (to His law), all moving for a prescribed term. He regulates all affairs. He explains the signs in detail so that you firmly believe in the meeting with your Lord.

وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ ۖ كُلُّ ۖ فِي فَلَكٍ يَسْبِحُونَ

21:33 It is He Who created the night and the day, and the sun and the moon; all (the celestial bodies) swim along, each in its rounded course.

It is the orbital motion that creates day and night, seasons, tides etc. We take the durations of orbital motions of the earth and the moon as the basis for calendars. Allah has also prescribed twelve months for a year.

إِنَّ عِدَّةَ الشُّهُورِ عِنْدَ اللَّهِ أَطْنَا عَشَرَ شَهْرًا فِي كِتَابِ اللَّهِ يَوْمَ خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ
مِنْهَا أَرْبَعَةُ حُرُمَّةٌ ۚ ذَلِكَ الدِّينُ الْقَيْمُ ۗ فَلَا تَظْلِمُوا فِيهِنَّ أَنفُسَكُمْ ۗ وَقَاتِلُوا الْمُشْرِكِينَ
كَافَةً كَمَا يَقَاتِلُوكُمْ كَافَةً ۗ وَاعْمَلُوهُمْ بِمَا كُنْتُمْ مَعَ النَّاسِ

9:36 The number of months in the sight of Allah is twelve (in a year) as per Record of Allah on the day He created the skies and the earth. Of these four are (sacred) prohibited (for war); that is the straight religion. So do not wrong yourselves in them (i.e., during those months). And fight all the *mushriks* as they fight you all. And know that Allah is with the God-conscious.

Accordingly a year is formed of twelve months. We follow it by default as this information has been incorporated by Allah in Adam's *nafs* and it is from that source we get that information like we get knowledge of science and technology (discussed in chapter 12). Motion of those celestial bodies has been designed so by the Creator for the benefit of man. Through several verses in the Quran Allah describes and informs us the way He created the universal components to meet the purposes envisaged in His mission in accordance with human needs specified in Adam's *nafs*.

هُوَ الَّذِي جَعَلَ لَكُمُ اللَّيْلَ لِتَسْكُنُوا فِيهِ وَالنَّهَارَ مُبْصِرًا ۖ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِتَعْزَمُ
يَسْمَعُونَ

10:67 It is He who made for you the night to rest therein and the day to make things visible (to you). Verily in that are signs for those who listen (to His message).

وَمِنْ رَحْمَتِهِ جَعَلَ لَكُمُ اللَّيْلَ وَالنَّهَارَ لِتَسْكُنُوا فِيهِ وَلِتَبْتَغُوا مِنْ فَضْلِهِ وَأَعْلَمُكُمْ شَكُورُونَ

28:73 It is out of His mercy He made the night and day for you to rest therein (i.e., in the night) and to seek from His Grace (in the day) and that you may become grateful.

وَمِنْ آيَاتِهِ مَنَامُكُمْ بِاللَّيْلِ وَالنَّهَارِ وَابْيَاعُوكُمْ مِنْ فَضْلِهِ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَسْمَعُونَ

30:23 Among His signs are your sleep in the night and your seeking (livelihood) from His bounty during the day. Verily in that are signs for those who hear.

اللَّهُ الَّذِي جَعَلَ لَكُمُ اللَّيْلَ لِتَسْكُنُوا فِيهِ وَالنَّهَارَ مُبْصِرًا ۝ إِنَّ اللَّهَ لَذُو فَضْلٍ عَلَى النَّاسِ وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يَشْكُرُونَ

40:61 It is Allah Who made the night for you, that you may rest therein, and the days as that which helps (you) to see. Verily Allah is full of Grace and Bounty to men: yet most men give no thanks.

وَجَعَلْنَا اللَّيْلَ وَالنَّهَارَ آيَتَيْنِ ۝ فَمَحَّقْنَا آيَةَ اللَّيْلِ وَجَعَلْنَا آيَةَ النَّهَارِ مُبْصِرَةً لِتَبْتَغُوا فَضْلًا مِنْ رَبِّكُمْ وَلَتَعْلَمُوا عَدَدَ السَّنِينَ وَالْحِسَابَ ۝ وَكُلُّ شَيْءٍ فَصَلَنَاهُ تَفْصِيلًا

17:12 We have made the night and the day as two (of Our) signs: the sign of the night have We obscured, while the sign of the day We have made to enlighten you; that you may seek bounty from your Lord, and that you may know the number and count of the years. And We have explained everything in detail.

وَجَعَلَ فِيهَا رَوَاسِيَ مِنْ فَوْقَهَا وَبَارَكَ فِيهَا وَقَدَرَ فِيهَا أَقْوَاتَهَا فِي أَرْبَعَةِ أَيَّامٍ سَوَاءً لِلسَّائِلِينَ

41:10 He set on the (earth) firm mountains high above it, and bestowed blessings on the earth, and fixed therein its

nourishment in four Days in accordance with (the needs of) those who seek (sustenance).

وَسَخَّرَ لِكُمُ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالقَمَرَ ۖ وَالنُّجُومُ مُسَخَّرَاتٍ بِأَمْرِهِ ۝ إِنَّ فِي ذَلِكَ
لَا يَاتِ لِقَوْمٍ يَعْقِلُونَ وَمَا دَرَا لَكُمْ فِي الْأَرْضِ مُخْتَلِفًا أُولَاهُ ۝ إِنَّ فِي ذَلِكَ لَآيَةً لِقَوْمٍ
يَذَّكَّرُونَ

16:12-13 He has subjected the night and the day, and the sun and the moon to you. The stars are (also) subjected (to you) by His command. Verily in that are signs for people who apply their mind. And (He has subjected to you) the things which He created on this earth in diverse colours. Indeed in that are signs for people who think.

وَسَخَّرَ لِكُمُ الشَّمْسَ وَالقَمَرَ دَائِيْنَ ۝ وَسَخَّرَ لِكُمُ اللَّيْلَ وَالنَّهَارَ

14:33 And He had subjected to you the sun and the moon, both diligently pursuing their courses; and the night and the day has he (also) made subject to you.

وَلَقَدْ جَعَلْنَا فِي السَّمَاءِ بُرُوجًا وَرَتَّابَاهَا لِلنَّاظِرِينَ

15:16 We (i.e., Allah) have made constellations in the sky and made them beautiful to the beholders.

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالقَمَرَ نُورًا وَقَدْرَةً مَنَازِلٍ لِتَعْلَمُوا عَدَدَ السَّنَيْنِ وَالْحِسَابَ
مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحَقِّ ۝ يُفَصِّلُ الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ

10:5 It is He who made the sun to be (a source of) light and the moon a shining object and fixed for it (i.e., moon) residences (i.e., orbits) to enable you to know the number of years and for computation (of time). Allah had not created it except with truth. He (i.e., Allah) explains the signs for people who understand.

بَارَكَ الَّذِي جَعَلَ فِي السَّمَاءِ بُرُوجًا وَجَعَلَ فِيهَا سِرَاجًا وَقَمَرًا مُبِيرًا وَهُوَ الَّذِي جَعَلَ اللَّيْلَ
وَالنَّهَارَ خَلْفَهُ لِمَنْ أَرَادَ أَنْ يَذَّكَّرَ أَوْ أَرَادَ شُكُورًا

25:61-62 Blessed is He who made constellations in the skies and placed therein a lamp (i.e., the sun) and a shining moon. And it is He who made the night and the day to follow each other for those who would like to think or show gratitude (to Him).

تُولِّجُ اللَّيْلَ فِي النَّهَارِ وَتُولِّجُ النَّهَارَ فِي اللَّيْلِ ۖ وَتُخْرِجُ الْحَيَّ مِنَ الْمَيِّتِ وَتُخْرِجُ الْمَيِّتَ مِنَ الْحَيَّ ۖ وَتَرْزُقُ مِنْ تَشَاءُ بِعِنْدِ حِسَابٍ

3:27 You (Allah) cause the night enter into the day and You cause the day enter into the night. You bring the living out of the dead and You bring the dead out of the living. You give sustenance to whom You please without measure.

الْحَمْدُ لِلَّهِ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ وَجَعَلَ الظُّلْمَاتِ وَالنُّورَ ۖ ۖ إِنَّ الَّذِينَ كَفَرُوا
بِرَبِّهِمْ يَغْدِلُونَ

6:1 Praise be to Allah who created the skies and the earth, and made the darkness and the light. Yet those who reject Faith equate others with their Guardian-Lord.

قُلْ أَرَأَيْتُمْ إِنْ جَعَلَ اللَّهُ عَنِيكُمُ الَّيْلَ سَرْمَدًا إِلَى يَوْمِ الْقِيَامَةِ مَنْ إِلَّا اللَّهُ عَيْرُ اللَّهِ يَأْتِيْكُمْ
بِضَيَّاءٍ ۖ أَفَلَا تَسْمَعُونَ قُلْ أَرَأَيْتُمْ إِنْ جَعَلَ اللَّهُ عَنِيكُمُ النَّهَارَ سَرْمَدًا إِلَى يَوْمِ الْقِيَامَةِ مَنْ
إِلَّا اللَّهُ عَيْرُ اللَّهِ يَأْتِيْكُمْ بِكَلِيلٍ تَسْكُنُونَ فِيهِ ۖ أَفَلَا ثُبَصُرُونَ وَمَنْ رَحْمَتِهِ جَعَلَ لَكُمُ الَّيْلَ
وَالنَّهَارَ تَسْكُنُوا فِيهِ وَلَتَبْتَغُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ

28:71-73 Say: Do you not see that if Allah were to make the night persist for you till the Day of Judgment, which God other than Allah can bring you light? Will you not then listen? Say: Do you not see that if Allah were to make the day persist for you till the Day of Judgment, which God other than Allah can bring you night in which you can rest? Will you not then see? It is out of His mercy He made the night and day for you to rest therein (i.e., in the night) and to seek from His Grace (in the day) and that you may become grateful.

فَالْيَوْمُ الْإِصْبَاحِ وَجَعَلَ اللَّيْلَ سَكَنًا وَالشَّمْسَ وَالقَمَرَ حُسْبَانًا ۝ ۝ ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ
وَهُوَ الَّذِي جَعَلَ لَكُمُ النُّجُومَ لِتَهْتَدُوا بِهَا فِي ظُلُمَاتِ الْبَرِّ وَالْبَحْرِ ۝ قَدْ فَصَّلْنَا الْآيَاتِ
لِقَوْمٍ يَعْلَمُونَ

6:96-97 It is He who cleaves the dawn (from the dark). He made the night calm (for rest) and the sun and moon for reckoning (of time). That is the system ordained by (Allah), the Mighty, the Omniscient. It is He who made the stars for you to serve as guidance in the darkness of the land and the sea. We explain Our signs for people who know.

وَآتَيْنَاهُمُ الْأَرْضَ الْمَيِّنَةَ أَحْيَيْنَاهَا وَأَحْرَخْنَا مِنْهَا حَبًّا فَيْمَنَةً يَا كُلُونَ جَعَلْنَا فِيهَا حَجَّاتٍ مِنْ
نَخْيَلٍ وَأَعْنَابٍ وَفَجَرْنَا فِيهَا مِنَ الْعُيُونِ لِيَا كُلُونَ مِنْ ثَمَرٍ وَمَا عَمِلْتُهُ أَيْدِيهِمْ ۝ أَفَلَا يَشْكُرُونَ

36:33-35 The dead earth is a sign for them. We give life to it and We produce grain from it of which you eat. And We produce therein gardens of date palms and grapes and We cause springs to gush forth therein – for them to eat from its fruits. It was not their hands that made it. Will they not be then grateful (to Me)?

هُوَ الَّذِي يُسَيِّرُكُمْ فِي الْبَرِّ وَالْبَحْرِ ۝ حَتَّىٰ إِذَا كُنْتُمْ فِي الْفُلُكِ وَجَرِيَنَ بِهِمْ بِرِيحٍ طَيِّبَةٍ
وَفَرَحُوا بِهَا جَاءَتْهَا رِيحٌ عَاصِفٌ وَجَاءَهُمُ الْمَوْجُ مِنْ كُلِّ مَكَانٍ وَطَنُوا أَنَّهُمْ أَحِيطُ بِهِمْ ۝
دَعُوا اللَّهَ مُخْلِصِينَ لَهُ الدِّينَ لَغَنِيَّنَا مِنْ هَذِهِ لَنَجْوَنَّ مِنَ الشَّاكِرِينَ

10:22 It is He who enables you to travel in the land and sea. Thus when you are in ships and the ships are sailing with them under favourable wind (condition) and they are enjoying it, there comes a stormy wind producing waves from all sides and they think they have been surrounded, they pray to Allah sincerely offering (their) duty solely to Him: “If You save us from this, we shall truly be among those grateful (to You).”

وَمِنْ آيَاتِهِ الْجُهُورُ فِي الْبَحْرِ كَالْأَعْلَامِ إِنْ يَسَّأْ يُسْكِنُ الرِّيحَ فَيَظْلَلُنَّ رَوَاكِدَ عَلَىٰ ظَهَرِهِ ۝
إِنَّ فِي ذَلِكَ لَايَاتٍ لِكُلِّ صَبَارٍ شَكُورٍ أَوْ يُوبِقُهُنَّ بِمَا كَسَبُوا وَيَعْفُ عَنْ كَثِيرٍ

42:32-34 And among His signs are the huge mountain-like (ships) sailing in the sea. If He wants, He can make the wind still; then they (i.e., ships) would stay motionless on its (i.e., sea) surface. Verily in this are signs for the patient and the grateful ones. Or He can destroy them (i.e., ships) because of what they have earned (for their evil deeds); but many (of the sins) He forgives.

رَبُّكُمُ الَّذِي يُرْحِي لَكُمُ الْفُلُكَ فِي الْبَحْرِ لِتَبْغُوا مِنْ فَضْلِهِ إِنَّهُ كَانَ يُكْمِنُ رَحْمَةً

17:66 It is your Lord who makes the ship sail smoothly for you through the sea to enable you to seek of His bounty. Indeed He is most merciful to you.

These verses are self explanatory. Through these verses Allah draws particular attention to the orbital motion of Earth, the moon, etc., and several other phenomena like the wind and rain indicating that the natural phenomena and rules (in the abioprogram) are so prescribed by Allah as to benefit man. In other words, natural laws and characteristics (e.g., mass, gravitational force, speed of rotation, orbital motion, etc.) of Earth, the moon, the sun, etc. are so prescribed by Allah as to create day and night, phenomena like wind, rain, etc., in accordance with the human requirements stipulated in the microbioprogram of the species (Adam's *nafs*).

Being the centre for testing human robots, Allah has provided sustenance and resources on the earth for His test subjects enough to last the entire period of the test. Whatever there is on the earth, it is created for mankind.

قَالَ اهْبِطُوا بَعْصُكُمْ لِيَعْضِ عَدُوٌ وَلَكُمْ فِي الْأَرْضِ مُسْتَقْرٌ وَمَتَاعٌ إِلَى حِينٍ

7:24 "...On the earth will be your dwelling place and your means of livelihood for a term."

هُوَ الَّذِي جَعَلَ لَكُمُ الْأَرْضَ ذُلُوا فَامْشُوا فِي مَنَاكِهَا وَكُلُوا مِنْ رِزْقِهِ وَإِلَيْهِ النُّشُورُ

67:15 It is He Who has made the earth manageable for you, so traverse you through its tracts and enjoy of the sustenance which He furnishes: but to Him is the Resurrection.

هُوَ الَّذِي خَلَقَ لَكُمْ مَا فِي الْأَرْضِ جَيِّنًا ثُمَّ اسْتَوَى إِلَى السَّمَاءِ فَسَوَاهُنَّ سَبْعَ سَمَاوَاتٍ ۝
وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

2:29 “It is He Who created for you all things that are on the earth....”

وَهُوَ الَّذِي جَعَلَ لَكُمُ الَّيْلَ إِلَيْاسًا وَالنَّوْمَ سُبَابًا وَجَعَلَ النَّهَارَ نُشُورًا

25:47 And it is He who made the night a cloth and sleep a rest for you. And He made the day a wakening (to become active).

قُلِ الْحَمْدُ لِلَّهِ وَسَلَامٌ عَلَى عِبَادِهِ الَّذِينَ اصْطَفَاهُ ۝ أَللَّهُ خَيْرٌ أَمَّا يُشْرِكُونَ أَمَّنْ حَلَقَ السَّمَاوَاتِ وَالْأَرْضَ وَأَنْزَلَ لَكُمْ مِنَ السَّمَاءِ مَاءً فَأَنْبَثْنَا بِهِ حَدَائِقَ دَاثَ بَهْجَةً مَا كَانَ لَكُمْ أَنْ تُنْبِتُوا شَجَرَهَا ۝ أَللَّهُ مَعَ اللَّهِ ۝ بَلْ هُمْ قَوْمٌ يَعْدِلُونَ أَمَّنْ جَعَلَ الْأَرْضَ فَرَارًا وَجَعَلَ خِلَالَهَا أَنْهَارًا وَجَعَلَ لَهَا رَوَاسِيَ وَجَعَلَ بَيْنَ الْبَحْرَيْنِ حَاجِرًا ۝ أَللَّهُ مَعَ اللَّهِ ۝ بَلْ أَكْثَرُهُمْ لَا يَعْلَمُونَ أَمَّنْ يُحِيطُ بِالْمُضْطَرِّ إِذَا دَعَاهُ وَيَكْسِفُ السُّوءَ وَيَجْعَلُكُمْ خَلَفَاءَ الْأَرْضِ ۝ أَللَّهُ مَعَ اللَّهِ ۝ قَلِيلًا مَا تَدَكُّرُونَ أَمَّنْ يَهْدِي كُمْ فِي ظُلُمَاتِ الْبَرِّ وَالْبَحْرِ وَمَنْ يُرْسِلُ الرِّيَاحَ بُشِّرًا بَيْنَ يَدَيِ رَحْمَهِ ۝ أَللَّهُ مَعَ اللَّهِ ۝ تَعَالَى اللَّهُ عَمَّا يُشْرِكُونَ أَمَّنْ يَبْدِأُ الْخَلْقَ ثُمَّ يُعِيدهُ وَمَنْ يَرْفُعُكُمْ مِنَ السَّمَاءِ وَالْأَرْضِ ۝ أَللَّهُ مَعَ اللَّهِ ۝ قُلْ هَاتُوا بِرْهَانَكُمْ إِنْ كُنْتُمْ صَادِقِينَ قُلْ لَا يَعْلَمُ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ غَيْبٌ إِلَّا اللَّهُ ۝ وَمَا يَشْعُرُونَ أَيَّانَ يُبَعْثُوْنَ

27:59-65 Say: Praise be to Allah and peace on his servants (prophets) whom He has chosen. Is Allah better or what they associate (with Him)? Or (the One) who created the skies and the earth and who sent down rain for you from the sky? Then with it We produced beautiful gardens (i.e., crops). You cannot make the trees in them grow. Is there (another) God along with Allah? Nay, they are people who deviate (from truth). Or (the One) who made the earth a habitat, made rivers through it, set

thereon nails (i.e., mountains) and made a barrier between two seas? Is there (another) God along with Allah? Nay, most of them do not realize. Or (the One) who answers (the prayers of) the distressed when he calls upon Him and who removes evil and makes you representatives of the earth? Is there (another) God along with Allah? Little do they think. Or (the One) who guides you through the darkness of the land and the sea, and who sends the winds as good news before (the arrival of) His mercy (i.e., the rain)? Is there (another) God along with Allah? Exalted is Allah above what they associate with Him! Or (the One) who originates creation then repeats it, and who gives you sustenance from the sky and the earth? Is there (another) God along with Allah? Say: Bring your evidence, if you are telling the truth. Say: None in the skies or in the earth knows the unseen except Allah nor do they know when they shall be raised up (for Judgment).

اللَّهُ الَّذِي جَعَلَ لَكُمُ الْأَرْضَ قَرَارًا وَالسَّمَاءَ بَنَاءً وَصَوَرَكُمْ فَأَحْسَنَ صُورَكُمْ وَرَزَقَكُمْ مِنَ
الطَّيِّبَاتِ ۝ دُلُكُمُ اللَّهُ رَبُّكُمْ ۝ فَتَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ

40:64 It is Allah who made the earth habitat for you and the sky a canopy. He gave you shape and perfected your shape, and provided for you sustenance from good things. That is Allah, your Lord. Glory to Allah, the Lord of the worlds.

وَاللَّهُ جَعَلَ لَكُمُ الْأَرْضَ بِسَاطًا لِتَسْلُكُوا مِنْهَا سُبُلًا فِي حَاجَةٍ

71:19-20 And Allah made the earth a spread-out (i.e., as carpet) for you to enable you to go about the spacious paths.

أَمْ بَجْعَلَ الْأَرْضَ مِهَادًا وَالْجِبَالَ أُوتَادًا وَخَلَقْنَاكُمْ أَزْوَاجًا وَجَعَلْنَا نَوْمَكُمْ سُبَابًا وَجَعَلْنَا¹
اللَّيْلَ لِيَاسًا وَجَعَلْنَا النَّهَارَ مَعَاشًا وَبَنَيْنَا فَوْقَكُمْ سَبَعًا شِدَادًا وَجَعَلْنَا سِرَاجًا وَهَاجًَا وَأَنْزَلْنَا
مِنَ الْمُعْصِرَاتِ مَاءً تَجَاجًا لِتُخْرِجَ بِهِ حَبَّا وَبَيْنًا وَجَنَّاتٍ أَلْفَافًا

78:6-16 Have We not made the earth a vast expanse? And the mountains as pegs? And created you in pairs? And made your sleep rest? And made the night a cloth? And made the day (for

earning) livelihood? And built over you the powerful seven (skies)? And placed (therein) a blazing lamp? And sent down from the clouds water in abundance to produce with it cereals and (different) plants and gardens with luxuriant vegetation?

أَمْ بَخْلَلِ الْأَرْضَ كَفَنَا أَحْيَاءً وَأَمْوَالًا وَجَعَلْنَا فِيهَا رَوَاسِيَ شَامِخَاتٍ وَأَسْقَيْنَاكُمْ مَاءً فُرَّاتًا

77:25-27 Have We not made the earth a receptacle (for) the living and the dead, and made therein high mountains standing firm and gave you pure water?

إِنَّمَا أَشَدُّ خَلْقًا أَمِ السَّمَاءُ ۝ بَنَاهَا رَفِعَ سَمْكَهَا فَسَوَاهَا وَأَعْطَشَ لَيْلَهَا وَأَخْرَجَ ضُحَاهَا

وَالْأَرْضَ بَعْدَ ذَلِكَ دَحَاهَا أَخْرَجَ مِنْهَا مَاءَهَا وَمُرْغَاهَا وَاجْتَمَعَ أَرْسَاهَا مَتَاعًا لَكُمْ

وَلَا نَعِمْكُمْ

79:27-33 Is it you the more difficult to create or the sky? (Allah) had built it. He raised its canopy and then perfected it. He made its night dark and brought out its light (i.e., day). And after that He extended the earth (to a vast expanse). He brought out from it its water and its pasture. And He fixed the mountains firmly as resources for you and your cattle.

فَلَيَنْظُرُ الْإِنْسَانُ إِلَى طَعَامِهِ أَنَا صَبَبْنَا الْمَاءَ صَبَابًا شَقَقْنَا الْأَرْضَ شَقًا فَأَنْبَثْنَا فِيهَا حَبًّا

وَعِنْبًا وَفَصْبًا وَرَيْتُوْنَا وَخَلَالًا وَحَدَائِقَ عُلْبًا وَفَاكِهَةًا وَأَبَا مَتَاعًا لَكُمْ وَلَا نَعِمْكُمْ

80:24-32 Then let man look at his food, (and how We provide it): For that We pour forth water in abundance, and We split the earth in fragments, and produce therein corn, and Grapes and nutritious plants, and Olives and Dates, and enclosed Gardens, dense with lofty trees, and fruits and fodder for use and convenience to you and your cattle.

وَلَقَدْ مَكَنَّاكُمْ فِي الْأَرْضِ وَجَعَلْنَا لَكُمْ فِيهَا مَعَابِشٌ ۝ قَلِيلًا مَا تَشْكُرُونَ

7:10 It is We Who placed you with authority on the earth, and provided you therein with means for the fulfillment of your life: small are the thanks that you give.

وَمَا أُوتِيتُمْ مِنْ شَيْءٍ فَمَتَّعُوا الْحَيَاةَ الدُّنْيَا وَزِينُوهَا ۚ وَمَا عِنْدَ اللَّهِ خَيْرٌ وَأَيْقَنَى ۖ ۝ أَفَلَا تَعْقِلُونَ

28:60 The (material) things which you are given are but the conveniences of this life and the glitter thereof; but that which is with Allah is better and more enduring: will you not then be wise?

The most important message that emerges from these revelations is the anthropocentric orientation of the universal system. This is what is implied in Allah's declaration that He made everything for mankind. The centrality of human species in the divine scheme of things is thus quite obvious. Man is at the centre of all creations and it is for him Allah created everything else. Planet Earth, the habitat of man, which is the divine laboratory for human robot testing, assumes special significance in this respect. The position of Earth in the overall divine scheme cannot be overemphasized. This is very much reflected in the Quran. Allah gives particular emphasis to Earth in the Quran by distinguishing it from the rest of the universe. The infrastructure (physical universe) created for testing human species is invariably referred to in the Quran as 'skies and Earth' (see verses 11:7, 45:22 and others quoted earlier), which is suggestive of Earth's significance in the divine scheme.

Being the habitat of human race Earth has been created by Allah in accordance with requirements stipulated in human microbioprogram (Adam's *nafs*). This also implies that there is no other region in the universe that can serve as habitat for man. The rest of the universal components (e.g., large number of galaxies) or the 'skies' referred to in the Quran are more of a supporting system in the overall design. The sky has been made a canopy for the earth and beautiful to look at by adorning with stars.

The Quran speaks at length about the facilities, amenities and infrastructure provided in the test centre – the

planet Earth. Some resources have been mentioned in a few verses already quoted. The verses given below provide examples of physical resources, plant resources, animal resources and marine resources provided on Earth. The verses are self-explanatory. Through these verses Allah provides a glimpse of His organizational set up of Earth for the accomplishment of His mission. We have to look at every resource including those not mentioned in the Quran from this divine perspective.

a) Physical resources

الَّذِي جَعَلَ لَكُمُ الْأَرْضَ فِرَاشًا وَالسَّمَاءَ بَنَاءً وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ مِنَ
الشَّمْرَاتِ رِزْقًا لَكُمْ ۝ فَلَا يَجْعَلُوا لِلَّهِ أَنْدَادًا وَأَنْتُمْ تَعْلَمُونَ

2:22 (It is He) 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 to Allah when you know (the truth).

يَسْأَلُونَكَ عَنِ الْأَهْلَةِ ۝ قُلْ هِيَ مَوَاقِيتُ لِلنَّاسِ وَالْحَجَّ ۝ وَلَيْسَ الْبِرُّ بِإِنْ تَأْتُوا بِالْبِيُوتَ
مِنْ ظُهُورِهَا وَلِكُنَّ الْبِرُّ مِنِ التَّقْوَىٰ ۝ وَأَنْتُمُ الْبِيُوتَ مِنْ أَبْوَاهُكُمْ ۝ وَاتَّقُوا اللَّهَ لَعَلَّكُمْ
تُفْلِحُونَ

2:189 “They ask you concerning the new moons (lunar cycles). Say: They are indicators of time periods for mankind and for Hajj pilgrimage....”

وَالْفَقَاءُ فِي الْأَرْضِ رَوَاسِيٌّ أَنْ تَمِيدَ بِكُمْ وَأَنْهَارًا وَسُبُلًا لَعَلَّكُمْ تَهْتَدُونَ وَعَلَامَاتٍ
وَبِالنَّجْمِ هُمْ يَهْتَدُونَ

16:15-16 And He has set up on the earth mountains standing firm lest it (i.e., earth) should tilt with you; and (has also provided) rivers and roads that you may guide yourselves. And (many) landmarks, and by the stars they guide themselves.

وَجَعَلَ فِيهَا رَوَاسِيٌّ مِنْ فَوْقَهَا وَبِارَكَ فِيهَا وَقَدَرَ فِيهَا أَقْوَاتَهَا فِي أَرْبَعَةِ أَيَّامٍ سَوَاءً لِلسَّائِلِينَ

41:10 He set on the (earth), mountains standing firm, high above it, and bestowed blessings on the earth, and measure therein all things to give them nourishment in due proportion, in four Days, in accordance with (the needs of) those who seek (sustenance).

وَهُوَ الَّذِي مَدَ الْأَرْضَ وَجَعَلَ فِيهَا رَوَاسِيَ وَأَنْهَارًا ۝ وَمِنْ كُلِّ الشَّمَرَاتِ جَعَلَ فِيهَا رَوْحِينٍ
اثْنَيْنِ ۝ يَعْشِي اللَّيْلَ النَّهَارَ ۝ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

13:3 And it is He who spread out the earth and set thereon mountains standing firm and (flowing) rivers. And He made all kinds of fruits in two pairs. He draws the night as veil over the day. Verily in that are signs for those who think.

وَجَعَلْنَا فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمَيَّدَ كِيمٌ وَجَعَلْنَا فِيهَا فِحَاجًا سُبُّلًا لَعَلَّهُمْ يَهْتَدُونَ وَجَعَلْنَا[۝]
السَّمَاءَ سَعْفًا مَخْفُوظًا ۝ وَهُمْ عَنْ آيَاتِنَا مُعْرِضُونَ

21:31-32 And We have made mountains firmly fixed on the earth to prevent its tilting with them. And We have made therein broad tracks so that they find their way. And We have made the sky a well-guarded canopy. Yet, they turn away from its signs!

أَمْ تَرَ أَنَّ اللَّهَ أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَتُصْبِحُ الْأَرْضُ مُخْسَرَةً ۝ إِنَّ اللَّهَ لَطِيفٌ خَبِيرٌ

22:63 Do you not see that Allah sends down rain from the sky and the earth thus becomes green? Indeed Allah has deep knowledge and is well acquainted (with everything).

وَالْأَرْضَ مَدَذَنَاهَا وَأَنْقَبَنَا فِيهَا رَوَاسِيَ وَأَبْنَتَنَا فِيهَا مِنْ كُلِّ شَيْءٍ مَوْرِنَ وَجَعَلْنَا لَكُمْ فِيهَا
مَعَايِشَ وَمَنْ لَسْتُمْ لَهُ بِرَازِقِينَ وَإِنْ مِنْ شَيْءٍ إِلَّا عِنْدَنَا حَرَائِثُهُ وَمَا نُنْزَلُهُ إِلَّا بِقَدْرٍ مَعْلُومٍ
وَأَرْسَلْنَا الرِّيَاحَ لَوَاقِحَ فَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً فَأَسْقَيْنَا كُمُورَهُ وَمَا أَنْزَلْنَا لَهُ بِخَازِنَ

15:19-22 And the earth We have spread out (like a carpet); set thereon mountains firm and immovable; and produced therein all kinds of things in due balance. And We have provided therein means of subsistence,- for you and for those for whose sustenance you are not responsible. And there is not a thing but its (sources and) treasures (inexhaustible) are with Us; but We

only send down thereof in due and ascertainable measures. And We send the fecundating winds, then cause the rain to descend from the sky, therewith providing you with water (in abundance), though you are not the guardians of its stores.

هُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً ۖ لَكُمْ مِنْهُ شَرَابٌ وَمِنْهُ شَجَرٌ فِيهِ تُسْبِّحُونَ يُبَشِّرُ لَكُمْ
بِهِ الرِّزْقُ وَالرَّيْثُونَ وَالنَّخِيلَ وَالْأَعْنَابَ وَمِنْ كُلِّ الشَّمَرَاتِ ۖ إِنَّ فِي ذَلِكَ لَآيَةً لِقَوْمٍ يَتَفَكَّرُونَ

16:10-11 It is He who sends down rain from the sky for you, from it you drink and from it (you grow) the trees on which you graze (i.e., feed) your cattle. With it (i.e., rainwater) He produces for you crops, olives, date palms, grapes and every kind of fruit. Verily in this is a sign for those who think.

أَمْ تَرَ أَنَّ اللَّهَ يُرِيْجِي سَحَابًا ۗ ثُمَّ يُؤَلِّفُ بَيْنَهُ ۗ ثُمَّ يَجْعَلُهُ رِكَامًا فَتَرَى الْوَدْقَ يَنْجُحُ مِنْ حَلَالِهِ
وَيَئْرَلُ مِنَ السَّمَاءِ مِنْ جَبَائِلٍ فِيهَا مِنْ بَرِدٍ فَيُصِيبُ بِهِ مَنْ يَشَاءُ وَيَصْرِفُهُ عَنْ مَنْ يَشَاءُ ۖ
يَكَادُ سَنَا بَرْقَهُ يَدْهَبُ بِالْأَبْصَارِ

24:43 Have you not seen Allah driving the clouds gently, then unites them together, then makes them into a heap? Then you see rain coming out from their midst. And He sends down hail from the sky – from the mountain masses (of clouds) therein. He strikes with it whom He intends and He diverts it from whom He pleases. The vivid flash of its lightning almost blinds the eyes.

وَكَانُوا مِنْ ذَاهِبَةٍ لَا تَحْمِلُ رِزْقَهَا اللَّهُ يَرْزُقُهَا وَإِنَّا كُنَّا ۖ وَهُوَ السَّمِيعُ الْعَلِيمُ

29:60 So many are the creatures that do not carry their own sustenance! It is Allah who feeds them and you. And He hears and knows (all things).

أَمْ تَرَ أَنَّ اللَّهَ سَحَرَ لَكُمْ مَا فِي الْأَرْضِ وَالْفُلْكَ تَجْرِي فِي الْبَحْرِ بِأَمْرِهِ وَمُسْكُنُ السَّمَاءِ أَنَّ
تَقْعَ عَلَى الْأَرْضِ إِلَّا يَأْذِنُهُ ۖ إِنَّ اللَّهَ بِالنَّاسِ لَرَءُوفٌ رَّحِيمٌ

22:65 See you not that Allah has made subject to you all that is on the earth, and the ships that sail through the sea by His Command? He withholds the sky (rain) from failing on the

earth except by His leave: for Allah is Most Kind and Most Merciful to man.

اللَّهُ الَّذِي سَخَّرَ لَكُمُ الْبَحْرَ لِتَسْجُرِي الْفُلْكُ فِيهِ بِإِمْرِهِ وَلِتَبْتَغُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ
45:12 It is Allah Who has subjected the sea to you, that ships may sail through it by His command, that you may seek of his Bounty, and that you may be grateful.

اللَّهُ الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ مِنَ الشَّمْرَاتِ رِزْقًا
لَكُمْ ۖ وَسَخَّرَ لَكُمُ الْفُلْكَ لِتَسْجُرِي فِي الْبَحْرِ بِإِمْرِهِ ۖ وَسَخَّرَ لَكُمُ الْأَنْهَارَ وَسَخَّرَ لَكُمْ
الشَّمْسَ وَالْقَمَرَ ۗ وَسَخَّرَ لَكُمُ اللَّيْلَ وَالنَّهَارَ

14:32-33 It is Allah who created the skies and the earth and sent down rain from the skies and with it He produced fruits (i.e., crop produce) as food for you. And He subjected the ships to you so that they sail through the sea by His command and the rivers (also) He had subjected to you. And He subjected to you the sun and the moon both as regular (phenomena), and the night and the day (also) He had subjected to you.

وَلَقَدْ كَرِمْنَا بَنِي آدَمَ وَحَمَلْنَاهُمْ فِي الْبَرِّ وَالْبَحْرِ وَرَزَقْنَاهُمْ مِنَ الطَّيَّابَاتِ وَفَضَّلْنَاهُمْ عَلَىٰ كَثِيرٍ
مِمَّنْ خَلَقْنَا تَفْضِيلًا

17:70 We have honoured the children of Adam; provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favours, above a great part of our creation.

b) Plant resources

وَالْأَرْضَ وَضَعَهَا لِلْأَنَامِ فِيهَا فَاكِهَةٌ وَالنَّخْلُ ذَاتُ الْأَكْمَامِ وَالْحُبُّ ذُو الْعَصْبِ وَالرَّيْحَانُ
55:10-12 It is He Who has spread out the earth for (His) creatures: Therein is fruit and date-palms, producing spathes (enclosing dates); Also corn, with (its) leaves and stalk for fodder, and sweet-smelling plants. Then which of the favours of your Lord will you deny?

هُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً ۖ كُلُّ مِنْهُ شَرَابٌ وَمُنْهُ شَجَرٌ فِيهِ تُسْبِمُونَ يُبْشِّرُ لَكُمْ بِهِ الرَّزْعُ وَالرَّيْتُونَ وَالنَّخِيلَ وَالْأَعْنَابَ وَمِنْ كُلِّ النَّمَراتِ ۖ إِنَّ فِي ذَلِكَ لَا يَهُ لِقَوْمٍ يَتَكَبَّرُونَ

16:10-11 It is He who sends down rain from the sky: from it you drink, and out of it (grows) the vegetation on which you feed your cattle. With it He produces for you corn, olives, date-palms, grapes and every kind of fruit: verily in this is a sign for those who give thought.

أَلَمْ تَرَ أَنَّ اللَّهَ أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ ثَمَرَاتٍ مُخْتَلِفًا أَلْوَانُهَا ۚ وَمِنَ الْجِبَالِ جُدَدٌ بِيَضْ وَمُحْرَرٌ مُخْتَلِفٌ أَلْوَانُهَا وَغَرَابِيبُ سُودٌ

35:27 Do you not see that Allah sends down rain from the sky? Then We produce with it (i.e., rainwater) fruits of various colours. And in the mountains there are white and red paths of various hues and (also) intense black.

وَهُوَ الَّذِي يُرِسِّلُ الرِّبَاحَ بُشْرًا بَيْنَ يَدَيِ رَحْمَتِهِ ۖ حَتَّىٰ إِذَا أَقْلَتْ سَحَابًا ثِقَالًا سُقْنَاهَا لَيَلَدِي مَيَّتٍ فَأَنْزَلْنَا بِهِ الْمَاءَ فَأَخْرَجْنَا بِهِ مِنْ كُلِّ النَّمَراتِ ۖ كَذَلِكَ لَخْرُجُ الْمُؤْتَمَ لَعَلَّكُمْ تَذَكَّرُونَ

7:57 It is He who sends the winds as glad tidings ahead of His mercy (i.e., rain). Thus when they had carried heavy clouds, We drive them to a lifeless land; then We sent down rain with it and then We produce all kinds of fruits with that. Like that We will rise up the dead. You may think over (that).

وَهُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ حَضِيرًا لَخْرُجُ مِنْهُ حَبَّاً مُتَرَابًا وَمِنَ النَّخْلِ مِنْ طَلْعِهَا قِوَانٌ دَانِيَةٌ وَحَبَّاتٌ مِنْ أَعْنَابٍ وَالرَّيْتُونَ وَالرَّمَانَ مُسْتَشِّهَا وَغَيْرُ مُسْتَشِّهِ ۖ اطْلُرُوا إِلَيْ مَرِهِ إِذَا أَمْرَ وَيَسِعِهِ ۖ إِنَّ فِي ذَلِكُمْ لَا يَأْتِ لِقَوْمٍ يُؤْمِنُونَ

6:99 It is He who sends down rain from the skies. With it We germinate all kinds of (seeds); then We produce from that green (crops) from which We produce closely packed grains; and from the date palm – from its bunches – (We produce) clusters of dates hanging down; and (We produce) gardens of grapes, olives and pomegranates of similar and dissimilar

(varieties). Look at its fruit when it begins to form and when it ripens. Behold! In those things there are signs for the believing people.

وَنَزَّلْنَا مِنَ السَّمَاءِ مَاءً مُبَارَكًا فَأَتَيْنَا بِهِ جَنَّاتٍ وَحَبَّ الْحَصِيدِ وَالنَّخْلَ بَاسِقَاتٍ لَمَّا طَلَعَ
نَصِيدٌ رِزْقًا لِلْعِبَادِ ۖ وَأَحْيَيْنَا بِهِ بَلْدَةً مَيْتَانًا ۖ كَذِيلَكَ الْحُرُوجُ

50:9-11 And We send down from the sky rain as blessing and We produce with it gardens and harvestable grains. And tall date palms with closely packed bunches as sustenance for (My) servants. And with it We give life to a dead land. So will be the resurrection.

وَهُوَ الَّذِي أَنْشَأَ جَنَّاتٍ مَعْرُوفَاتٍ وَغَيْرَ مَعْرُوفَاتٍ وَالنَّخْلَ وَالرَّزْعَ مُخْتَلِفًا أُكُلُهُ وَالرَّيْثُونَ
وَالرَّمَّانَ مُتَشَابِهًا وَغَيْرَ مُتَشَابِهٍ ۗ كُلُوا مِنْ مَرِهِ إِذَا أَمْرَ وَأَتُوا حَقَّهُ يَوْمَ حَصَادِهِ ۖ وَلَا
تُسْرِفُوا ۖ إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ

6:141 It is He who makes gardens with or without trellises (i.e., with or without vines and creepers), and dates and crops with different kinds of fruits, and olives and pomegranates of similar and different varieties. Eat their fruits when they bear fruit, and give its dues (i.e., debts, etc.) on the day of its harvest, and do not waste (by extravagance). Verily He does not like extravagant people.

وَفِي الْأَرْضِ قِطَعٌ مُتَحَاوِرَاتٌ وَجَنَّاتٌ مِنْ أَعْنَابٍ وَرَزْعٍ وَنَخِيلٍ صِنْوَانٌ وَغَيْرُ صِنْوَانٍ يُسْقَى
إِمَاءً وَاحِدًا وَتَنْضَلُ بَعْضَهَا عَلَى بَعْضٍ فِي الْأُكْلِ ۗ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَعْقُلُونَ

13:4 And on the earth are tracts situated side by side, and gardens of grapes and crop fields, and date palms with multiple shoots or otherwise – (all) watered with the same water. Yet We make some better than the others to eat. Verily in that are signs for those who understand.

الَّذِي جَعَلَ لَكُمُ الْأَرْضَ مَهْدًا وَسَلَكَ لَكُمْ فِيهَا سُبُّلًا وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ
أَرْوَاجًا مِنْ نَبَاتٍ شَتَّى كُلُوا وَارْغِوا أَعْمَاقُكُمْ ۖ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِأُولَئِكَ الْمُنَّاهِ

20:53-54 (Allah) Who made the earth like a spread out carpet for you, provided therein routes, and sent down water from the sky. With it We produced pairs of diverse plants. You eat and let your cattle graze. Verily, in that are signs for intelligent people.

c) Animal resources

أَوْلَمْ يَرَوْا أَنَّا خَلَقْنَا لَهُمْ مِمَّا عَيْلَتْ أَيْدِينَا أَعْمَالًا فَهُمْ لَهَا مَالِكُونَ وَذَلِكُنَا هُمْ فَمِنْهَا رُكُوبُهُمْ وَمِنْهَا يَأْكُلُونَ وَلَهُمْ فِيهَا مَنَافِعٌ وَمَسَارِبٌ ۝ أَفَلَا يَشْكُرُونَ

36:71-73 See they not that it is We Who have created for them - among the things which Our hands have fashioned - cattle, which are under their dominion? - And that We have subjected them to their (use)? Of them some do carry them and some they eat: And they have (other) profits from them (besides), and they get (milk) to drink. Will they not then be grateful?

وَاللَّهُ جَعَلَ لَكُمْ مِنْ بَيْرَتِكُمْ سَكَنًا وَجَعَلَ لَكُمْ مِنْ جُلُودِ الْأَنْعَامِ بَيْوَانًا تَسْتَحْفُوهَا يَوْمَ طَعْنِكُمْ وَيَوْمَ إِقَامَتِكُمْ ۝ وَمِنْ أَصْوافِهَا وَأَوْبَارِهَا وَأَشْعَارِهَا أَنَّا وَمَتَاعًا إِلَى حِينِ

16:80 It is Allah Who made your habitations homes of rest and quiet for you; and made for you, out of the skins of animals, (tents for) dwellings, which you find so light (and handy) when you travel and when you stop (in your travels); and out of their wool, and their soft fibres (between wool and hair), and their hair, rich stuff and articles of convenience (to serve you) for a time.

اللَّهُ الَّذِي جَعَلَ لَكُمُ الْأَنْعَامَ لِتَرْكِبُوا مِنْهَا وَمِنْهَا تَأْكُلُونَ وَلَكُمْ فِيهَا مَنَافِعٌ وَلِتَبْلُغُوا عَيْنَاهَا حَاجَةً فِي صُدُورِكُمْ وَعَيْنَاهَا وَعَلَى الْفُلْكِ تُخْمَلُونَ

40:79-80 It is Allah Who made cattle for you, that you may use some for riding and some for food; And there are (other) advantages in them for you (besides); that you may through them attain to any need (there may be) in your hearts; and on them and on ships you are carried.

وَالْأَنْعَامَ حَلَمَهَا ۝ لِكُمْ فِيهَا دِفْءٌ وَمَنَافِعٌ وَمِنْهَا تَأْكُلُونَ وَلِكُمْ فِيهَا جَمَالٌ حِينَ تُرْبِيُّونَ
وَحِينَ تَسْرُحُونَ وَتَحِيلُّ أَثْقَالَكُمْ إِلَى بَلَدٍ لَمْ تَكُونُوا بِالغَيْرِ إِلَّا بِشَقِّ الْأَنْفُسِ ۝ إِنَّ رَبَّكُمْ
لَرَءُوفٌ رَّحِيمٌ وَالْحَمْيَانَ وَالْبَيْعَالَ وَالْحَمِيرَ لِتَرْكِبُوهَا وَزِيَّةً ۝ وَيَخْلُقُ مَا لَا تَعْلَمُونَ

16:5-8 And He created cattle. You have in them warmth and numerous benefits and you eat from them (i.e., meat). And you find beauty in them while you take them to rest and while you leave them for grazing. And they carry your heavy loads to countries where you cannot (otherwise) reach except with (considerable) physical strain. Your Lord is indeed Most Kind, Most Merciful. And (He created) horses, mules and donkeys for you to ride and for flaunting. And He has created (other) things of which you have no knowledge.

وَمِنَ الْأَنْعَامَ حَمَوْلَةً وَفَرْشًا ۝ كُلُّوا مِمَّا رَزَقَكُمُ اللَّهُ وَلَا تَتَّبِعُوا خُطُواتِ الشَّيْطَانِ ۝ إِنَّهُ لَكُمْ
عَدُوٌّ مُّبِينٌ

6:142 And among cattle are some for carrying burden and some small. Eat what Allah has provided for you and do not follow the footsteps of the Satan. Verily he is an avowed enemy to you.

وَإِنَّ لِكُمْ فِي الْأَنْعَامِ لِعِبْرَةً ۝ سُسَقِيْكُمْ مِمَّا فِي بُطُونِهَا وَلِكُمْ فِيهَا مَنَافِعٌ كَثِيرَةٌ وَمِنْهَا
تَأْكُلُونَ وَعَلَيْهَا وَعَلَى الْفُلْكِ تُحَمَّلُونَ

23:21-22 And in cattle you have a lesson. From their bellies We produce (milk) for you to drink. There are in them numerous (other) benefits for you and you (also) eat them. And you are carried on them as well as on ships (for journey).

وَالَّذِي خَلَقَ الْأَزْوَاجَ كُلَّهَا وَجَعَلَ لَكُمْ مِنَ الْفُلْكِ وَالْأَنْعَامَ مَا تَرْكَبُونَ يَسْتَنْتَوْا عَلَى طُفُورِهِ
ثُمَّ تَدْكُرُوا نِعْمَةَ رَبِّكُمْ إِذَا اسْتَوْبَثْمُ عَلَيْهِ وَقَنُولُوا سُبْحَانَ الَّذِي سَخَّرَ لَنَا هُذَا وَمَا كُنَّا لَهُ
مُقْرِنِينَ

43:12-13 (The One) who created in pairs all things and made for you ships and cattle on which you ride to enable you to sit on its back and to remember the favour of your Lord after

sitting on it and say, “Glory to Him who subjected it to us. And we could not have tamed it (by ourselves).”

It is pertinent to note that these verses make it clear that animals are created for meeting the varied needs and requirements of human race. That is why the animals are subjected to us, which means that Allah has designed the biosoftware of the animals in such a way to make them subservient to us. Otherwise we will not be able to even tame them (Q. 43:12-13).

d) Marine resources

وَهُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْمًا طَرِيرًا وَتَسْتَخْرُجُوا مِنْهُ حِلْيَةً تَأْبِسُوهَا وَتَرِزِّي
الْفُلْكَ مَوَاحِرَ فِيهِ وَلَبَيْتَعُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ

16:14 It is He Who has made the sea subject, that you may eat thereof flesh that is fresh and tender, and that you may extract therefrom ornaments to wear; and you see the ships therein that plough the waves, that you may seek (thus) of the bounty of Allah and that you may be grateful.

وَمَا يَسْنَوِي الْبَحْرَانِ هَذَا عَذْبٌ فُرَاتٌ سَائِقٌ شَرَابَةً وَهَذَا مُلْحٌ أَجَاجٌ ۝ وَمِنْ كُلٌّ
تَأْكُلُونَ لَحْمًا طَرِيرًا وَتَسْتَخْرُجُونَ حِلْيَةً تَأْبِسُوهَا ۝ وَتَرِزِّي الْفُلْكَ فِيهِ مَوَاحِرَ لَبَيْتَعُوا مِنْ
فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ

35:12 The two seas are not alike; one is sweet, pure and pleasant to drink, and the other, saline and bitter. Yet from all of them you eat fresh meat and you extract ornaments to wear; and you see the ships ploughing through them to enable you to seek from His bounty and that you may become grateful.

Through these and many other verses, the Quran enumerates so many kinds of resources and natural mechanisms (e.g., rain, wind, sailing of ships, etc.) that are provided for the benefit of man during the test period on the earth.

e) Other favours

One of the many unique characteristics of man is his shyness for nakedness. Allah gave clothing to cover the nudity and as an adornment and protection from heat, made spouses from among ourselves, gave homes, children and grandchildren from our spouses. Allah made our homes comfortable abode for us. And He made cattle skins suitable for making tents, which is light and handy while travelling and camping. From their wool, their soft fibres and their hair, we make useful things (like warm clothing) and devices.

يَا بَنِي آدَمَ قَدْ أَنْزَلْنَا عَلَيْكُمْ لِيَنَاسًا مُّوَارِي سُوقَاتُكُمْ وَرِيشًا ۝ وَبِنَاسٍ التَّقْوَىٰ ذَلِكَ خَيْرٌ ۝
ذَلِكَ مِنْ آيَاتِ اللَّهِ لَعَلَّهُمْ يَذَكَّرُونَ

7:26 O children of Adam (i.e., mankind)! We have sent down to you clothing to cover your nudity and as an adornment. But the fabric of God-consciousness (i.e., *taqwa*) is the best. That is among the signs of Allah for them to ponder over.

وَاللَّهُ جَعَلَ لَكُمْ مِنْ بَيْوَتِكُمْ سَكَنًا وَجَعَلَ لَكُمْ مِنْ جُلُودِ الْأَنْعَامِ بُيُوتًا تَسْتَخْفُوْهَا يَوْمَ
ظَغْنِيْكُمْ وَيَوْمَ إِقَامَتِكُمْ ۝ وَمِنْ أَصْوَافِهَا وَأَوْبَارِهَا وَأَشْعَارِهَا أَنَّا نَوَّبَنَا إِلَيْ حِينٍ وَاللَّهُ
جَعَلَ لَكُمْ مِمَّا خَلَقَ ظَلَالًا وَجَعَلَ لَكُمْ مِنَ الْجَنِّيَالِ أَكْنَانًا وَجَعَلَ لَكُمْ سَرَابِيلَ تَقْيِيْكُمُ الْحَرَّ
وَسَرَابِيلَ تَقْيِيْكُمْ بِأَسْكُنْمَ ۝ كَذَلِكَ يُئْمِنُ بِعَمَّةَ عَيَّيْكُمْ لَعَلَّكُمْ تُسْلِمُونَ

16:80-81 Allah made your homes an abode for you. And He made for you houses (tents) from cattle skins, which you find so light (and handy) while traveling and while camping; and from their wool, their soft fibres and their hair, (He made for you) devices and useful articles (lasting) for a period. Allah made shade for you from things He created and He made for you places of refuge in the mountains; He made for you garments to protect you from heat, and clothes to protect you from severity (of battle). Thus He completes His favours for you that you may submit to His will (in Islam).

All these are Allah's favours and blessings to human beings undergoing the divine test in this laboratory - Earth. Apart from that, these are all signs (*ayaat*) of Allah's power and wisdom. This is explicitly mentioned in many of the verses quoted above.

Evaluation of the laboratory infrastructure vis-à-vis the divine purpose

An effective method of ascertaining the scientific validity of the Quranic revelation of the purpose of creation of the universe as infrastructure for testing human beings is through evaluation of the created system from this teleological angle. Such an analysis is attempted here in the light of the verses quoted above.

Total area of the earth is 510.072 million km² of which land is 148.94 million km² (29.2%) and water 361.132 million km² (70.8%) [5]. Natural resources may be either biotic (living) or abiotic (non-living). They are materials essential or useful to man. These include land, air, water, plants, animals, fish, birds, microorganisms, forests, wildlife, minerals, natural gas, petroleum, coal, etc. The list is so long. Natural resources are classified under renewable, flow, and non-renewable groups. Renewable resources are water, plants, animals, etc. Wind, solar radiation, etc., are treated as flow renewable resources as they do not require regeneration. Non-renewable resources are finite and their supply is limited. Coal, petroleum, mineral deposits come under this category.

The availability of natural resources as per the Quran is guaranteed till the end of the divine test programme (Q. 7:24 quoted earlier). That is when the universe will end. The finite nature of the resources and their limited supply are a fact. For instance, the reserve of natural gas at the end of 2005 is estimated to be around 179,831,967 million m³ [6], that of oil is 1200700 million barrels [5] and that of coal is 909,064 million tons [7]. There are over 450 kinds of minerals provided

by Allah on the earth. Millions of biological species are also available. All the biological organisms are not used directly by man. Apart from being food, the bioresources cater to other human needs as well – ranging from ornament to experimental material. Statistics also shows world's annual wood production (timber-equivalent) is 3.4 billion m³, meat production is 220 million tons, and marine fish catch is 90 million tons [8] to mention but a few. The earth is thus a giant storehouse of a wide variety of supplies in accordance with human requirements to last a pre-determined period.

Since natural resources are created by Allah for the exclusive use of man, their nature, distribution and availability must correspond to human needs and requirements. And we find this is true. This is discernible from the relative availabilities of resources that are required by human beings in huge amounts (e.g., water) and that required in small quantities (e.g., platinum, gold, etc.). Several mechanisms are also in operation to ensure their availability in sufficient quantities. Renewal through recycling and regeneration is adopted by the Creator to replenish the supply of high-demand resources. Water, plants, animals, etc. come under this category. Besides the sun, Allah has also provided other energy sources to suit other requirements of human beings. Petroleum, coal and nuclear sources for energy generation belong to this list. Studies of the relative availability of the resources vis-à-vis human needs will bring out clearly the natural scenario of the supply-demand equation. The outcome of such studies will certainly make people think and understand the purpose of Allah's creations in the light of the Quran. It will also enable us to discover the truth about the universe and redefine our priorities in life.

The Quranic revelation that everything on Earth is created for man may be called into question on the ground that other species also utilize the resources. We think that natural resources are provided for all the organisms and not

exclusively for mankind. It is in a way correct. It is however significant to note that although there are millions of other species inhabiting the earth, the Quran does not mention about them as beneficiaries of the natural resources because they also form resources created for man. This is what we can understand from the verses on natural resources quoted above. Their presence on Earth should be seen that way. These organic beings are renewable resources sustained by Allah. Consequently, we find they require and consume only non-renewable resources for their sustenance. This can be explained as follows. Over two million biological species are catalogued and several million others are supposed to inhabit this planet. Of these, man alone has the natural tendency (i.e., prescribed in the biosoftware) to exploit the non-renewable resources. No other species has. They consume only the renewable resources. This propensity is an instinct, a default character. That is, the microbioprograms of other species stipulate only renewable resources for them. They do not deplete any resource they consume.

Further if we examine the requirements and behaviour of other organisms, it will be evident that they use the renewable resources as such for every purpose. For example they eat whatever nature provides. A bird builds its nest utilizing certain materials available in nature. Likewise every requirement of these species is met directly from what is provided in nature. On the other hand, humans do not utilize the natural produce including food as such like other organisms. To man nature only provides raw materials from which he produces things using appropriate technologies. Human requirements are stipulated in the biosoftware that way. Excepting perhaps some fruits and water, every item of food we eat is processed one. Nature only provides the raw materials – inestimably diverse plants and animals. We utilize them to make inconceivably large number of food items with varying tastes. We change the natural form into something different by adopting certain technologies (e.g., cooking, cooling, mixing,

etc.) to suit our tastes stipulated in the biosoftware. The range in taste is so large. Only human species has such wide range in sensory perception. This is true not only for food but also for every other material requirement like house building, transport, and so on. This would mean that we need a wide range of technological know-how for utilization of natural resources as prescribed in our biosoftware. This knowledge is science and technology, which Allah provides through biomimetic transmission via germline (see chapter 12).

The Quran enumerates so many resources and natural mechanisms (e.g., the sun, rain, wind, etc.) that are so complicated and awe-inspiring to human intellect. A couple of examples are given here. Consider the sun, the source of energy to Earth, and water, another life-sustaining requirement. Let us see how their supplies are maintained.

The sun, which Allah describes as lamp (Q. 71:16 quoted above) is the primary source of energy required for sustaining life on Earth (see also chapter 4). The temperature at sun's surface is around 5800 K while at the core it may reach as high as 15,600,000 K. The sun is presently composed of 70% hydrogen and 28% helium and the rest 2% is made up of mainly metals. The nuclear fusion going on in the core converts hydrogen into helium and therefore, with time the composition of the sun changes with the depletion of hydrogen. This nuclear reaction generates immense energy (see chapter 4 for the nuclear reactions going on in the sun). The sun's energy output is 386 billion billion megawatts per second for which 700,000,000 tons of hydrogen are converted to about 695,000,000 tons of helium. The energy is produced as gamma radiation which while travelling from the core towards the surface gets continuously absorbed and re-emitted in longer wavelength region so that by the time it reaches the surface it will be primarily visible light. This is how Allah created the sun to serve as the primary source of energy to sustain life on the earth, the human robot testing centre. However solar energy

is not directly accessible to all organisms on the earth. Allah has created plants giving ability to harness the solar energy and convert it to chemical energy through photosynthetic process. The plants thus serve as the primary energy (food) source in the bioworld. Some animals also serve as food source for other animals. In addition to plants, animals also form food source to man.

The mechanisms involved in worldwide circulation and distribution of water through hydrologic cycle indicates how intricate the divine abioprogram is on a global scale.

وَأَرْسَلْنَا الرِّيَاحَ لَوَاقِحَ فَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً فَأَسْقَيْنَا كُمُودًا وَمَا أَنْتُمْ لَهُ بِخَازِنٍ

15:22 And We send the fecundating winds, then cause the rain to descend from the sky, therewith providing you with water, though you are not the guardians of its stores.

وَاللَّهُ الَّذِي أَرْسَلَ الرِّيَاحَ فَتُثْبِرُ سَحَابًا فَسُقْنَاهُ إِلَى بَلْدٍ مَيِّتٍ فَأَحْيَنَا بِهِ الْأَرْضَ بَعْدَ مَوْتِهَا
كَذَلِكَ النُّشُورُ

35:9 “It is Allah Who sends forth the winds, so that they raise up the clouds and We drive them to a land that is dead, and revive the earth therewith after its death...”

وَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً يَعْدِرُ فَأَسْكَنَاهُ فِي الْأَرْضِ ۖ وَإِنَّا عَلَىٰ ذَهَابِهِ لَقَادِرُونَ فَأَنْشَأْنَا
لَكُمْ بِهِ حَيَاتٍ مِنْ تَحْيِيلٍ وَأَغْنَاهُ لَكُمْ فِيهَا فَوَاكِهٌ كَثِيرٌ وَمِنْهَا تَأْكُلُونَ

23:18-19 And We send down water from the sky according to certain measure and We store it in the earth. And We certainly are able to drain it off. With it We produced for you gardens of date palms and grapes. You have plenty of fruits in them and you are eating them.

أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَسَالَتْ أَوْدِيَةٌ بِقَدَرِهَا فَاحْتَمَلَ السَّيْلُ زَيْدًا رَايِبًا ۚ وَمَمَّا يُوقَدُونَ
عَلَيْهِ فِي الْأَرْضِ ابْتِغَاءً حِلْيَةٍ أَوْ مَتَاعٍ زَيْدٌ مِثْلُهُ ۚ كَذَلِكَ يَضْرِبُ اللَّهُ الْحَقَّ وَالْبَاطِلَنَ ۚ فَأَمَّا

الَّذِي أَنْذَلَ مِنَ السَّمَاوَاتِ مَاءً فَجَاءُكُمْ مِنْ كُلِّ السَّمَاوَاتِ
وَأَمَّا مَا يَنْفَعُ النَّاسَ فَيَمْكُثُ فِي الْأَرْضِ
كَذَلِكَ يَصْرِيبُ اللَّهُ
الْأَمْمَانَ

13:17 He sent down water from the skies; then it flowed along the valleys according to its measure. Then that stream carried foam (floating) on the surface. There is similar foam (scum) on (metals) which they smelt in the fire to make ornaments or utensils. Thus Allah explains the true and the false. While the foam goes as waste, while that (i.e., water) which is useful to mankind remains in the earth. Thus Allah sets forth parables.

About 70% of the earth's surface is covered with water although we can see only a very small portion of it in circulation. The oceans store 97.5% of the earth's water, land contains 2.4% and the atmosphere holds less than 0.001% as water vapour. Of all the water that is present on the earth, only 2.5% is fresh water; the rest is salty. (In all these proportions, we can see Allah's planning and strategy). Most of the fresh water remains frozen in icecaps, present as soil moisture or inaccessible in deep underground aquifers, leaving less than 1% accessible for use. The annual precipitation (Table 13.1) for the earth is more than 30 times the atmosphere's total capacity to hold water indicating rapid recycling of water between the earth's surface and atmosphere [14].

The process of hydrologic cycle (Fig. 13.1) is responsible for circulation and conservation of the earth's water [15, 16, 17]. The hydrologic cycle begins with the evaporation of water from the surface of the ocean. As moist air is lifted it cools and water vapour condenses to form clouds. One would certainly have expected that water would remain as vapour as it goes up and it would continue to go higher and higher in the sky. But nature has the mechanism to prevent it from going up beyond certain altitudes by transforming it into clouds. These clouds literally serve as the mobile overhead reservoirs of water that can be dispatched to any point on the earth through the control of the wind. Such controlling

mechanism has been indicated in the Quranic verses 15:22 and 35:9 given above.

Table 13.1 Earth's annual water budget

Type/process	Oceans	Land	Atmosphere
Reserves (10^{15} km 3)	1350	33.6	0.013
Precipitation received (10^{12} km 3 y $^{-1}$)	324	99	
Evaporation/ transpiration (10^{12} km 3 y $^{-1}$)	361	62	

Source: <http://ww2010.atmos.uiuc.edu/Gh/guides/mtr/hyd/bdgt.rxml> Accessed July 4, 2013

This is indeed a very complex natural phenomenon when we consider the quantum of water involved in the global transport and circulation. Once the water reaches the ground as rain, two processes occur: a) some of the water may evaporate back into the atmosphere and b) some of the water may penetrate the surface and become groundwater. Groundwater either seeps its way into oceans, rivers, and streams, or is released back into the atmosphere through transpiration (via plants). The remaining quantity of water on the earth's surface is the runoff, which empties into lakes, rivers and streams and is carried back to the oceans, where the cycle begins again. The Quranic revelations (Q. 23:18-19; 13:17 quoted above) point to these phenomena. The total quantity of water that is transported to the atmosphere annually is about 423×10^9 km 3 ; the same quantity of water is returned to the earth through precipitation, thus conserving the total water content of the planet [18, 19].

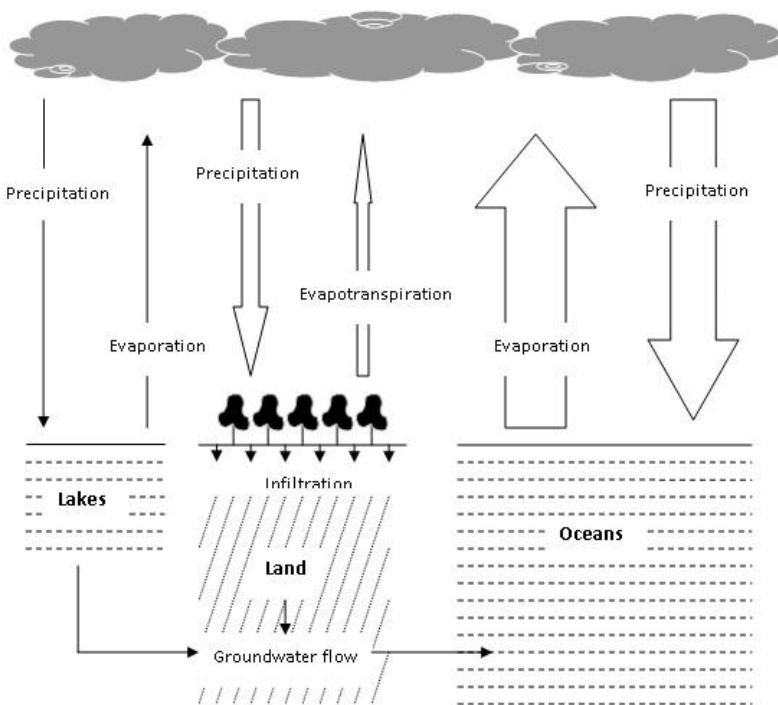


Fig. 13.1. Global water cycle involving precipitation, evaporation, evapotranspiration and runoff

Based on: <http://www.unep.org/vitalwater/images/03-water-cycle.jpg>. Original source given: Shiklomanov, I.A., State Hydrological Institute, St. Petersburg, and UNESCO, Paris, 1999; Max Planck Institute for Meteorology, Hamburg, 1994; Freeze, Allen, John, Cherry. Groundwater, Prentice-Hall, Englewood Cliffs, NJ. 1979.

Note: The width of the arrows indicating processes is approximately proportional to the volume of transported water.

An important thing we can infer from the hydrologic cycle is not a single molecule of water on our planet is broken down to its constituent atoms (hydrogen and oxygen) or lost irreversibly. Water being the universal solvent and an essential component of life its total quantity is always conserved through recycling. Although water participates in almost every

chemical reaction that is taking place on the earth and combines with a large number of compounds in a variety of ways, none of these reactions leads to its destruction or its irreversible loss. The molecule is recoverable from whatever substance or compound in which it exists. Without this unique characteristic of the water molecule, it would not have been possible to sustain life on this planet. It takes Allah to create it.

It is for man and man alone Allah has created everything on this planet. And all these resources and natural mechanisms to sustain them are unique to Earth in the entire cosmos. It is impossible to estimate Allah's blessings and bounties given to man on the earth. But still man is ungrateful to Him. To quote the Creator:

وَإِنْ تَعْدُوا نِعْمَةَ اللَّهِ لَا تُحْصُوْهَا ۝ إِنَّ اللَّهَ لَغَفُورٌ رَّحِيمٌ

16:18 If you would count up the favours of Allah, never would you be able to number them: for Allah is Oft-Forgiving, Most Merciful.

وَآتَكُمْ مِّنْ كُلِّ مَا سَأَلْتُمُوهُ ۝ وَإِنْ تَعْدُوا نِعْمَتَ اللَّهِ لَا تُحْصُوْهَا ۝ إِنَّ الْإِنْسَانَ لَظَلُومٌ
كَفَّارٌ

14:34 And He gives you of all that you ask for. But if you count the favours of Allah, never will you be able to number them. Verily, man is given up to injustice and ingratitude.

By giving us scientific and technological knowledge (see chapter 12), God is enabling us to utilize the natural resources. This is one of the important purposes of providing scientific knowledge. Since Allah has provided the natural resources in accordance with the human biosoftware, we should be given knowledge of what resource is to be used for what purpose(s). That is to say we cannot decide the purpose of a resource ourselves. For example we cannot use petroleum as fuel for automobile unless it is meant by God for that purpose. It is according to that, appropriate knowledge is included in Adam's *nafs*. If man is not given the scientific and

technological knowledge, the natural resources will remain unutilized. For example, petroleum reserves in the world remained untouched and unutilized till we got the knowledge of its uses and drilling technology about a century ago. This example also reveals that the resources are earmarked for different era so that people can utilize only the resources allotted for their era. This is also controlled and regulated by the scientific and technological knowledge released by Allah to the people. From the advancement of science and technology being made in our times, it is evident that quite a large number of resources are earmarked for the era of Prophet Muhammad, which is the final and presumably the longest in the divine testing programme.

That the diverse resources provided on the earth are in accordance with the purposes and human requirements stipulated in Adam's *nafs* can be made clearer through a thought experiment. There is a lot of excitement over the successful Moon and Mars missions now being conducted. Most of these missions are conducted on the premise that some day man will be able to live on Moon or another planet like Mars. And to support that we also make a lot of hue and cry over the discovery of water on moon, etc. A lot of money is also being pumped into these programmes by not only wealthy countries but also by half-starved nations for getting name and fame! Man will never make home on the moon or Mars for the simple reason that the Creator has not intended it. He made only Earth as the habitat of man (Q. 7:24 quoted above). There is no indication whatsoever in the Quran that Allah has made any region in the cosmos other than Earth habitable for man. Allah has created only Earth for human habitation. This means we will not find the lunar or Martian environment favourable to us or the resources there useful to us. We will also realize that we will not be able to generate scientific and technological knowledge to utilize the resources there because the knowledge provided in Adam's *nafs* only helps to develop technologies for utilizing the resources provided on the earth and nowhere else.

This is also supported by available information about their environment. For instance, lunar environment indicates it is not suitable for human habitation supporting the Quranic revelation. The moon is only one-fourth the size of Earth and has less mass. Since mass is less, the gravity it exerts is also considerably less, 83.3% less than Earth's to be precise. A person who weighs 80 kg on Earth will be 13.3 kg on the moon. The weightlessness will affect normal performance of human being on the moon. It will also cause dyslexia, a language-based learning disorder that affects reading, writing and spelling skills. We will find the environment, the resources and everything else on the moon unsuitable to our biosystem. Based on the Quran, it is possible to predict that efforts to migrate to the moon for settlement will fail. The failure will provide another proof of consistency between Allah's purpose of creation stated in the Quran and the ground realities. Thus it can be established scientifically that Earth was created by Allah as human habitat to serve as the human robot testing laboratory with resources lasting a finite period prescribed by Allah.

Another important observation about human species is its population growth. Human population increases with time [9]. Population touched the 6 billion mark in 1995 (Fig. 13.2). The current population (as of 2015) is more than 7 billion. According to the United Nations, world population reached 7 billion on October 31, 2011 [10]. By contrast, populations of other organisms do not show any increase although they were all there even before the arrival of Adam and Eve on Earth. The current rate of human population growth is about 50 million a year, which the earth sustains as per Allah's program without exceeding the prescribed carrying capacity at any given point of time. Decrease in the population of other species, extinction of species, etc. occur as per the divine program. Man should realize this fact. There is no point in expressing concern over such issues.

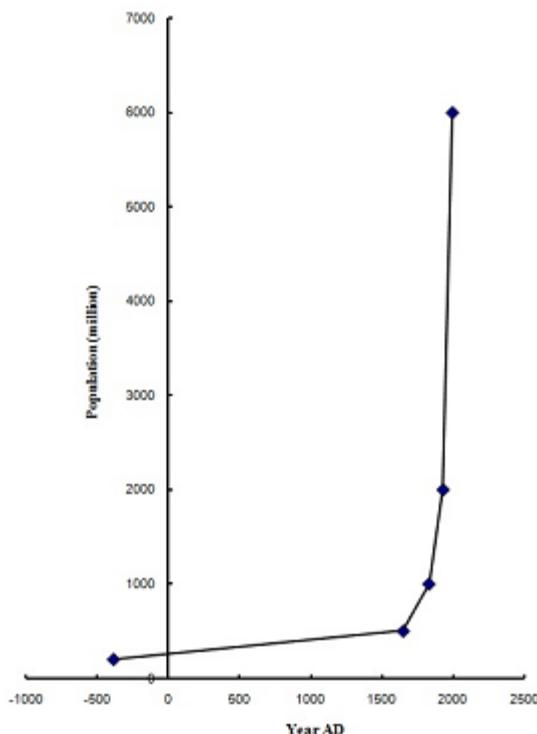


Fig. 13.2. Human population growth with time

Based on: Danesi, P.R. and Cherif, H.S. 1996. Environmental changes in perspective: The global response to challenges. *IAEA Bulletin*, 2/1996, p 2-8

Estimation of the total human population so far lived on the earth is an impossible task for several reasons. So many parameters whose accuracy and reliability cannot be verified are involved in that computation with the result the outcome will be no better than a wild guess. The parameters include the span of human habitation of the earth since Adam and Eve, average birth rates over the period, occupancy and global distribution trends, fluctuations in population sizes due to natural catastrophes and destruction of early nations and civilizations described in the Quran, etc. Despite the inaccuracy, guesstimates have been made of the number of people ever born on the earth till date. One such guesstimate

shows that as of 2002, about 106,456,367,669 people have lived on the earth since antiquity. The world population of 6,215,000,000 in mid-2002 is 5.8% of this number [11]. Another estimate done in 1999 shows that 96,100,000,000 people have lived on the earth [12]. This figure is about 15 times the previous one. The current global population of just over 7 billion is undoubtedly the highest human population ever lived on Earth at any point of time since Adam. This indicates that the carrying capacity of the present earth with modest resource support is much more than 7 billion. The carrying capacity is the number of human beings that can be optimally supported, given a particular subsistence adaptation [13].

It is in the Muhammadan era, which is the final and perhaps the longest period in the history of human robot testing, Allah is creating the largest human population. Since the previous century, human population has been growing exponentially (Fig. 13.1). Needless to say it also increases the demand for resources. Perhaps the most striking phenomenon we witness in this context is the parallel advancement in science and technology to bring more and more natural resources within the reach of mankind. Advancement in science and technology has been planned by Allah in such a way as to provide knowledge about nature and for developing technology to meet every demand of growing human population be it for food, transport, communication, employment (livelihood) or any other sector prescribed in Adam's *nafs*. Advancement of science and technology commensurate with human population increase we observe today is proof of divine planning, which none can deny. The creation of human beings will go on at stipulated rates until Allah has tested the required number of human robots. That will mark the end of divine testing programme and return of human robots to their Creator.

اللَّهُ يَعْلَمُ مَا تَحْمِلُ كُلُّ أُنْثَىٰ وَمَا تَغْيِضُ الْأَرْضَ حَمْمَةً وَمَا تَرْدَادٌ ۖ وَكُلُّ شَيْءٍ عِنْدَهُ بِقُدْرَةٍ

13:8 Allah knows what every female (womb) bears, by how much the wombs fall short (in number) or exceed. Every thing is in accordance with a calculated measure (due proportion) with Him.

وَاللَّهُ أَنْتُكُمْ مِنَ الْأَرْضِ نَبَاتًا تُمْ بَعْدُكُمْ فِيهَا وَيُنْتَخَلُكُمْ إِخْرَاجًا

71:17-18 And Allah produced you from the earth in large numbers. Subsequently He returns you (following death) into it (the earth) and get you out (from it again on the Day of Resurrection).

إِنْ كُلُّ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ إِلَّا آتَيْ الرَّحْمَنِ عَبْدًا لَعَذْ أَحْصَاهُمْ وَعَدَهُمْ عَدًّا وَكُلُّهُمْ
آتَيْهِ يَوْمَ الْقِيَامَةِ فَرِدًا إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ سَيَجْعَلُهُمُ الرَّحْمَنُ وُدًّا

19:93-96 Everyone in the skies and the earth is to come to the Most Merciful (i.e., Allah) as a servant. He (Allah) has an account of them and has numbered them exactly. And everyone of them will come to Him singly on the Day of Judgment. To those who believed and did good deeds, the Most Merciful (i.e., Allah) will bring affectionate relationship.

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14. HUMAN ROBOT TESTING PROGRAMME ON EARTH

The first test of human beings took place in Allah's abode with Adam and Eve. The Quran narrates the oldest test history of man following the creation of first human couple, Adam and Eve. The relevant verses have been presented in chapter 12 in the context of explaining Satan virus. The verses are also reproduced here from a different standpoint – to provide an account of the circumstances leading to the expulsion of Adam and Eve from the Garden to this Earth.

وَلَقَدْ خَلَقْنَاكُمْ ثُمَّ صَوَرْنَاكُمْ ثُمَّ قُلْنَا لِلْمَلَائِكَةِ اسْجُدُوا لِإِذْمَانٍ فَسَجَدُوا إِلَّا إِبْلِيسٌ لَمْ يَكُنْ
مِنَ السَّاجِدِينَ قَالَ مَا مَسْعَكَ أَلَا تَسْجُدُ إِذْ أَمْرَتُكَ ۖ قَالَ أَنَا خَيْرٌ مِنْهُ خَلَقْتَنِي مِنْ نَارٍ
وَخَلَقْتَهُ مِنْ طِينٍ قَالَ فَاهْبِطْ مِنْهَا فَمَا يَكُونُ لَكَ أَنْ تَتَكَبَّرَ فِيهَا فَاقْخُرْ إِنَّكَ مِنَ
الصَّاغِرِينَ قَالَ أَنْظُرْنِي إِلَى يَوْمِ يُبَعَّثُونَ قَالَ إِنَّكَ مِنَ الْمُنْظَرِينَ قَالَ فَبِمَا أَغْوَيْتَنِي لَأَقْعُدَنَّ
هُنْ مِنْ صَرَاطِكَ الْمُسْتَقِيمِ ثُمَّ لَا تَتَبَيَّنُهُمْ مِنْ بَيْنِ أَيْدِيهِمْ وَمِنْ خَلْفِهِمْ وَعَنْ أَيْمَانِهِمْ وَعَنْ
شَمَائِلِهِمْ ۖ وَلَا يَجِدُ أَكْثَرُهُمْ شَاكِرِينَ قَالَ اخْرُجْ مِنْهَا مَذْءُومًا مَذْحُورًا ۖ لَمَنْ يَعْلَمَ
مِنْهُمْ لَأَمَلَأَنَّ جَهَنَّمَ مِنْكُمْ أَجْمَعِينَ وَبِاً آدُمْ اسْكُنْ أَنْتَ وَزَوْجُكَ الْجَنَّةَ فَكُلَا مِنْ حِثْ
شِئْسَتَا وَلَا تَقْرِبَا هَذِهِ الشَّجَرَةَ فَتَكُونَا مِنَ الظَّالِمِينَ فَوَسُوسَ لَهُمَا الشَّيْطَانُ لِيُهَدِيَ لَهُمَا مَا
وُرِيَ عَنْهُمَا مِنْ سَوْلَاتِهِمْ وَقَالَ مَا نَهَاكُمَا رِيُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مُلْكِيْنَ
أَوْ تَكُونَا مِنَ الْخَالِدِينَ وَقَاسَهُمَا إِنِّي لَكُمَا لَمَنِ النَّاصِحِينَ فَدَلَّاهُمَا بِغُورِ ۚ فَلَمَّا دَأَافَا
الشَّجَرَةَ بَدَثَ لَهُمَا سَوْلَاتِهِمَا وَطَفَقَا يُخْصِيَانِ عَيْنِيهِمَا مِنْ وَرَقِ الْجَنَّةِ ۖ وَنَادَاهُمَا رَبُّهُمَا أَمْ
أَنْهُكُمَا عَنْ تِلْكُمَا الشَّجَرَةِ وَأَقْلَنَ لَكُمَا إِنَّ الشَّيْطَانَ لَكُمَا عَدُوٌّ مُبِينٌ قَالَا رَبَّنَا ظَلَمْنَا

أَنْفُسَنَا وَإِنْ لَمْ تَغْفِرْ لَنَا وَتَرْحَمْنَا لَنَكُونَنَّ مِنَ الْخَاسِرِينَ قَالَ اهْبِطُوا بَعْضُكُمْ لِيَعْضِ عَدُوٌّ
وَلَكُمْ فِي الْأَرْضِ مُسْتَقْرٌ وَمَتَاعٌ إِلَى حِينٍ قَالَ فِيهَا تَحْيَوْنَ وَفِيهَا تَمُوتُونَ وَمِنْهَا تُخْرِجُونَ

7:11-25 Indeed We created you and gave you shape. Then We asked the angels to bow down to Adam and they (all) bowed down except *Iblis*. He was not among those who bowed down.

(Allah) said: What prevented you from bowing down when I commanded you? He said: I am better than he. You created me from fire and You created him from clay. (Allah) said (to *Iblis*): Get out from here. You cannot be arrogant here. So get out; indeed you are among the meanest. He (*Iblis*) said: Give me respite till the Day they (human beings) are resurrected. (Allah) said: Certainly you are among those who are granted respite. He (*Iblis*) said: Because You have misled me, I will lie in wait for them (human beings) on Your straight way; then I will reach (i.e., mislead) them from their front and from their back, and from their right and from their left. You will not find most of them grateful (to You for Your mercies). (Allah) said: Get out from here disgraced and expelled. If any of them follow you, I will fill Hell with you all. (Allah said): O Adam! Dwell you and your wife in the garden and eat from it as you wish but do not approach this Tree, then you will become transgressors. Then began Satan to whisper suggestions to them to bring into the open all their shame that was hidden from them (before). It (i.e., Satan) said: Your Lord forbade you this Tree lest you should become angels or immortals. And it swore to both of them: I am indeed your sincere advisor. So through deceit it brought their fall. When they tasted of the *Tree*, their shame became manifest to them and they began to sew together the leaves of the Garden over their bodies. And their Lord called to them: Did I not tell you that Satan was an avowed enemy to you? They said: Our Lord! We have wronged our own souls. If You do not forgive us and bestow upon us Your Mercy, we shall be certainly be lost. (Allah) said: Get you down with enmity between yourselves. The earth will be your dwelling place and your means of livelihood for a term. He (Allah) said: Therein shall you live, and therein shall you die, and from there shall you be taken out (resurrection).

قَالَ رَبُّ إِمَّا أَعْوَيْتَنِي لَا زَيْنَ هُمْ فِي الْأَرْضِ وَلَا عَوَيْنَهُمْ أَجْعَيْنَ إِلَّا عِبَادَكَ مِنْهُمْ
الْمُخْلَصِينَ

15:39-40 (*Iblis*) said: O my Lord! Because You have misled me, I will make (evil) alluring to them (i.e., human beings) on the earth and I will mislead them all except Your sincere servants among them.

When Allah ordered the angels to bow down to Adam after his creation, all the angels bowed down except *Iblis*. Allah asked *Iblis* to explain his non-compliance. *Iblis* responded boastfully that he was much above man in status and that prevented him from prostrating before Adam. This arrogance earned him Allah's wrath and curse. Allah asked him to get out of the divine abode. Then *Iblis* pleaded for respite till the Day of Judgement when all human beings are raised up again. Allah granted *Iblis* respite. *Iblis* swore that since Allah misled him (Q. 7:16), he would mislead all human beings from the divine path except Allah's sincere and pious servants (Q. 15:39-40).

Allah tells Adam and Eve to live in the Garden after giving a strong warning not to approach the Tree in it. If they approach it, they will become transgressors. That was the only directive given to them by Allah. That instruction formed the basis of their testing. Allah told them that they will not become hungry or naked in that Garden and they will not feel hot and thirsty. Thus while both were living in the Garden, Satan started conveying evil suggestions to their minds to tempt them to approach the forbidden Tree and thereby expose their nudity which was hidden from them. The Satan whispered: "Your Lord forbade you this Tree lest you should become angels or immortals." And to both of them Satan swore that he was indeed their well-wisher. Adam and Eve fell for it and ate from the Tree. They became naked and started covering their shame with leaves. Allah then called to them: "...Did I not forbid you that Tree and tell you that Satan was indeed a clear enemy to you?" Allah asked them to get out of the Garden. This is what happened in the very first test of *Homo sapiens* faced by the first human couple.

فَأَرَاهُمَا الشَّيْطَانُ عَنْهَا فَأَخْرَجَهُمَا مِمَّا كَانَا فِيهِ ۝ وَقُلْنَا اهْبِطُوا بَعْضُكُمْ لِيَعْضِ عَلُوٌ ۝
وَلَكُمْ فِي الْأَرْضِ مُسْتَقْرٌ وَمَتَاعٌ إِلَى حِينٍ فَتَلَقَّى آدُمُ مِنْ رَبِّهِ كَلِمَاتٍ فَتَابَ عَلَيْهِ ۝ إِنَّهُ
هُوَ التَّوَّابُ الرَّحِيمُ قُلْنَا اهْبِطُوا مِنْهَا هَمِيعًا ۝ فَإِمَّا يَتَبَيَّنُكُمْ مِنْهُمْ هُدًى فَمَنْ تَبَعَ هُدَى
فَلَا خَوْفٌ عَلَيْهِمْ وَلَا هُمْ يَخْرُجُونَ وَالَّذِينَ كَفَرُوا وَكَذَّبُوا بِآيَاتِنَا أُولَئِكَ أَصْحَابُ النَّارِ ۝
هُمْ فِيهَا خَالِدُونَ

2:36-39 Then the Satan misled them about it and got them out of the (blessed) state they were in. We (Allah) said: You all get down with enmity among yourselves. And on earth is your dwelling place and means of livelihood for a (fixed) term. Then Adam received from his Lord certain Words (or instructions) and He forgave him (Adam). Verily, He is Oft-Returning, Most Merciful. We (Allah) said: You all get down from here. And when guidance comes to you from Me, whosoever follows My guidance, on them shall be no fear nor shall they grieve. But those who reject and treat Our signs as false, they shall be companions of the Fire; they shall reside therein.

They were thus sent down to earth. Allah forgave Adam and guided him to the righteous path. Adam received from Allah certain instructions. Allah said to them that the earth is their dwelling place and means of livelihood for a fixed term and when Allah's guidance comes to them, whosoever follows it, they will not go astray and they do not have to fear or grieve and whosoever reject it, they will fall into misery and reside in Hell forever. It is with these instructions Adam and Eve were sent down to earth.

The arrival of Adam and Eve on Earth marked the beginning of God's test of human robots on the earth. The earth is the habitat of human beings and means of livelihood for a fixed term (test period). Man will die on the earth, and afterwards resurrected from the earth. The Quran does not mention the exact location of the earth where Adam and Eve arrived. Investigations about the origin of human race have led to two theories about the location where human species first

appeared. One is ‘out of Africa’ theory and the other, multiregional theory. Of these, the latter proposes origin of man at more than one place on the earth. The multiregional theory is therefore not compatible with the Quran. This theory has to be rejected in the light of the Quranic indication of one location for the arrival of the first human couple. ‘Out of Africa’ theory points to Africa as the region of origin of modern man and from where humans spread over the entire globe [1, 2]. This theory is acceptable as it is not at variance with the Quran. Recent studies employing mtDNA analysis have offered further insight into the pattern of migration of early humans. It was found that Arabia rather than North Africa or the Near East was the first staging-post in the spread of modern human around the world [3]. Based on this it may be suggested that Adam and Eve might have been sent to some part of Africa and from there their progeny migrated into Arabia. It was from Arabia humans spread to other places in due course. The advent of early civilizations and prophets in and around Arabia also strengthen this reasoning.

Islam – the basis of Allah’s test

Unless and until human beings know who created them and for what purpose, why they are here, what the Creator expects from them and what is their future, etc., they will not be able to respond to the test the way God wants them to. It is therefore imperative that the Creator informs mankind of His intentions and directives. And Allah states thus:

إِنَّ عَلَيْنَا لِتَهْدِيَ

92:12 Verily it is binding on Us to provide guidance.

Divine guidance is the religion Islam. Islam constitutes Allah’s directives for testing human robots for their obedience to Him from the first human couple (Adam and Eve) to the last human being to be born on this planet before the end of the world. It is the Religion of Allah. No human being has any role in its

formulation. All other religions are man-made. Allah will not accept a religion other than Islam. To that effect Allah informs the entire mankind thus:

يَا أَيُّهَا النَّاسُ إِنَّمَا يُحَبِّبُنَا رُسُلُنَا مِنْكُمْ يَقُصُّونَ عَلَيْنَاكُمْ آيَاتِنَا ۝ فَمَنِ اتَّقَىٰ وَأَصْلَحَ فَلَا
خَوْفٌ عَلَيْهِمْ وَلَا هُنْ يَخْرُجُونَ وَالَّذِينَ كَذَّبُوا بِآيَاتِنَا وَاسْتَكْبَرُوا عَنْهَا أُولَئِكَ أَصْحَابُ النَّارِ
۝ هُنَّ فِيهَا خَالِدُونَ

7:35-36 O children of Adam! Whenever there come to you apostles from among you explaining My verses to you, then whoever guard (against evil) and do good things, on them shall be no fear nor shall have they to grieve. But those who treat Our verses as false and show arrogance towards it, they are companions of the Fire; they will dwell therein forever.

إِنَّ الدِّينَ عِنْدَ اللَّهِ الْإِسْلَامُ ۝ وَمَا اخْتَلَفَ الَّذِينَ أُوتُوا الْكِتَابَ إِلَّا مِنْ بَعْدِ مَا جَاءَهُمْ
الْعِلْمُ بَعْدًا بَيْنَهُمْ ۝ وَمَنْ يَكُفُّرُ بِآيَاتِ اللَّهِ فَإِنَّ اللَّهَ سَرِيعُ الْحِسَابِ

3:19 The religion before Allah is Islam (i.e., submission to His Will). The People of the Book split (into groups) because of mutual jealousy after knowledge had come to them. Whoever denies the verses of Allah (the Quran), then (know) Allah is indeed swift in calling to account.

أَعَيْرُ دِينَ اللَّهِ يَعْلَمُ وَلَهُ أَنْسُلَمَ مَنْ فِي السَّمَاوَاتِ وَالْأَرْضِ طَوْعًا وَكَرْهًا وَإِلَيْهِ يُرْجَعُونَ

3:83 Do they seek other than the Religion of Allah while all creatures in the skies and Earth have obediently and compulsorily submitted to His Will? And to Him shall they all be brought back.

وَمَنْ يَبْتَغِ عَيْرَ إِلْيَسْلَامٍ دِينًا فَلَأَنَّ يُفْلِتَ مِنْهُ وَهُوَ فِي الْآخِرَةِ مِنَ الْخَاسِرِينَ

3:85 If anyone desires a religion other than Islam, it will not be accepted from him. And in the Hereafter he will be among the losers.

فَأَقِمْ وَجْهَكَ لِلّدِينِ حَنِيفًا ۝ فِطْرَتَ اللَّهِ الَّتِي فَطَرَ النَّاسَ عَلَيْهَا ۝ لَا تَبْدِيلَ لِخُلُقِ اللَّهِ ۝ ذَلِكَ الدِّينُ الْقَيْمُ وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ

30:30 So set your face sincerely to this Faith (Islam). Allah designed (it) the way He made man. (There is) no change in Allah's creation. That is the lasting religion but most people do not realize.

فَأَقِمْ وَجْهَكَ لِلّدِينِ الْقَيْمِ مِنْ قَبْلٍ أَنْ يَأْتِيَ يَوْمٌ لَا مَرَدَ لَهُ مِنَ اللَّهِ ۝ يَوْمَئِذٍ يَصَدَّعُونَ

30:43 So set your face to this straight religion before there comes from Allah a Day that cannot be averted. On that Day they (i.e., human beings) will separate (from one another).

وَجَاهُهُوا فِي اللَّهِ حَقًّا جِهَادِهِ ۝ هُوَ اخْبَارُكُمْ وَمَا جَعَلَ عَلَيْكُمْ فِي الدِّينِ مِنْ حَرْجٍ ۝ مِلْهَةً أَئِيمَكُمْ إِنْتَاهِيمٍ ۝ هُوَ سَمَّاُكُمُ الْمُسْلِمِينَ مِنْ قَبْلٍ وَفِي هُدَا لِيَكُونَ الرَّسُولُ شَهِيدًا ۝ عَلَيْكُمْ وَتَكُونُوا شُهَدَاءَ عَلَى النَّاسِ ۝ فَأَقِيمُوا الصَّلَاةَ وَآتُوا الزَّكَاةَ وَاعْتَصِمُوا بِاللَّهِ هُوَ مَوْلَانَا ۝ فَنِعْمَ الْمُؤْمَنُ وَنِعْمَ النَّصِيرُ

22:78 “.....He (Allah) has chosen you and He has imposed no difficulties on you in religion. It is the religion of your father Abraham. It is He who named you Muslims, both before and in this (Quran). (That is) for the messenger to be a witness for you, and you (i.e., believers) the witnesses for the mankind. So establish the Prayer, give charity and hold on to Allah firmly. He is your guardian – the best to protect and the best to help.”

Islam is therefore the divine test capsule. The basic tenets of the religion Islam are presented here in the light of the Quranic revelations. These would not be different for nations of different prophets.

مَا يُعَالِ لَكَ إِلَّا مَا قَدْ قِيلَ لِلرَّسُولِ مِنْ قَبْلِكَ ۝ إِنَّ رَبَّكَ لَذُو مَغْفِرَةٍ وَدُوْ عِقَابٍ أَلِيمٍ

41:43 Nothing is said to you (O Prophet Muhammad) that was not said to the apostles before you. Indeed your Lord is the Lord of forgiveness as well as the Lord of painful punishment.

There may be however differences in the rites and rules prescribed by Allah for different peoples. For instance, all kinds of food were permitted for the Jews, the people of Prophet Moses (Q. 3:93-94). However for the people of Prophet Muhammad some items of food are not allowed (Q. 16:115).

كُلُّ الطَّعَامِ كَانَ حِلًا لِّيٰ إِسْرَائِيلَ إِلَّا مَا حَرَمَ إِسْرَائِيلُ عَلَىٰ نَفْسِهِ مِنْ قَبْلِ أَنْ شَرَأَ
الْتَّوَزُّعَ ۝ فُلُّ فَأُثْلِثُوا بِالشَّرْوَرَةِ فَأُثْلِثُوهَا إِنْ كُنْتُمْ صَادِقِينَ فَمَنْ افْتَرَىٰ عَلَىٰ اللَّهِ الْكَذِبَ مِنْ
بَعْدِ ذَلِكَ فَأُولَئِكَ هُمُ الظَّالِمُونَ

3:93-94 All food items were lawful to the children of Israel except what Israel made unlawful for itself before the *Taurat* (the Book of Moses) was revealed. Say: “You bring the *Taurat* and recite it, if you are truthful.” If anybody fabricates lie about Allah after that, they are the wrongdoers.

إِنَّمَا حَرَمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَلَحْمَ الْخِنْزِيرِ وَمَا أَهْلَأَ لِغَيْرِ اللَّهِ بِهِ ۝ فَمَنْ اضطُرَّ عَبْرَ بَاغٍ
وَلَا عَادٍ فَإِنَّ اللَّهَ عَفُورٌ رَّحِيمٌ

16:115 He has forbidden to you only dead body, blood, pork and any (food) on which name other than Allah's has been invoked. But if anybody is forced (by the circumstances, he may eat the forbidden food) without willful disobedience and transgressing the limits. Then verily Allah is Oft-Forgiving, Most Merciful.

a) Doctrine of oneness of God (*Tawhid*)

The foundation of Islam is *tawhid* – the doctrine of oneness of God (monotheism). Islamic monotheism means Allah (*Al Ilah* in Arabic meaning the Lord or God) is the only God. It is this truth Allah conveyed to His servants first and foremost. It is this truth Allah's robots have to accept first. Obviously it formed the core message the messengers of Allah, from Adam to Muhammad, conveyed to their peoples. We find every message in the Quran resonates and revolves round the

absolute truth – Allah, the only God. A large number of verses in the Quran convey the doctrine of oneness of God emphasizing its pivotal importance and directing mankind to stop associating partners with Him and also idolatory.

لَا شَرِيكَ لَهُ ۖ وَبِدْلَكَ أَمْرُكُ وَأَنَا أَوَّلُ الْمُسْلِمِينَ قُلْ أَعْيُّرَ اللَّهَ أَعْيُّرِي رَبِّي وَهُوَ رَبُّ كُلِّ
شَيْءٍ ۝ وَلَا تَكْسِبُ كُلُّ نَفْسٍ إِلَّا عَيْنَاهَا ۝ وَلَا تَزِدُّ وَازِدَةً وَرِزْ أُخْرَى ۝ ثُمَّ إِلَى رَبِّكُمْ
مَرْجِعُكُمْ فَيَبَيَّنُكُمْ بِمَا كُنْتُمْ فِيهِ تَحْتَلِفُونَ

6:163-164 He (i.e., Allah) has no partner and I was instructed about that. And I am the foremost among Muslims. Say: Should I seek a Lord other than Allah? And He is the Lord of all things. No soul earns except on itself. No bearer of burdens bears the burden of another. Afterwards, your return is to Allah. He will then tell you about the things in which you disputed.

قُلْ إِنِّي هُمَيْثٌ أَنَّ أَعْبُدَ الَّذِينَ تَدْعُونَ مِنْ دُونِ اللَّهِ ۝ قُلْ لَا أَأَبْغُ أَهْوَاءَكُمْ ۝ قَدْ ضَلَّلْتُ
إِذًا وَمَا أَنَا مِنَ الْمُهَتَّدِينَ

6:56 Say: It is forbidden on me (Prophet Muhammad) to worship those whom you call upon other than Allah. Say: I will not follow your desires. (If I do that), I would go astray and I will not be among the guided ones.

خَنَفَاءَ لِلَّهِ عَيْرَ مُشْرِكِينَ بِهِ ۝ وَمَنْ يُشْرِكُ بِاللَّهِ فَكَانَمَا حَرَّ مِنَ السَّمَاءِ فَتَخْطُفُهُ الطَّيْرُ أَوْ
تَهْوِي بِهِ الرِّيحُ فِي مَكَانٍ سَحِيقٍ

22:31 Be honest (in Faith) to Allah without joining partners to Him. If anyone associates partners with Allah, he is like the one dropped from the sky and then swooped up by birds, or the one carried by wind and thrown into a far-off place.

وَقُلِ الْحَمْدُ لِلَّهِ الَّذِي لَمْ يَتَحْجُدْ وَلَدًا وَلَمْ يَكُنْ لَهُ شَرِيكٌ فِي الْمُلْكِ وَلَمْ يَكُنْ لَهُ وَلِيٌّ مِنَ
الْدُلُّ ۝ وَكَبِيرٌ ثَكِيرًا

17:111 Say: Praise be to Allah. He has no son. He has no partner in (His) dominion, and He has no helper for weakness (i.e., He has no weakness). Glorify His greatness to the highest.

فَلَمَّا تَكُونُتُمْ لَتَكُفُرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَجَعَلَوْنَ لَهُ أَنْدَادًا ۝ ذَلِكَ رَبُّ
الْعَالَمَيْنَ

41:9 Say: Do you deny the One (Allah) who created the earth in two Days and (also) invent equals to Him? He is the Lord of the worlds.

أَيُشْرِكُونَ مَا لَا يَكُلُّفُ شَيْئًا وَهُنْ يُخَلِّفُونَ وَلَا يَسْتَطِيعُونَ لَهُمْ نَصْرًا وَلَا أَنْفُسَهُمْ يَنْصُرُونَ

7:191-192 Do they ascribe to Him partners that can create nothing but are themselves created? The (partners) cannot give them any help nor can they help themselves!

وَإِذْ قَالَ إِبْرَاهِيمُ لِأَبِيهِ آزَرَ أَتَتَخْدِدُ أَصْنَامًا آتِهِمْ ۝ إِنِّي أَرَأَكَ وَقَوْمَكَ فِي ضَلَالٍ مُّبِينٍ

6:74 Lo! Abraham said to his father Azar: Do you take idols for gods? Indeed I see you and your people in manifest error.

وَإِذْ قَالَ إِبْرَاهِيمُ رَبِّي اجْعَلْ هَذَا الْبَلْدَ آمِنًا وَاجْنِنْيَ وَبَيْئَ أَنْ نَبْدِدُ الْأَصْنَامَ رَبِّ إِنَّهُ
أَضْلَلَ كَثِيرًا مِنَ النَّاسِ ۝ فَمَنْ تَبَعَّنِي فَإِنَّهُ مَبِينٌ ۝ وَمَنْ عَصَانِي فَإِنَّكَ عَفُورٌ رَحِيمٌ

14:35-36 Remember Abraham said: O my Lord! Make this city secure and keep me and my children away from worshipping idols. O my Lord! They (i.e., the idols) have indeed led many people astray. Then whoever follows me, he belongs to me (i.e., my group) and whoever disobeys me, then verily You are Oft-Forgiving, Most Merciful.

وَلَئِنْ سَأَلْتُهُمْ مَنْ خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ لَيَقُولُنَّ اللَّهُ ۝ فَلَمَّا أَفْرَأَيْتُمْ مَا تَدْعُونَ مِنْ دُونِ
الَّهِ إِنْ أَرَأَيْنَ اللَّهَ بِضُرِّ هَلْ هُنَّ كَاشِفَاتُ ضُرُّهُ أَوْ أَرَادَنَ يَرْحِمُهُ هَلْ هُنَّ
مُسْكَاثُ رَحْمَتِهِ ۝ فَلَمَّا حَسَنَى اللَّهُ ۝ عَلَيْهِ يَسْوَكُلُ الْمُتَوَكِّلُونَ

39:38 If you ask them who created the skies and the earth, they will say, “Allah”. Say: Have you seen those, which you

invoke besides Allah? If Allah intends (to give) some harm for me, can they remove His harm? Or if He intends (to bestow) some mercy on me, can they prevent His mercy? Say: Sufficient is Allah for me! Those who want to put trust will put trust on Him.

It is pertinent to note in this context that Allah informs us that He had already taken testimony from human beings (*anfus*) that Allah is their Creator (Q. 7:172-173).

وَإِذْ أَخْدَى رُتُكَ مِنْ بَنِي آدَمَ مِنْ ظُهُورِهِمْ وَأَشْهَدَهُمْ عَلَى أَنفُسِهِمْ أَلْسُنُ^١ يَرْتَكِمُ
 قَالُوا يَكُلَّ^٢ شَهْدَنَا^٣ أَنْ تَقُولُوا يَوْمَ الْقِيَامَةِ إِنَّا كُنَّا عَنْ هَذَا غَافِلِينَ أَوْ تَقُولُوا إِنَّا
 أَشْرَكَ آباؤُنَا مِنْ قَبْلِ^٤ وَكُنَّا دُرْرَةً^٥ مِنْ بَعْدِهِمْ^٦ أَفَتُهَلِكُنَا^٧ بِمَا فَعَلَ الْمُبْطَلُونَ

7:172-173 Behold, your Lord took from the loins of the children of Adam their offspring and made them testify about themselves! (Allah asked them): “Am I not your Lord? They said: “Yes! We do testify.” (This was done because) you might say on the Day of Judgment: “We were unaware about it” or you might say: “Our forefathers had joined partners to Allah and we became (their) descendants (following their footsteps). Will You then destroy us for what those vain people had done?”

The verses clearly reveal that Allah has made it known to human beings that He is their God and they have testified to that. The testimony mentioned implies that information about the existence of Creator Allah had already been incorporated in human biosoftware (Adam’s *nafs*) and human beings know by default there is God. This supposition is strengthened by two Quranic indications. One is, nowhere in the Quran is there mention of people at any time during the past believing in no God (atheism). People in the past believed in not one God but in many false gods. It is to correct this belief and convey His messages Allah sent the prophets to the people.

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ مِنْ رَسُولٍ إِلَّا نُوحِي إِلَيْهِ أَنَّهُ لَا إِلَهَ إِلَّا أَنَا فَاعْبُدُونِ

21:25 We (Allah) had not sent an apostle before you (Prophet Muhammad) except to convey to him, “There is no God but I; therefore serve (i.e., worship) Me”.

لَقَدْ أَرْسَلْنَا نُوحًا إِلَى قَوْمِهِ فَقَالَ يَا قَوْمَ اعْبُدُوا اللَّهَ مَا لَكُمْ مِنْ إِلَهٍ غَيْرُهُ إِنِّي أَخَافُ
عَلَيْكُمْ عَذَابٌ يَوْمٌ عَظِيمٌ

7:59 We sent Noah to his people. He said: O my people! Worship Allah. You have no God besides Him. Verily, I am afraid of punishment for you on a great Day (i.e., the Day of Judgement).

وَإِلَى عَادٍ أَخَاهُمْ هُودًا قَالَ يَا قَوْمَ اعْبُدُوا اللَّهَ مَا لَكُمْ مِنْ إِلَهٍ غَيْرُهُ أَفَلَا تَتَّقُونَ

7:65 To the 'Ad people, (We sent) their brother Hud. He said: O my people! Worship Allah. You have no God besides Him. Will you not fear (Allah)?

وَإِلَهُكُمْ إِلَهٌ وَاحِدٌ لَا إِلَهٌ إِلَّا هُوَ الرَّحْمَنُ الرَّحِيمُ

2:163 And your God is One God. There is no God but He, Most Gracious, Most Merciful.

There are also experimental findings to support the availability of information about God in human biosystem. The results of the studies conducted in cognitive neuroscience by Jordan Grafman and his team at the US National Institute of Neurological Disorders and Stroke in Bethesda, defined a psychological and neuroanatomical framework for the (predominately explicit) processing of religious belief [4]. In simple terms this means that their study indicated there are certain locations in the brain that control religious faith. They interpreted their results from the evolutionary point of view and suggested that “religiosity is integrated in cognitive processes and brain networks used in social cognition, rather than being *sui generis*... The evolution of these networks was likely driven by their primary roles in social cognition, language, and logical reasoning... Religious cognition likely

emerged as a unique combination of these several evolutionarily important cognitive processes.”

The finding from the study is however important from the Quranic point of view because it proves that there is some part in the brain concerned with religious belief. This can be very much expected from the revelation of the testimony in verses 7:172-173 quoted above. Thus belief in God comes from the *a priori* information immanent in our biosystem. Ever since the arrival of man on Earth, he has been demonstrating this by way of belief in supernatural powers, gods and goddesses. Historical accounts and archaeological finds testify to the prevalence of worshipping gods and goddesses in ancient cultures. This also indicates that man is by default a believer in God. Even in the biosystems of the so-called atheists there is the glimmer of divinity deep in their minds. The term “atheism” denotes denial of God and it comes from the Greek prefix *a-*, meaning “without” and the Greek word “*theos*” meaning “deity”. There are also agnostics who are skeptical about God. They neither believe nor disbelieve in God. But in practice, they are also atheists. Agnosticism is considered negative atheism in the sense that it only denotes lack of belief in God whereas positive atheism is total denial of existence of God.

Atheism is of very recent origin. Although there are several historical accounts of atheism, they differ substantially over its beginning. The disagreement is mainly because of the way ‘atheism’ is defined. Besides strict negation of God’s existence, the definitions also cover various forms of religious criticism, heterodoxy and nonconformity. As the German scholar of atheism Winfried Schroeder points out, a ‘history of atheism’ can often in fact amount to something more like a history of various religious departures from orthodoxy than of atheism in any strict sense [5]. According to Lucien Febvre and Paul Oskar Kristeller, there is no good evidence for atheism (in this stricter sense of negating God) prior to the seventeenth

century [6]. This observation is important as it implies that the idea of ‘no god’ took shape with the advancement of modern science. Development of Darwin’s theory and others (see chapter 3) substantiates that. Clearly therefore atheism is of satanic origin and is unnatural to human biosystem.

Second indication in the Quran of the presence of information on God in human biosystem is Allah instructs Adam while they (Adam and Eve) were sent down to Earth (the human robot testing laboratory) that when Allah’s guidance (through prophets) comes, people should believe in that and obey Allah (Q. 2:38-39 quoted above). This direction reflects the availability of information about God in human biosystem. This is further strengthened by the use of the term “reminder” in several verses to indicate the Books (Scriptures) Allah gave to His prophets. The Scriptures serve as reminder of the testimony of human species (Q. 7:172-173 quoted above). Some of the verses in which the Scripture is mentioned as Reminder are presented below.

فَالْاَهْبِطُوا مِنْهَا جَيْعًا طَّبَقْتُمْ بِعْضُكُمْ بِعْضٍ عَدُوٌ فَإِمَّا يَأْتِيَنَّكُمْ مِّنِي هُدًى فَمَنْ اتَّبَعَ هُدَاهِي فَلَا يَضِلُّ وَلَا يَشْفَعَ وَمَنْ أَعْرَضَ عَنْ ذِكْرِي فَإِنَّ لَهُ مَعِيشَةً ضَنْكاً وَنَحْشُرُهُ يَوْمَ الْقِيَامَةِ أَعْمَمِ

20:123-124 He (Allah) said: “Both of you (Adam and Eve) together get down from it (i.e., the garden where they were living). You (human beings) will be enemies among one another. But when guidance comes to you (mankind) from Me, whoever follows My guidance will not go astray or fall into misery. Whoever turns away from My Reminder, he will surely have a narrow life; and on the Day of Judgment, We will gather him as blind.

أَوْ عَجِّلْتُمْ أَنْ جَاءَكُمْ دُكْرٌ مِّنْ رَّبِّكُمْ عَلَى رَجُلٍ مِّنْكُمْ لِئَنِّي رَّكِنْتُمْ وَلَتَّهُوا وَلَعَلَّكُمْ تُرْجُونَ
7:63 Are you surprised to see a Reminder (i.e., the messages) coming from your Lord through a man (Prophet Noah) among

you to warn you so that you may fear Allah and receive His mercy?

وَلَقَدْ آتَيْنَا مُوسَى وَهَارُونَ الْفُرْقَانَ وَضِيَاءً وَدُكْرًا لِلمُتَّقِينَ الَّذِينَ يَخْشَوْنَ رَبَّهُمْ بِالْغَيْبِ وَهُمْ مِنَ السَّاعَةِ مُشْفِقُوْنَ

21:48-49 We had given to Moses and Aaron the criterion (to judge right and wrong), a light and a Reminder for the God-conscious – those who fear their Lord unseen and who are afraid of the (Final) Hour.

وَلَقَدْ كَبَّبَنَا فِي الرَّوْبَرِ مِنْ بَعْدِ الدُّكْرِ أَنَّ الْأَرْضَ يَرِيُّنَاهَا عِبَادِي الصَّالِحُونَ

21:105 Before this, We wrote in the Zaboor (the Book given to Prophet David) after the Reminder (*Taurat* given to Moses) that My righteous servants will inherit the earth.

أَوْعَجْنَاهُمْ أَنْ جَاءَكُمْ دِكْرٌ مِنْ رَبِّكُمْ عَلَى رَجُلٍ مِنْكُمْ لِتُنذِرُكُمْ ۝ وَادْكُرُوا إِذْ جَعَلْنَاكُمْ خُلَفَاءَ مِنْ بَعْدِ قَوْمٍ ثُوْجَرَدُكُمْ فِي الْخُلُقِ سُبْطَةً ۝ فَادْكُرُوا آلَّا إِلَهَ لَكُمْ كُمْ شُفَّلَخُونَ

7:69 Are you surprised to see a Reminder (i.e., the messages) coming from your Lord through a man (Prophet Hud) among you to warn you? And remember that He made you the successors to the people of Noah and enhanced your physique. Therefore, remember Allah's favours so that you may be successful.

فَقَالُوا أَبْشِرْ إِنَّا وَاحِدًا نَتَبِعُهُ إِنَّا إِذَا لَفِي ضَلَالٍ وَسُعْرٍ أَلْقِي الدُّكْرَ عَلَيْهِ مِنْ بَيْنَنَا بَلْ هُوَ كَذَابٌ أَشَرٌ

54:24-25 They said: Are we to follow a man (Prophet Salih) from among ourselves? Then we will surely be in error and mad! Has the Reminder been sent down to him among us? Nay, he is an insolent liar!

إِنْ هُوَ إِلَّا دُكْرٌ لِلْعَالَمِينَ

3887 This (the Quran) is nothing but a Reminder to the people of the world.

b) God-consciousness (*taqwa*)

Man should live every moment of his life in accordance with the instructions of Allah submitting to His Will. Such people are the true Muslims. They are the God-fearing or God-conscious ones, whom the Quran addresses as “*muttaqeen*”.

يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ حَقًّا تُعَاتِهِ وَلَا تَمُوتُنَ إِلَّا وَأَنْتُمْ مُسْلِمُونَ

3:102 O believers! Fear Allah the way He should be feared and do not die except as Muslims.

يَا أَيُّهَا الَّذِينَ آمَنُوا اصْبِرُوا وَصَابِرُوا وَرَابِطُوا وَاتَّقُوا اللَّهَ لَعَلَّكُمْ تُفْلِحُونَ

3:200 O believers! Be patient and excel in patience and be prepared. And be God-conscious that you may succeed.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تُحِلُّو شَعَائِرَ اللَّهِ وَلَا الشَّهْرَ الْحُرَامَ وَلَا الْمُهْدِيَ وَلَا الْمُلَائِكَةَ وَلَا أَمِيرَ الْبَيْتِ الْحُرَامَ يَبْتَغُونَ فَضْلًا مِنْ رَبِّهِمْ وَرِضْوَانًا ۝ وَإِذَا حَلَّتُمْ فَاصْطَادُوا ۝ وَلَا يَجِدُونَكُمْ شَيْئًا قَوْمٌ أَنْ صَدُوكُمْ عَنِ الْمَسْجِدِ الْحُرَامِ أَنْ تَعْتَدُوا ۝ وَتَعَاوَنُوا عَلَى الْبِرِّ وَالتَّقْوَى ۝ وَلَا تَعَاوَنُوا عَلَى الْإِلْمِ وَالْعُدُوانِ ۝ وَاتَّقُوا اللَّهَ ۝ إِنَّ اللَّهَ شَدِيدُ الْعِقَابِ

5:2 “O believers! Fear Allah. Verily Allah is severe in punishment.”

يَسْأَلُونَكَ مَاذَا أَحْلَاءَ هُنَّ ۝ قُلْ أَحْلَاءُ لَكُمُ الطَّيِّبَاتُ ۝ وَمَا عَلِمْتُمْ مِنَ الْجُنُوحِ مُكْلِبِينَ تُعَمِّلُونَهُنَّ مَمَا عَلِمْتُمُ اللَّهُ ۝ فَكُلُّوا مِمَّا أَمْسَكْنَ عَلَيْكُمْ وَادْكُرُوا اسْمَ اللَّهِ عَلَيْهِ ۝ وَاتَّقُوا اللَّهَ ۝ إِنَّ اللَّهَ سَرِيعُ الْحِسَابِ

5:4 “....And fear Allah. Verily Allah is swift in taking account.”

يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ وَلْتَسْتُرْ نَفْسُكَ مَا قَدَّمْتُ لِعَدِ ۝ وَاتَّقُوا اللَّهَ ۝ إِنَّ اللَّهَ خَبِيرٌ بِمَا تَعْمَلُونَ

59:18 O believers! Fear Allah. Let every one take a look at what he has done for tomorrow in advance. Fear Allah. And Allah is well acquainted with what you do.

c) Articles of Faith

Allah directs mankind to believe in Him unseen, the angels, the prophets (messengers or apostles), the Books sent to prophets, the Last Day (end of the world), re-creation of the universe, resurrection, meeting with Allah, Judgement, Heaven and Hell, the unseen (*ghayb*), etc.

لَيْسَ الِّبَرُّ أَنْ تُؤْلُوا وُجُوهُكُمْ قَبْلَ الْمَشْرِقِ وَالْمَغْرِبِ وَلَكِنَّ الِّبَرُّ مَنْ آتَى اللَّهَ وَآتِيَّوْمَ الْآخِرِ
وَالْمَلَائِكَةَ وَالْكِتَابِ وَالنَّبِيِّنَ وَآتَى الْمَالَ عَلَى حُجَّهِ ذَوِي الْقُرْبَى وَالْيَتَامَى وَالْمَسَاكِينَ وَابْنَ
السَّبِيلِ وَالسَّائِلِينَ وَفِي الرِّقَابِ وَأَقَامَ الصَّلَاةَ وَآتَى الرِّزْكَاهَ وَالْمُؤْمِنُونَ بِعِهْدِهِمْ إِذَا عَاهَدُوا
وَالصَّابِرِينَ فِي الْبَأْسَاءِ وَالضَّرَاءِ وَحِينَ الْبَأْسِ ۝ أُولَئِكَ الَّذِينَ صَدَقُوا ۝ وَأُولَئِكَ هُمُ
الْمُتَّقِّنُونَ

2:177 It is not whether you turn your faces towards east or west that is piety; but the pious is the one who believes in Allah, the Last Day, the angels, the Book and the messengers; and (who) gives his treasured wealth to kin, orphans, the poor, the wayfarer, those who ask, and for freeing slaves; and (who is) steadfast in the Prayer, and (who) gives charity; and (who) fulfill the contracts they make; and (who) remain patient during suffering and adversity, and during war. They are the people of truth and they are the God-conscious.

ذَلِكَ بِأَنَّ اللَّهَ هُوَ الْحَقُّ وَأَنَّهُ يُحِبُّ الْمُؤْمِنَى وَأَنَّهُ عَلَى كُلِّ شَيْءٍ قَدِيرٌ وَأَنَّ السَّاعَةَ آتِيَّةٌ لَا
رَبِّ فِيهَا وَأَنَّ اللَّهَ يَبْعَثُ مَنْ فِي الْأُفْوَرِ

22:6-7 That is so because Allah is the Reality (the Truth) and (because) He gives life to the dead, and (because) He has power over all things. And (because) the (Final) Hour will come; there is no doubt about it and about (the fact) that Allah will raise up (all) who are in the graves.

إِنَّ الَّذِينَ آمَنُوا وَالَّذِينَ هَادُوا وَالصَّارَى وَالصَّابِرَى مَنْ آمَنَ بِاللَّهِ وَالْيَوْمِ الْآخِرِ وَعَمِلَ صَالِحًا فَلَهُمْ أَجْرٌ مِّنْ رَّبِّهِمْ وَلَا حَوْفٌ عَلَيْهِمْ وَلَا هُمْ يَحْزُنُونَ

2:62 The believers (in the Quran), the Jews, the Christians and the Sabians (or) any who believe in Allah and the Day of Judgement and work righteousness – they have their reward with their Lord; they do not have to fear nor shall they grieve.

فَآمَنُوا بِاللَّهِ وَرَسُولِهِ وَالنُّورِ الَّذِي أَنْزَلْنَا ۚ وَاللَّهُ إِنَّمَا تَعْمَلُونَ حَسِيرٌ

64:8 Believe, therefore, in Allah and His messenger and in the Light (i.e., the Quran), which We have sent down. And Allah is well acquainted with what you do.

يَا أَيُّهَا الَّذِينَ آمَنُوا بِاللَّهِ وَرَسُولِهِ وَالْكِتَابِ الَّذِي نَزَّلَ عَلَى رَسُولِهِ وَالْكِتَابِ الَّذِي أَنْزَلَ مِنْ قَبْلِهِ ۝ وَمَنْ يَكُفُّرْ بِاللَّهِ وَمَلَائِكَتِهِ وَكُنْدِلِيقَتِهِ وَرُسُلِهِ وَالْيَوْمِ الْآخِرِ فَقَدْ ضَلَّ ضَلَالًا بَعِيدًا ۝

4:136 Any whoever denies Allah, His angels, His Books, His messengers, and the Day of Judgment, has gone far astray.

إِنَّ الَّذِينَ يَكْفُرُونَ بِاللَّهِ وَرَسُولِهِ وَيُرِيدُونَ أَنْ يُفَرِّقُوا بَيْنَ اللَّهِ وَرَسُولِهِ وَيَقُولُونَ نُؤْمِنُ بِيَعْضٍ وَنَكْفُرُ بِيَعْضٍ وَيُرِيدُونَ أَنْ يَتَخَذُلُوا بَيْنَ ذَلِكَ سَبِيلًا أُولَئِكَ هُمُ الْكَافِرُونَ حَقًّا ۝ وَأَعْتَدْنَا لِلْكَافِرِينَ عَذَابًا مُهِينًا وَالَّذِينَ آمَنُوا بِاللَّهِ وَرَسُولِهِ وَمَنْ يُفَرِّقُوا بَيْنَ أَحَدٍ مِنْهُمْ أُولَئِكَ سَوْفَ يُؤْتَيْهِمْ أَحْرَارَهُمْ ۝ وَكَانَ اللَّهُ عَفْوًا رَحِيمًا

4:150-152 Those who deny Allah and His apostles, and wish to discriminate between Allah and His apostles, saying, “We believe in some and we reject others”, and (those who) wish to take a middle course, they are in truth the unbelievers, and we have kept for the unbelievers a humiliating punishment. Those who believe in Allah and His apostles and make no distinction between any of the apostles, for them He will give their rewards. And Allah is Oft-Forgiving, Most Merciful.

الَّذِينَ يُؤْمِنُونَ بِالْعَيْبِ وَمُقِيمُونَ الصَّلَاةَ وَمَنْ رَزَقْنَاهُمْ يُنْتَهِيُونَ

2:3 Those who believe in the unseen, are steadfast in Prayer and spend (in charity) out of what We have provided them.

يَسْأَلُونَكَ عَنِ السَّاعَةِ أَيَّانَ مُرْسَاهَا ۝ قُلْ إِنَّمَا عِلْمُهَا عِنْدَ رَبِّي ۝ لَا يُجْلِيهَا لَوْقَتُهَا إِلَّا هُوَ ۝ نَعْلَمُ فِي السَّمَاوَاتِ وَالْأَرْضَ ۝ لَا تَأْتِيكُمْ إِلَّا بَعْنَةً ۝ يَسْأَلُونَكَ كَائِنَاتٍ حَفِيَّةٍ عَنْهَا ۝ قُلْ إِنَّمَا عِلْمُهَا عِنْدَ اللَّهِ وَلَكُنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ ۝

7:187 They ask you about the (Final) Hour - when will it happen? Say: Verily, its knowledge is with my Lord (alone). None but He can reveal its time. It will be hard for the skies and the earth. It will come to you all of a sudden. They ask you as if you are well informed about it. Say: Certainly, its knowledge is with Allah (alone); but most people do not know.

وَمَنْ آتَيْتَهُ أَنْ تَقْوَمُ السَّمَاءُ وَالْأَرْضُ بِأَمْرِهِ ۝ ثُمَّ إِذَا دَعَاكُمْ دَعْوَةً مِنَ الْأَرْضِ إِذَا أَنْتُمْ
خَرُجُونَ

30:25 And among His signs is the existence of the skies and earth by His command. Then when He calls you by a single call (on the Day of Resurrection), behold you (all) come out of the earth!

يَوْمَ نَطْرُي السَّمَاءَ كَطَيِّ السِّجْلِ لِلْكُتُبِ ۝ كَمَا بَدَأْنَا أَوَّلَ خَلْقٍ نُعِيدُهُ ۝ وَعْدًا عَلَيْنَا
إِنَّا كُنَّا فَاعِلِينَ ۝

21:104 The Day We roll up the sky like a scroll rolled up for books! As We originated the first creation, so shall We repeat it – a promise binding on Us. Truly shall We fulfill it.

وَيَوْمَ يَحْشُرُهُمْ كَانُوا لَمْ يَلْبُسُوا إِلَّا سَاعَةً مِنَ النَّهَارِ يَسْعَارُونَ بَيْنَهُمْ ۝ قَدْ حَسِرَ الدِّينَ
كَذَّبُوا بِلِقَاءَ اللَّهِ وَمَا كَانُوا مُهْتَدِينَ

10:45 The Day He gathers them together! (They will feel on resurrection that) they had spent hardly an hour of a day. They will recognize each other. Surely those who denied the meeting with Allah had lost (everything) and they did not receive guidance.

أَوْمَّ يَنْفَكِرُوا فِي أَنْفُسِهِمْ ۝ مَا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَحَلِّ
مُسَمَّىٰ ۝ وَإِنَّ كَثِيرًا مِنَ النَّاسِ بِلِقَاءَ رَبِّهِمْ لَكَافِرُونَ

30:8 Do they not think themselves? Allah did not create the skies and the earth, and all in between except with truth (i.e., with purpose) for a fixed term. Yet there are many among people who deny meeting with their Lord!

يَا أَيُّهَا النَّاسُ إِنْ كُنْتُمْ فِي رَبِّ مِنَ الْبَغْشِ فَإِنَّا خَلَقْنَاكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلْقَةٍ ثُمَّ مِنْ مُضْعَعَةٍ مُخْلَقَةٍ وَعَيْرَ مُخْلَقَةٍ لِبَيْنَ لَكُمْ وَنُقْرُ في الْأَرْحَامِ مَا نَشَاءُ إِلَى أَجْلٍ مُسَمَّى ثُمَّ نُخْرُجُكُمْ طَفْلًا ثُمَّ يَتَبَلَّغُوا أَشْدَكُمْ وَمِنْكُمْ مَنْ يُتَوَقَّى وَمِنْكُمْ مَنْ يُرَدُّ إِلَى أَرْذَلِ الْغَمْرِ لِكِيلًا يَعْلَمُ مِنْ بَعْدِ عِلْمٍ شَيْئًا وَتَرَى الْأَرْضَ هَامِدَةً فَإِذَا أَنْزَلْنَا عَلَيْهَا الْمَاءَ اهْتَرَّتْ وَرَبَّتْ وَأَنْبَتَتْ مِنْ كُلِّ نَوْجٍ كَثِيرًا

22:5 O mankind! If you are in doubt about resurrection, (consider) that We created you from dust, then out of (sperm) drop, then out of a leech-like clot, then out of a morsel of flesh, partly developed and partly undeveloped; (that is) to make it clear to you (Our power). And We retain in the wombs whatever We wish for a fixed term; then We bring you out (from the womb) as baby, then (We foster you) to reach your full development. And some of you die (early in their life) and some are brought to the feeblest old age so that they know nothing after having known (much). And you see the earth parched (and lifeless), but when We pour down rain on it, it stirs and swells, and it (causes) all kinds of wonderful pairs (of plants) to germinate (and grow).

وَقَالُوا إِذَا كُنَّا عِظَامًا وَرُفَاتًا إِنَّا لَمْ بُعْدُونَ حَتَّىٰ جَلِيدًا قُلْ كُونُوا حِجَارَةً أَوْ حَدِيدًا أَوْ حَلْفَانًا مِمَّا يَكْبِرُ فِي صُدُورِكُمْ فَسَيَقُولُونَ مَنْ يُعِيدُنَا قُلِ الَّذِي فَطَرَكُمْ أَوَّلَ مَرَّةً فَسَيُعْضُدُونَ إِلَيْكَ رُؤُوسَهُمْ وَيَقُولُونَ مَنْ هُوَ قُلْ عَسَى أَنْ يَكُونَ قَرِيبًا

17:49-51 They say: What! After we had become bones and dust, we will be resurrected as a new creation? Say (O Prophet Muhammad!): Let you be stone or iron or anything, which in your memories is the most difficult (to be resurrected), (yet you will be resurrected)! Then they will ask: Who will return us (to

a new creation)? Say: The One who created you first time. Then they will nod their heads towards you (mockingly) and ask: "When will that be? Say: Maybe, it will happen quite soon!"

d) Religious rites, prayers and rules

There are several rites and prayers prescribed by Allah in the Quran for human beings to follow. These are acts of worshipping Allah. Allah has also prescribed rules, laws and punishment for crimes for sustaining peace and justice in the society. The rules for male and female are different to suit the biosystem as well as the purpose intended by the Creator. All these are part and parcel of Allah's religion Islam prescribed in His Scriptures and conveyed through the prophets.

e) Other aspects

Allah also tests us through hardships and good things in this life.

أَمْ حَسِبُتُمْ أَنْ تَدْخُلُوا الْجَنَّةَ وَلَمَّا يَعْلَمِ اللَّهُ الدِّينَ جَاهَدُوا مِنْكُمْ وَيَعْلَمَ الصَّابِرِينَ
3:142 Do you think that you will enter the Garden while Allah has not yet known who among you have striven hard (in the cause of Allah) and (who are) the patient ones.

أَمْ حَسِبُتُمْ أَنْ تَدْخُلُوا الْجَنَّةَ وَلَمَّا يَأْتِكُمْ مَنَّا الَّذِينَ خَلُوا مِنْ قَبْلِكُمْ ۝ مَسْتَهْمُ الْبَاسَاءُ
وَالضَّرَاءُ وَرُزِّلُوا حَتَّىٰ يَقُولُ الرَّسُولُ وَالَّذِينَ آمَنُوا مَعَهُ مَنَّى نَصْرُ اللَّهِ ۝ أَلَا إِنَّ نَصْرَ اللَّهِ
فَرِيبٌ

2:214 Or do you think that you will enter the Garden without (going through) such (trials) as that came to those before you? They faced difficulty and adversity and were shaken to such an extent that even the messenger and the believers with him cried, "When (will) Allah's help (come)?" Ah! Know Allah's help is certainly near!

أَحَسِبَ النَّاسُ أَنْ يُتْرَكُوا أَنْ يَقُولُوا آمَنَّا وَهُمْ لَا يُفْتَنُونَ وَلَقَدْ فَتَنَّا الَّذِينَ مِنْ قَبْلِهِمْ ۝
فَلَيَعْلَمَنَّ اللَّهُ الَّذِينَ صَدَقُوا وَلَيَعْلَمَنَّ الْكَاذِبِينَ أَمْ حَسِبَ الَّذِينَ يَعْمَلُونَ السَّيِّئَاتِ أَنْ
يَسْبِقُونَا ۝ سَاءَ مَا يَحْكُمُونَ مَنْ كَانَ يَرْجُو لِقاءَ اللَّهِ فَإِنَّ أَجَلَ اللَّهِ لَا تِ ۝ وَهُوَ السَّمِيعُ
الْعَلِيمُ وَمَنْ جَاهَدَ فِيمَا يُجَاهِدُ لِنَفْسِهِ ۝ إِنَّ اللَّهَ لَغَنِيٌّ عَنِ الْعَالَمِينَ

29:2-6 Do people think they will be left alone because they say “we believe”, and that they will not be tested? We did test those before them. Thus Allah will certainly know who told the truth and He will also know who are liars. Do the evildoers think that they will outwit Us? What they judge is bad! Whoever hopes for the meeting with Allah, indeed that time decreed by Allah will come. And He hears and knows (all things). And whoever strives, he strives only for his own soul. Verily, Allah is not dependent on people of the world.

وَلَنَبْلُونَكُمْ بِشَيْءٍ مِّنَ الْحُזْنِ وَالْخُوْفِ وَالْخُوْجَعِ وَنَفْصٍ مِّنَ الْأَمْوَالِ وَالْأَنْفُسِ وَالثَّمَرَاتِ ۝ وَبَشِّرُ
الصَّابِرِينَ

2:155 Be sure we shall test you with something of fear and hunger, some loss in wealth, lives and fruits, but give glad tidings to those who patiently persevere.

لَتُبَلَّوْنَ فِي أَمْوَالِكُمْ وَأَنْفُسِكُمْ وَلَتُسْتَمْعَنَ مِنَ الَّذِينَ أُوتُوا الْكِتَابَ مِنْ قَبْلِكُمْ وَمِنَ الَّذِينَ
أَشْرَكُوا أَدَى كَثِيرًا ۝ وَإِنْ تَصْبِرُوا وَتَتَّقُوا فَإِنَّ دُلْكَ مِنْ عَزْمِ الْأَمْوَرِ

3:186 You will certainly be tried and tested in your possessions and in your personal selves (i.e., physically). And you will certainly hear so much disturbing things from those who received the Book before you and from those who associate partners with Allah. But if you remain patient and fear Allah, then verily it is a matter great (mental) resolve.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَيَأْتِيَنَّكُمُ اللَّهُ بِشَيْءٍ مِّنَ الصَّيْدِ تَنَاهُ أَيْدِيهِمْ وَرَمَاحُكُمْ لِيَعْلَمَ اللَّهُ
مِنْ يَخْافُهُ بِالْعَيْبِ ۝ فَمَنْ اعْنَدَهُ بَعْدَ ذَلِكَ فَلَهُ عَذَابٌ أَلِيمٌ

5:94 O believers! Allah will indeed test you in the matter of game (i.e., hunted animal) caught by your hands and your

spears, to know who fears Him unseen. Whoever transgresses thereafter will have a grievous penalty.

مَنْ كَانَ يُرِيدُ الْعَاجِلَةَ عَجَّلْنَا لَهُ فِيهَا مَا نَسَاءَ لِمَنْ نُرِيدُ ثُمَّ جَعَلْنَا لَهُ جَهَنَّمَ يَصْلَاهَا
مَدْفُومًا مَدْخُورًا

17:18 Whoever wishes for the transient things (of this life), We readily grant them what We like in such things to whom We like. Thereafter We will give him Hell. He will burn therein disgraced and repelled.

مَنْ كَانَ يُرِيدُ ثَوَابَ الدُّنْيَا فَعِنْدَ اللَّهِ ثَوَابُ الدُّنْيَا وَالآخِرَةِ ۝ وَكَانَ اللَّهُ سَيِّئًا بَصِيرًا

4:134 Whoever desires the reward of this world, (let him know that) with Allah is the reward of this world and the Hereafter. Allah hears and sees (all things).

رُبُّنَ لِلنَّاسِ حُبُّ الشَّهَوَاتِ مِنَ النِّسَاءِ وَالْبَنِينَ وَالْقَنَاطِيرِ الْمُفْقَنْطَرَةِ مِنَ الْذَّهَبِ وَالْفِضَّةِ
وَالْحُلَيلِ الْمُسْؤَمَةِ وَالْأَنْعَامِ وَالْحَرْثِ ۝ ذَلِكَ مَتَاعُ الْحَيَاةِ الدُّنْيَا ۝ وَاللَّهُ عِنْدُهُ خُسْنُ الْمَآبِ

3:14 Love for coveted things (like) women, children, heaped-up hoards of gold and silver, bred horses, cattle and crops are made alluring to mankind. These are pleasures of the life of (this) world. And with Allah is the excellent destination (for mankind).

وَاعْلَمُوا أَمَّا أَمْوَالُكُمْ وَأَوْلَادُكُمْ فَتَنَّةٌ وَأَنَّ اللَّهَ عِنْدَهُ أَجْرٌ عَظِيمٌ

8:28 And know that your wealth and your children are a trial and it is with Allah the highest reward is.

اللَّهُ يُسْطِعُ الرِّزْقَ لِمَنْ يَشَاءُ وَيَقْدِرُ ۝ وَفَرِحُوا بِالْحَيَاةِ الدُّنْيَا وَمَا الْحَيَاةُ الدُّنْيَا فِي الْآخِرَةِ
إِلَّا مَتَاعٌ

13:26 Allah enhances sustenance to whom He wishes and restricts (the sustenance to whom He wishes). They rejoice in the life of this world. The life of this world is nothing but a (small) comfort compared to the Hereafter.

ذَلِكَ بِأَنَّهُمْ اسْتَحْبُوا الْحَيَاةَ الدُّنْيَا عَلَى الْآخِرَةِ وَأَنَّ اللَّهَ لَا يَهْدِي النَّقْوَمُ الْكَافِرِينَ أُولَئِكَ الَّذِينَ طَبَعَ اللَّهُ عَلَى قُلُوبِهِمْ وَسَعَاهُمْ وَأَبْصَارُهُمْ ۖ وَأُولَئِكَ هُمُ الْغَافِلُونَ

16:107-108 That is because they love the life of this world more than the Hereafter and that Allah will not guide the disbelieving people. They are the ones whose minds, hearing and vision Allah has sealed up and they are the ones (who are) the unmindful.

إِنَّا جَعَلْنَا مَا عَلَى الْأَرْضِ زِينَةً لَّهَا لِبَتُولُوهُمْ أَيُّهُمْ أَحْسَنُ عَمَالًا

18:7 Indeed We have made all that is on earth a decoration for it in order to test them (as to) who among them are best in deed.

إِنَّمَا أَمْوَالُكُمْ وَأَوْلَادُكُمْ فِتْنَةٌ ۚ وَاللَّهُ عِنْدَهُ أَحْرُجٌ عَظِيمٌ

64:15 Certainly, your wealth and your children are but a trial. And with Allah is the great reward.

الْمَالُ وَالْبَنُونَ زِينَةُ الْحَيَاةِ الدُّنْيَا ۖ وَالْبَاقِيَاتُ الصَّالِحَاتُ خَيْرٌ عِنْدَ رَبِّكَ تَوَابًا وَخَيْرٌ أَمَالًا

18:46 Wealth and children are adornment of the life of this world. But the good (deeds) that last are better for reward with your Lord and better to hope for.

وَمَا أَمْوَالُكُمْ وَلَا أَوْلَادُكُمْ بِالَّتِي تُقْرِبُونَ إِلَّا مِنْ آمَنَ وَعَمِلَ صَالِحًا فَأُولَئِكَ هُمُ جَزَاءُ الْصَّاغِفِ بِمَا عَمِلُوا وَهُمْ فِي الْعُرْقَاتِ آمِنُونَ

34:37 Your wealth and your children do not bring you nearer to Us except those who believe and do good. They are the ones for whom there is double the reward for their deeds and they will be in the secure high places.

وَمَا أُوتِيْشُمْ مِنْ شَيْءٍ فَمَتَاعُ الْحَيَاةِ الدُّنْيَا وَرِزْقُهَا ۖ وَمَا عِنْدَ اللَّهِ خَيْرٌ وَأَيْقَنِي ۖ أَفَلَا تَعْقِلُونَ

28:60 Whatever things you are given are provisions of this life and its adornment; but what is with Allah (i.e., in the Hereafter) is better and everlasting. Still do you not realize?

وَمَا هُنْدِهُ الْحَيَاةُ الدُّنْيَا إِلَّا هُمْ وَلَعِبٌ ۝ وَإِنَّ الدَّارَ الْآخِرَةَ لَهُيَ الْحَيَاةُ ۝ لَوْ كَانُوا يَعْلَمُونَ

29:64 The life of this world is nothing but amusement and play (to the rejecters). Verily the Home of the Hereafter (i.e., Heaven) is the real life, if only they knew!

فَأَمَّا الْإِنْسَانُ إِذَا مَا ابْتَلَاهُ رَبُّهُ فَأَكْرَمَهُ وَتَعَمَّمَ فَيَقُولُ رَبِّي أَكْرَمَنِ وَأَمَّا إِذَا مَا ابْتَلَاهُ فَعَذَّرَ عَلَيْهِ رَبُّهُ فَيَقُولُ رَبِّي أَهَانَنِ

89:15-16 As for man, when his Lord tests him with honours and bounty, then he will say, "My Lord has honoured me". But when He tests him by restricting his sustenance, then he will say, "My Lord has humiliated me".

وَمِنَ النَّاسِ مَنْ يَقُولُ آمَنَّا بِاللَّهِ فَإِذَا أُوذِيَ فِي اللَّهِ جَعَلَ فُتْنَةَ النَّاسِ كَعَذَابِ اللَّهِ وَلَعِنَ جَاءَ نَصْرٌ مِنْ رَبِّكَ لَيَقُولُنَّ إِنَّا كُنَّا مَعَكُمْ ۝ أَوْ يَسِّرَ اللَّهُ بِأَعْلَمَ مِمَّا فِي صُدُورِ الْعَالَمَيْنَ وَلَيَعْلَمَنَّ اللَّهُ الدِّينَ آمَنُوا وَلَيَعْلَمَنَّ الْمُنَافِقِينَ

29:10-11 There are, among people, those who say, "We believe in Allah"; but if they happen to suffer in (the cause of) Allah, they will take the persecution by the people for Allah's punishment. And if help comes from your Lord, they are sure to say, "We have been with you". Is not Allah who knows best what is (stored) in the memories of people of the world? And Allah certainly knows those who believed and He certainly knows the hypocrites.

وَلَنَبْلُونَكُمْ حَتَّىٰ تَعْلَمَ الْمُجَاهِدِينَ مِنْكُمْ وَالصَّابِرِينَ وَنَبْلُو أَخْبَارَكُمْ

47:31 And We will test you until We know who among you strive hard (in the cause of Allah) and are patient. And We will test your record.

فُلْنَ يَا قَوْمَ اعْمَلُوا عَلَىٰ مَكَانِتُكُمْ إِنِّي عَامِلٌ ۝ فَسُوفَ تَعْلَمُونَ مَنْ تَكُونُ لَهُ عَاقِبَةُ الدَّارِ ۝ إِنَّهُ لَا يُفْلِحُ الظَّالِمُونَ ۝

6:135 (O Prophet Muhammad) say: “O people! Do according to your way. I too am doing (according to my way). You will know afterwards who will have the Ultimate Home (i.e., Heaven). Verily, the wrongdoers will not succeed.”

كُلَّا مُعْدٌ هُؤُلَاءِ وَهُؤُلَاءِ مِنْ عَطَاءِ رَبِّكَ ۝ وَمَا كَانَ عَطَاءُ رَبِّكَ مَحْظُورًا انْظُرْ كَيْفَ فَصَلَّى
بَعْضُهُمْ عَلَى بَعْضٍ ۝ وَلَلآخِرَةُ أَكْبَرُ دَرَجَاتٍ وَأَكْبَرُ تَفْضِيلًا

17:20-21 We help all – these as well as those (people) – from the bounties of your Lord. The bounties of your Lord are not closed (to anyone). See how We have favoured some over others. But the Hereafter is greater in status and greater in preference.

فَمَا أُوْتِيْتُمْ مِنْ شَيْءٍ فَمَتَاعُ الْحَيَاةِ الدُّنْيَا ۝ وَمَا عِنْدَ اللَّهِ خَيْرٌ وَأَبْغَى لِلَّذِينَ آمَنُوا وَعَلَى
رَحْمَمْ يَسْتَوْكُلُونَ

42:36 What you are given is (only) the provision for the life of this world. And what is (kept) with Allah is better and everlasting for those who believe and put their trust in their Lord.

إِلَيْهِ مَرْجِعُكُمْ جَمِيعًا ۝ وَعَدَ اللَّهُ حَقًّا ۝ إِنَّهُ يَبْدأُ الْحَلْقَ ثُمَّ يُعِيدُهُ لِيَعْزِيزِ الَّذِينَ آمَنُوا
وَعَمِلُوا الصَّالِحَاتِ بِالْقِسْطِ ۝ وَالَّذِينَ كَفَرُوا لَهُمْ شَرَابٌ مِنْ حَمِيمٍ وَعَذَابٌ أَلِيمٌ إِمَّا كَانُوا
يَكْفُرُونَ

10:4 To Him is the return of all of you. The promise of Allah is truth. It is He who begins the creation and repeats it to reward with justice those who believe and do good deeds; but those who reject Him will have boiling drinks and a grievous penalty because they rejected Him.

يَا أَيُّهَا النَّاسُ إِنَّ وَعْدَ اللَّهِ حَقٌّ ۝ فَلَا تَعْرِئُكُمُ الْحَيَاةُ الدُّنْيَا ۝ وَلَا يَعْرِئُكُمْ بِاللَّهِ الْغَرُورُ

35:5 O mankind! Certainly the promise of Allah is true. Therefore let not the life of this world deceive you and let not the chief deceiver (i.e., the Satan) deceive you about Allah.

Mission of the prophets

To convey His messages to human robots undergoing the test, Allah designed the most effective means of communication with them by choosing representatives from among themselves and appointing them as His messengers or prophets to convey His message. Allah had not sent a prophet to any people who spoke a different language.

أَكَانَ لِلنَّاسِ عَجَبًا أَنْ أُوحِيَنَا إِلَيْ رَجُلٍ مِّنْهُمْ أَنَّ أَنذِرِ النَّاسَ وَبَشِّرِ الَّذِينَ آمَنُوا أَنَّ لَهُمْ
فَدَمَ صِدْقٌ عِنْدَ رَّبِّهِمْ ۖ قَالَ الْكَافِرُونَ إِنَّ هَذَا لَسَاحِرٌ مُّبِينٌ

10:2 Is it a surprise to people that We conveyed (the message) to a person from among themselves to warn people and to give good news to the believers that they have lofty rank of truth with their Lord? (But) the unbelievers said: “This (man, Prophet Muhammad) is indeed an evident magician!”

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ إِلَّا رِجَالًا نُوحِي إِلَيْهِمْ مِنْ أَهْلِ الْفُرْقَىٰ ۖ أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ
فَيَنْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِهِمْ ۖ وَلَدَارُ الْآخِرَةِ خَيْرٌ لِلَّذِينَ آتَيْنَا ۖ أَفَلَا
يَعْقُلُونَ

12:109 We had not sent before you (Prophet Muhammad) anyone (as apostle) except men from among the people of the country (concerned) conveying Our message. Had they not travelled through the earth and seen what was the end of those before them? The home of the Hereafter is best for the righteous. Will you not then understand?

وَمَا أَرْسَلْنَا مِنْ رَسُولٍ إِلَّا بِلِسَانٍ قَوْمِهِ لِيُبَيِّنَ لَهُمْ ۖ فَيُضَلُّ اللَّهُ مَنْ يَشَاءُ وَيَهْدِي مَنْ
يَشَاءُ ۖ وَهُوَ أَعْلَمُ الْحَكَمَيْمُ

14:4 We had not sent any apostle except in the language of his people to explain (the message) to them. Then Allah misguides whom He pleases and guides whom He pleases. And He is Mighty, Wise.

Human history thus saw the advent of a string of prophets ending with Prophet Muhammad. The exact number of prophets sent by Allah is not mentioned in the Quran. They all preached Allah's religion Islam.

وَلَقَدْ بَعَثْنَا فِي كُلِّ أُمَّةٍ رَسُولًا أَنْ اعْبُدُوا اللَّهَ وَاجْتَبَيْنَا الطَّاغُوتَ ۖ فَمِنْهُمْ مَنْ هَدَى اللَّهَ
وَمِنْهُمْ مَنْ حَقَّتْ عَلَيْهِ الضَّلَالَةُ ۚ فَسَيِّرُوا فِي الْأَرْضِ فَانظُرُوا كَيْفَ كَانَ عَاقِبَةُ الْمُكَذِّبِينَ

16:36 We had certainly appointed an apostle to every people (with the message), “You serve Allah and give up *tagut* (i.e., a false god people worshipped)”. There are some among them whom Allah guided and some who were left astray. So travel through the earth and see how the end of the rejecters (of Faith) is.

وَلَقَدْ أَرْسَلْنَا مِنْ قَبْلِكَ فِي شَيْءٍ الْأُولَئِنَّ

15:10 We had sent apostles to earlier groups (of people) before you (Prophet Muhammad).

قُولُوا آمَنَّا بِاللَّهِ وَمَا أُنْزِلَ إِلَيْنَا وَمَا أُنْزِلَ إِلَى إِبْرَاهِيمَ وَإِسْمَاعِيلَ وَإِسْحَاقَ وَيَعْقُوبَ
وَالْأَسْبَاطِ وَمَا أُوتِيَ مُوسَى وَعِيسَى وَمَا أُوتِيَ النَّبِيُّونَ مِنْ رَبِّهِمْ لَا نُفَرِّقُ بَيْنَ أَحَدٍ مِنْهُمْ
وَلَكُنْ لَهُمُ الْمُسْلِمُونَ

2:136 You say: We believe in Allah and (in) the revelation sent down to us and (in) the revelation sent down to Abraham, Ismail, Isaac, Jacob, and to the descendants of Jacob, and that given to Moses and Jesus, and that given to (all) prophets from their Lord. We make no distinction between them. And we submit to Him (in Islam).

وَإِذْ يَرْفَعُ إِبْرَاهِيمُ الْقَوَاعِدَ مِنَ الْبَيْتِ وَإِسْمَاعِيلُ رَبَّنَا تَقْبَلَنِي ۖ إِنَّكَ أَنْتَ السَّمِيعُ الْعَلِيمُ
رَبَّنَا وَاجْعَلْنَا مُسْلِمِينَ لَكَ وَمِنْ ذُرِّيَّتِنَا أُمَّةً مُشْلِمَةً لَكَ وَأَرَنَا مَنَاسِكَنَا وَتُبْ عَلَيْنَا ۖ إِنَّكَ
أَنْتَ التَّوَابُ الرَّحِيمُ رَبَّنَا وَابْعَثْ فِيهِمْ رَسُولًا مِنْهُمْ يَتَّلَوْ عَلَيْهِمْ آيَاتِكَ وَيُعَلِّمُهُمُ الْكِتَابَ
وَالْحِكْمَةَ وَيُزَكِّيهِمْ ۖ إِنَّكَ أَنْتَ الْعَزِيزُ الْحَكِيمُ وَمَنْ يَرْعَبُ عَنْ مِلَّةِ إِبْرَاهِيمَ إِلَّا مَنْ سَفَهَ
نَفْسَهُ ۖ وَلَقَدِ اصْطَفَيْنَا فِي الدُّنْيَا ۖ وَإِنَّهُ فِي الْآخِرَةِ لِمَنِ الصَّالِحِينَ إِذْ قَالَ لَهُ رَبُّهُ أَسْلِمْ

قَالَ أَسْلَمْتُ لِرَبِّ الْعَالَمِينَ وَوَصَّىٰ بِهَا إِبْرَاهِيمُ تَنِيهٍ وَيَعْمُوبُ يَا بَنِي إِنَّ اللَّهَ اصْطَفَنِي لِكُمُ الدِّينَ فَلَا تَمُونُنَ إِلَّا وَأَنْتُمْ مُسْلِمُونَ

2:127-132 And remember Abraham and Ismail raised the foundations of the House (Masjidul Haram). (They prayed:) Our Lord! Accept (this service) from us. Verily You are the All-Hearing, the All-knowing. Our Lord! Make us Muslims and a Muslim community from our progenies. And show us our religious rites and accept our repentance. Verily You are Oft-Returning, Most Merciful. Our Lord! Appoint for them (i.e., for our progenies) a messenger from among themselves who shall recite to them Your revelations and teach them the Book and wisdom, and sanctify them. Indeed You are the Mighty, the Wise. And who will turn away from the religion of Abraham except the one who fools himself? We (i.e., Allah) chose and rendered him pure in this world and he will be in the ranks of the righteous in the Hereafter. Behold! His Lord said to him: Submit (yourself) to Me. He (i.e., Abraham) said: I submit (myself) to the Lord of the worlds. And Abraham and Jacob advised their children about it thus: O my children! Allah has chosen the religion (Islam) for you; then you should not die except as Muslims.

مَا كَانَ مُحَمَّدًا أَبَا أَحَدٍ مِّنْ رِجَالِكُمْ وَلَكِنْ رَسُولَ اللَّهِ وَخَاتَمُ النَّبِيِّنَ وَكَانَ اللَّهُ بِكُلِّ شَيْءٍ عَلِيمًا

33:40 Muhammad is not the father of any of your men, but (he is) the messenger of Allah, and the seal (last) of the prophets; and Allah has full knowledge of all things.

وَلَقَدْ أَرْسَلْنَا رُسُلًا مِّنْ قَبْلِكَ مِنْهُمْ مَنْ فَصَّلَنَا عَلَيْكَ وَمِنْهُمْ مَنْ لَمْ نَفْصُلْنَ عَلَيْكَ وَمَا كَانَ لِرَسُولٍ أَنْ يَأْتِي بِآيَةٍ إِلَّا بِإِذْنِ اللَّهِ فَإِذَا جَاءَ أَمْرُ اللَّهِ فُضِّلَ بِالْحَقِّ وَخَسِرَ هُنَالِكَ الْمُبْطَلُونَ

40:78 We had sent apostles before you (Prophet Muhammad). Of them there are some We have mentioned to you and some

We have not mentioned to you. It is not possible for an apostle to bring a sign without Allah's permission. And when Allah's order comes, the judgement will be passed with justice and the followers of falsehood will lose there.

The people of each prophet formed a nation. Each prophet was given a Book (Scripture) containing the religious matters prescribed for his people. That formed Allah's guidance – the religion Islam – for the people of that time.

كَانَ النَّاسُ أُمَّةً وَاحِدَةً فَبَعَثَ اللَّهُ النَّبِيِّينَ مُبَشِّرِينَ وَمُنذِرِينَ وَأَنْزَلَ مَعَهُمُ الْكِتَابَ بِالْحَقِّ
لِيَحُكُمُ بَيْنَ النَّاسِ فِيمَا اخْتَلَفُوا فِيهِ ۝ وَمَا اخْتَلَفَ فِيهِ إِلَّا الَّذِينَ أَوْتُوهُ مِنْ بَعْدِ
جَاءَهُمْ بِالْبَيِّنَاتُ بَعْدًا بَيْنَهُمْ ۝ فَهَدَى اللَّهُ الَّذِينَ آمَنُوا لِمَا اخْتَلَفُوا فِيهِ مِنْ الْحُقْقِ بِإِذْنِهِ
۝ وَاللَّهُ يَهْدِي مَنْ يَشَاءُ إِلَى صِرَاطٍ مُسْتَقِيمٍ

2:213 Mankind was a single community. Then Allah sent prophets as conveyors of good news and warnings and He also sent with them the Book in truth to judge between people in matters wherein they differed. But only those who received the Book differed in it after the clear signs had come to them because of mutual hatred. Thus Allah by His mercy guided the believers to the truth in which they differed. And Allah guides whom He likes to the straight path.

وَلِكُلِّ أُمَّةٍ جَعَلْنَا مَنْسَكًا لِيَذَكُرُوا اسْمَ اللَّهِ عَلَىٰ مَا رَزَقَهُمْ مِنْ بُجُيُّمَةِ الْأَنْعَامِ ۝ فَإِلَهُكُمْ إِلَهٌ
وَاحِدٌ فَلَهُ أَسْلِيمُوا ۝ وَبَشِّرُ الْمُخْتَيِّرِينَ الَّذِينَ إِذَا ذُكِرَ اللَّهُ وَجَلَّ قُلُوبُهُمْ وَالصَّابِرِينَ عَلَىٰ
مَا أَصَابَهُمْ وَالْفَقِيرِيِّ الصَّلَاةَ وَمَمْا رَزَقْنَاهُمْ يُنْفَعُونَ

22:34-35 To every people We have prescribed rites to pronounce the name of Allah over the sustenance He gave them from animals. Your God is One God and so submit to Him (in Islam) and proclaim the good news to the humble (people) whose minds will tremble (with fear) when they are reminded of Allah, who tolerate their afflictions, keep up the Prayer, and spend (in charity) from what We have provided them.

لِكُلِّ أُمَّةٍ جَعَلْنَا مِنْسَكًا هُمْ نَاسِكُوهُ ۖ فَلَا يُنَازِعُنَّكَ فِي الْأُمُورِ ۚ وَادْعُ إِلَى رَبِّكَ ۖ إِنَّكَ لَعَلَىٰ هُدًى مُّسْتَقِيمٍ

22:67 To every people We have prescribed rites, which they follow. Let them not then dispute with you (Prophet Muhammad) in that matter. And you invite (people) to your Lord. Certainly you are on the right guidance.

There is only one Book given to a prophet (Q. 13:38-39, 15:4). That Book contained the religion Islam prescribed for his people. Thus the people of a prophet should follow the directives given in the Book sent to their prophet. Allah informs that He tests the people of a prophet in what is given to them (Q. 5:48); i.e., the directions and messages in the Book given to the prophet formed the basis of Allah's test for them. Thus Allah's directives given in the Quran form the religion Islam for the people of Prophet Muhammad, i.e., people born to this earth from the time Muhammad became prophet till the end of the world. The Quran thus forms the basis of divine test to us.

وَلَقَدْ أَرْسَلْنَا رُسُلًا مِّنْ قَبْلِكَ وَجَعَلْنَا لَهُمْ أَرْوَاحًا وَدُرَرَةً ۗ وَمَا كَانَ لِرَسُولٍ أَنْ يَأْتِي بِآيَةٍ إِلَّا يَأْذِنُ اللَّهُ ۖ لِكُلِّ أَجْلٍ كِتَابٌ يَمْحُوا اللَّهُ مَا يَشَاءُ وَيُثْبِتُ ۖ وَعِنْدَهُ أُمُّ الْكِتَابِ

13:38-39 We had sent apostles before you and given them wives and children. It is impossible for an apostle to bring a revelation without Allah's permission. For each period there is a Book. Allah deletes or retains what He wants. With Him is the Mother of the Book.

وَمَا أَهْلَكْنَا مِنْ قَرْيَةٍ إِلَّا وَلَكُمْ كِتَابٌ مَعْلُومٌ

15:4 We had not destroyed any country without giving a known Book.

وَأَنْزَلْنَا إِلَيْكَ الْكِتَابَ بِالْحَقِّ مُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ مِنَ الْكِتَابِ وَمُهَمِّمًا عَلَيْهِ ۖ فَاخْكُمْ بَيْنَهُمْ إِمَّا أَنْزَلَ اللَّهُ ۖ وَلَا تَتَنَزَّعَ أَهْوَاهُمْ عَمَّا جَاءَكَ مِنَ الْحَقِّ ۖ لِكُلِّ جَعَلْنَا إِنْكُمْ

سِرْعَةً وَمِنْهَا جَاءَ ۖ وَلَوْ شَاءَ اللَّهُ بَعَدَكُمْ أُمَّةٌ وَاحِدَةٌ وَلَكِنْ لَيْلُوكُمْ فِي مَا آتَيْتُكُمْ ۝
فَاسْتَبِّعُوا الْخَيْرَاتِ ۝ إِلَى اللَّهِ مَرْجِعُكُمْ حَمِيمًا فَيُبَيِّنُكُمْ مَا كُنْتُمْ فِيهِ تَحْتَلُونَ

5:48 We sent down the Book (the Quran) to you (O Prophet Muhammad) in truth confirming the Book that came before it and as guardian over it (i.e., protecting the true revelations carried in the earlier Book). Therefore judge between them by what Allah has revealed and do not follow their desires leaving the truth that has come to you. To each among you We have prescribed a law and a (code of religious) practice (*minhaj*). If Allah had so willed, He would have made you a single people, but (His plan is) to test you in what He has given you. So strive to advance in good things. The return of you all is to Allah. It is He who will show you the truth of the matters in which you dispute.

وَلَقَدْ آتَيْنَا مُوسَى وَهَارُونَ الْفُرْقَانَ وَضِيَاءً وَذِكْرًا لِلمُتَّقِينَ الَّذِينَ يَخْشَوْنَ رَبَّهُمْ بِالْغَيْبِ وَهُمْ
مِنَ السَّاعَةِ مُسْفِقُونَ

21:48-49 We had given to Moses and Harun the criterion (to judge right and wrong), a light and a Reminder (i.e., *Taurat*) for the God-conscious who fear their Lord unseen and who are afraid of the (Final) Hour.

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ إِلَّا رِجَالًا نُوحِي إِلَيْهِمْ ۝ فَاسْأَلُوا أَهْلَ الذِّكْرِ إِنْ كُنْتُمْ لَا تَعْلَمُونَ
بِالْبَيِّنَاتِ وَالرُّتْبَرِ ۝ وَأَرْزَلْنَا إِلَيْكَ الذِّكْرَ لِتُبَيِّنَ لِلنَّاسِ مَا نُزِّلَ إِلَيْهِمْ وَلَعَلَّهُمْ يَتَعَمَّدُونَ

16:43-44 And before you (Prophet Muhammad), We had sent only men (as apostles) to whom We transmitted the message. If you do not know this, ask the People of the Book. (We sent them) with clear signs and Scriptures. And We sent down to you (Prophet Muhammad) this Reminder (i.e., the Quran) to explain to the people what has been sent to them so that they may think (over it).

وَوَهَبْنَا لَهُ إِسْحَاقَ وَيَعْقُوبَ ۝ كُلَّا هَدَيْنَا ۝ وَنُوحًا هَدَيْنَا مِنْ قَبْلِ ۝ وَمِنْ دُرْرَتِهِ دَأْوَدَ
وَسُلَيْمَانَ وَأَيُوبَ وَيُوسُفَ وَمُوسَى وَهَارُونَ ۝ وَكَلِيلَةَ بَخْرَى الْمُحْسِنِينَ وَزَكَرِيَا وَحَجَّيَا

وَعِيسَىٰ وَإِلْيَاسَ ۖ كُلُّ مِنَ الصَّالِحِينَ وَإِسْمَاعِيلَ وَالْيَسَعَ وَيُونُسَ وَلُوطًا ۖ وَكُلُّاً فَصَّلَنَا عَلَى الْعَالَمِينَ وَمِنْ آبَائِهِمْ وَذُرَّيَّهِمْ وَإِخْوَانِهِمْ ۖ وَاجْتَبَيْنَاهُمْ وَهَدَيْنَاهُمْ إِلَى صِرَاطٍ مُسْتَقِيمٍ ذُلِكَ هُدَى اللَّهِ يَهْدِي بِهِ مَنْ يَشَاءُ مِنْ عِبَادِهِ ۖ وَلَوْ أَشْرَكُوا لَهُ طَرِيقًا عَنْهُمْ مَا كَانُوا يَعْمَلُونَ أُولَئِكَ الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ وَالْحُكْمَ وَالنُّبُوَّةَ ۖ فَإِنْ يَكُفُّرُنَّ بِهَا هُنَّ لَاءُ قَدْرٍ وَكُلْنَا بِهَا قَوْمًا كَيْسُوا بِهَا بِكَافِرِينَ

6:84-89 We gave him (i.e., Abraham) Isaac and Jacob. We guided all of them. And earlier We guided Noah and from his progeny David, Solomon, Job, Joseph, Moses and Aaron. Thus We reward the righteous. And (We also guided) Zakariya, John, Jesus and Elias. They were all good-doers. And (also) Ismail, Elisha, Jonas and Lot. And We favoured them all over (other) people of the world. And We chose from among their fathers, their progeny and their brethren and We guided them to a straight path. That is Allah's guidance. He guides whom He pleases from among His servants. If they join gods with Him, all that they do would become futile for them. They were those to whom We gave the Book, authority of judgement and prophethood. If they reject them, then We entrusted it with a people who will not reject them.

Although every prophet was given Scripture, only five are mentioned in the Quran by name. These are the Scriptures sent to Prophet Abraham (Ibrahim), Prophet Moses (Musa), Prophet David (Davood), Prophet Jesus Christ (Isa) and Prophet Muhammad. Of these, the Book of Abraham (Q. 87:18-19), the earliest of the series, is practically unknown to the present-day world. There is a book in Greek by G. H. Box called *The Testament of Abraham* published in 1927 by the Society for the Promotion of Christian Knowledge, London. It seems to be a Greek translation of a Hebrew original [7]. The book of Moses is *Taurat* (Q. 5:44); the Book of David is *Zaboor* (Q. 4:163); the Book of Jesus is *Injeel* (Q. 5:46) and the Book of last prophet Muhammad is the Quran (Q. 2:185, 20:114). These Scriptures as well as those not mentioned in the

Quran in fact form the divine software (Allah's instructions or programs) of guidance for people of different era.

إِنَّ هَذَا لِفِي الصُّحْفِ الْأُولَى صُحْفٌ إِنْرَاهِيمَ وَمُوسَى

87:18-19 Verily this (message) is in the earlier Scriptures, the Scriptures of Abraham and Moses.

إِنَّا أَنْزَلْنَا التُّورَةَ فِيهَا هُدًى وَنُورٌ ۝ يَحْكُمُ بِهَا النَّبِيُّونَ الَّذِينَ أَسْلَمُوا لِلَّذِينَ هَادُوا وَالرَّبَّانِيُّونَ
وَالْأَحْجَارُ إِمَّا اسْتَحْفَظُوا مِنْ كِتَابِ اللَّهِ وَكَانُوا عَلَيْهِ شُهَدَاءٍ ۝ فَلَا تَخُشُّوا النَّاسَ وَاصْحَشُونَ
وَلَا تَشْتَرُوا بِآيَاتِنَا قَلِيلًا ۝ وَمَنْ لَمْ يَحْكُمْ بِهَا أَنْزَلَ اللَّهُ فَأُولَئِكَ هُمُ الْكَافِرُونَ

5:44 Indeed, We had sent down the *Taurat* (to Moses). Therein was guidance and light. The messengers who submitted themselves to Allah passed judgement to the Jews with that. Their clerics (*rabbis*) and religious scholars (also followed it) because they were made responsible for the protection of Allah's Book and they were its witnesses. Therefore do not fear people but fear Me and do not sell My signs (i.e., Scriptural revelations) for a paltry price. Those who do not judge by what Allah has revealed, they are the unbelievers.

وَقَفَّيْنَا عَلَى آثَارِهِمْ بِعِيسَى ابْنِ مَرْيَمَ مُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ مِنَ التُّورَةِ ۝ وَأَتَيْنَاهُ الْإِنْجِيلَ
فِيهِ هُدًى وَنُورٌ وَمُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ مِنَ التُّورَةِ وَهُدًى وَمُؤْعِظَةٌ لِلْمُتَعَنِّينَ

5:46 And We sent Jesus the son of Mary in continuation of them (i.e., earlier apostles) confirming the *Taurat* that came before him. We gave him the *Injeel* (Gospel). Therein is guidance and light and it is a confirmation of the *Taurat* that came before him. It is a guidance and advice to those who are God-conscious.

هُنْ رَمَضَانَ الَّذِي أَنْزَلَ فِيهِ الْقُرْآنُ هُدًى لِلنَّاسِ وَبَيِّنَاتٍ مِنَ الْهُدَى وَالْفُرْقَانِ ۝ فَمَنْ
شَهَدَ مِنْكُمُ الشَّهَرَ فَلْيَصُمِّمْهُ ۝ وَمَنْ كَانَ مَرِيضًا أَوْ عَلَى سَفَرٍ فَعَلَّمَهُ مِنْ أَيَّامٍ أُخْرَ ۝
يُرِيدُ اللَّهُ بِكُمُ الْيُسْرَ وَلَا يُرِيدُ بِكُمُ الْعُسْرَ وَلَتُكْمِلُوا الْعِدَّةَ وَلَتُنَبَّهُوا اللَّهُ عَلَى مَا هَدَأْتُمْ
وَلَعَلَّكُمْ تَشَكُّرُونَ

2:185 “Ramadan is the month in which the Quran was sent down as guidance to mankind and clear proofs for guidance and criterion (for judging right and wrong)...”

فَتَعَالَى اللَّهُ الْمَلِكُ الْحَقُّ ۝ وَلَا تَعْجَلْ بِالْقُرْآنِ مِنْ قَبْلِ أَنْ يُفْضِي إِلَيْكَ وَحْيُهُ ۝ وَقُلْ
رَبِّ زِدْنِي عِلْمًا

20:114 High above all is Allah, the true King! You should not be in haste with the Quran before its message is transmitted to you as programmed (by Allah) and say: “O my Lord! Increase my knowledge.”

Prophets were messengers appointed by Allah to convey His directives to the people. If prophets were not sent, people would not have received the divine guidance and would have plea against Allah. The only responsibility assigned by Allah to the prophet is to convey His messages contained in the Book given to him.

رَسُّالاً مُبَشِّرِينَ وَمُنذِرِينَ لَكُلُّا يَكُونُ لِلنَّاسِ عَلَى اللَّهِ حُجَّةٌ بَعْدَ الرَّسُولِ ۝ وَكَانَ
اللَّهُ عَزِيزًا حَكِيمًا

4:165 Messengers are conveyors of good news and warners so that mankind, after (the coming) of the apostles, should not have any plea against Allah. And Allah is Mighty, Wise.

وَلَوْ أَنَّا أَهْلَكْنَاهُمْ بِعَذَابٍ مِنْ قَبْلِهِ لَقَالُوا رَبَّنَا لَوْلَا أَرْسَلْتَ إِلَيْنَا رَسُولًا فَنَتَّبَعَ آيَاتِكَ مِنْ
قَبْلِ أَنْ نَذَلَّ وَنَخْرُجَ

20:134 And if We had destroyed them with a punishment before this, they would have said: “Our Lord! Why did You not send an apostle to us. Then we would have followed Your directives before we suffered disgrace and shame.”

وَلَوْلَا أَنْ ثُصِّيَّهُمْ مُصِيَّةٌ بِمَا قَدَّمْتُ أَيْدِيهِمْ فَيَقُولُوا رَبَّنَا لَوْلَا أَرْسَلْتَ إِلَيْنَا رَسُولًا فَنَتَّبَعَ
آيَاتِكَ وَكَوْنُونَ مِنَ الْمُؤْمِنِينَ

28:47 (Oh Prophet! We would not have sent you to them) if they will not say when some calamity befalls on them because of what their hands did earlier: “Our Lord! Why did You not send us an apostle? We should have followed then Your signs (i.e., revelations) and become believers”.

وَاصْرِبْ لَهُمْ مَثَلًا أَصْحَابَ الْفَرِيْةِ إِذْ جَاءَهَا الْمُرْسَلُونَ إِذْ أَرْسَلْنَا إِلَيْهِمُ اثْنَيْنِ فَكَذَّبُوهُمَا
فَعَرَزْنَا بِشَالِثٍ فَقَالُوا إِنَّا إِلَيْكُمْ مُرْسَلُونَ قَالُوا مَا أَنْتُمْ إِلَّا بَشَرٌ مِثْلُنَا وَمَا أَنْزَلَ الرَّحْمَنُ مِنْ
شَيْءٍ إِنْ أَنْتُمْ إِلَّا تَكْذِبُونَ قَالُوا رَبُّنَا يَعْلَمُ إِنَّا إِلَيْكُمْ لَمَرْسُلُونَ وَمَا عَلَيْنَا إِلَّا الْبَلَاغُ الْمُبِينُ

36:13-17 You (Prophet Muhammad) describe to them about the people of that country as an example. Behold, when the apostles came there! When We (first) sent to them two apostles, they rejected both of them. Then We strengthened them with a third. The apostles said (to the people): Truly, we are messengers sent to you. The (people) said: You are only men like us. And (Allah) Most Gracious has not sent anything. You are only telling lie. The apostles said: Our Lord knows that we are (messengers) sent to you. And our duty is only to convey (the message) clearly.

وَإِبْرَاهِيمَ إِذْ قَالَ لِقَوْمِهِ اعْبُدُوا اللَّهَ وَاتَّقُوهُ ۝ دُلِكُمْ خَيْرٌ لَكُمْ إِنْ كُنْتُمْ تَعْلَمُونَ إِنَّمَا^١
تَعْبُدُونَ مِنْ دُونِ اللَّهِ أُوتَانَا وَخَلَقْنَاكُمْ إِنَّمَا ۝ إِنَّ الَّذِينَ تَعْبُدُونَ مِنْ دُونِ اللَّهِ لَا يَمْلِكُونَ
لَكُمْ رِزْقٌ فَابْتَغُوا عِنْدَ اللَّهِ الرِّزْقَ وَاعْبُدُوهُ وَاشْكُرُوهُ ۝ إِلَيْهِ تُرْجَعُونَ وَإِنْ تُكَذِّبُوا فَقَدْ
كَذَّبَ أُمُّمٌ مِنْ قَبْلِكُمْ ۝ وَمَا عَلَى الرَّسُولِ إِلَّا الْبَلَاغُ الْمُبِينُ

29:16-18 And (remember) Abraham, when he said to his people: Serve Allah and fear Him. That is good for you, if you understand. Certainly what you worship besides Allah are mere idols and you invent falsehood. Verily, the things you worship besides Allah have no power to give you sustenance. Therefore, you seek sustenance from Allah. Serve Him and be grateful to Him. To Him will be your return. And if you reject (the message), so did generations before you. The duty of the apostle is only to convey (the message) clearly.

Allah has made agreement with prophets for conveying His Scripture to the people.

وَإِذْ أَخَذَ اللَّهُ مِيثَاقَ النَّبِيِّينَ لِمَا آتَيْتُكُمْ مِنْ كِتَابٍ وَحِكْمَةٍ ثُمَّ جَاءَكُمْ رَسُولٌ مُصَدِّقٌ لِمَا
مَعَكُمْ لَتَرْوَمُنَّ بِهِ وَلَنَصْرُونَهُ ۝ قَالَ أَفَقْرِزُنَا وَأَخْدُمُنَا عَلَى دُلُكُمْ إِصْرِي ۝ فَأُلُوا
أَفْرِزَنَا ۝ قَالَ فَأَشْهَدُوا وَأَنَا مَعَكُمْ مِنَ الشَّاهِدِينَ

3:81 Behold! Allah took covenant of the prophets that “I give you Book and wisdom and then an apostle comes to you confirming what is (i.e., the Book) with you, then you should believe in him and render him help.” Allah said: “Do you agree and accept my covenant as binding on you?” They said: “We agree.” Allah said: “Then you bear witness and I also bear witness along with you.”

وَإِذْ أَخَذْنَا مِنَ النَّبِيِّينَ مِيثَاقَهُمْ وَمِنْكَ وَمِنْ نُوحٍ وَإِنْرَاهِيمَ وَمُوسَى وَعِيسَى ابْنِ مَرْيَمَ ۝
وَأَخَذْنَا مِنْهُمْ مِيثَاقًا عَلَيْهَا لِيَسْأَلَ الصَّادِقِينَ عَنْ صِدْقِهِمْ ۝ وَأَعَدَ لِلْكَافِرِينَ عَذَابًا أَلِيمًا

33:7-8 And remember We took from the prophets their covenant – from you (Prophet Muhammad), from Noah, Abraham, Moses, and Jesus the son of Mary. We took from them a solemn covenant to question the truthful about their honesty. And He has kept for the unbelievers a painful penalty.

The people to whom the prophet was sent formed the nation of that prophet in the divine test programme. The prophet will be the witness of his people on the Day of Judgment.

وَلِكُلِّ أُمَّةٍ رَسُولٌ ۝ فَإِذَا جَاءَ رَسُولُهُمْ قُضِيَ بَيْنَهُمْ بِالْقُسْطِ وَهُمْ لَا يُظْلَمُونَ

10:47 To every nation (*ummah*) is an apostle. Thus upon arrival of their apostle, judgement would be passed (on Day of Judgement) between them with justice and they will not be dealt with unjustly.

وَيَوْمَ تَبَعَثُ مِنْ كُلِّ أُمَّةٍ شَهِيدًا ثُمَّ لَا يُؤْدَنُ لِلَّذِينَ كَفَرُوا وَلَا هُمْ يُسْتَعْنَبُونَ

16:84 The Day We will raise from each people a witness! Then the unbelievers will not be permitted (to present their excuses) nor will they be asked to repent (to Allah for forgiveness).

وَيَوْمَ يَبْعَثُ فِي كُلِّ أُمَّةٍ شَهِيدًا عَلَيْهِمْ ۝ وَجَنَّا بِكَ شَهِيدًا عَلَىٰ هُؤُلَاءِ ۝
وَنَزَّلْنَا عَلَيْكَ الْكِتَابَ تِبْيَانًا لِكُلِّ شَيْءٍ وَهُدًى وَرَحْمَةً وَبُشْرَىٰ لِلْمُسْلِمِينَ

16:89 The Day We will raise for each people a witness over them from among themselves. And We will bring you as witness over those people. We sent down the Book to you as an explanation to everything, a guide, a mercy, and good news to Muslims (i.e., those who submit to the will of God).

يَوْمَ يَجْمَعُ اللَّهُ الرُّسُلَ فَيَقُولُ مَاذَا أَجِبْتُمْ ۝ قَالُوا لَا عِلْمَ لَنَا ۝ إِنَّكَ أَنْتَ عَلَامُ الْغُيُوبِ

5:109 The day Allah will assemble the apostles together! He will ask: What was the response you received (from people to the message you conveyed to them)? They will say: We have no knowledge. Certainly it is You who has full knowledge of the mysteries.

فَكَيْفَ إِذَا جَنَّا مِنْ كُلِّ أُمَّةٍ بِشَهِيدٍ وَجَنَّا بِكَ عَلَىٰ هُؤُلَاءِ شَهِيدًا

4:41 How will it be if We bring a witness from each people and We bring you (Prophet Muhammad) as witness over these people?

Miracles shown by the prophets

Many prophets were bestowed with special abilities to perform miracles in order to convince the people of their divinity and authenticity. Thus we find that Prophet Moses could change a rod into a snake, change the colour of his hand to white, split the sea creating a path to escape from the enemies, etc.

وَلَقَدْ آتَيْنَا مُوسَىٰ تِسْعَ آيَاتٍ بَيِّنَاتٍ ۝ فَاسْأَلْ بَنِي إِسْرَائِيلَ إِذْ حَاءُهُمْ فَقَالَ لَهُ فِرْعَوْنُ
إِنِّي لَأَظْنُنُكَ يَا مُوسَىٰ مَسْحُورًا

17:101 We had given Moses nine clear signs. Ask the Children of Israel (about) the situation when he came to them (as messenger of Allah with those signs). Pharaoh said to him: “O Moses! Indeed I consider you as one affected by sorcery!”

قَالَ إِنْ كُنْتَ چُفْتَ بِآيَةٍ فَأَبْرِهِ إِنْ كُنْتَ مِنَ الصَّادِقِينَ فَأَلْقِي عَصَاهُ فَإِذَا هِيَ تُعْبَانُ
مُبِينٌ وَنَزَعَ يَدَهُ فَإِذَا هِيَ بِيَضَاعٍ لِلنَّاظِرِينَ قَالَ الْمَلَأُ مِنْ قَوْمٍ فِرْعَوْنَ إِنْ هُدَا لَسَاحِرٌ عَلَيْهِ

7:106-109 (Pharaoh) said: “If you have come with a sign, then bring it, if you are telling the truth.” Then (Moses) dropped his rod and it was an obvious snake! And he drew out his hand, and behold, it was white to all the beholders! The bigwigs among the people of Pharaoh said: “Here is indeed an expert magician.”

فَاتَّبَعُوهُمْ مُشْرِقِينَ فَلَمَّا تَرَاءَى الْجَمْعَانِ قَالَ أَصْحَابُ مُوسَى إِنَّا لَمُذْرُكُونَ قَالَ كَلَّا إِنَّ
مَعَيِّ رَبِّي سَيِّدُنَا فَأَوْحَيْنَا إِلَيْ مُوسَى أَنِ اسْرِبْ بِعَصَاكَ الْبَحْرَ فَأَنْتَلَقَ فَكَانَ كُلُّ
فِرْقٍ كَالظَّوْدِ الْعَظِيمِ

26:60-63 So they (i.e., Pharaoh and his people) followed them (i.e., Moses and his followers) at sunrise. And when the two parties saw each other, the companions of Moses said: We are sure to be captured. Moses said: By no means! My Lord is with me; He will guide me. Then We conveyed to Moses: Strike the sea with your stick. (When Moses struck it with his stick), it divided and each part was like a huge mountain of sand.

Jesus Christ (Prophet Isa) could speak from the cradle, heal the sick, bring dead men back to life, restore eyesight to the blind, heal lepers, create living bird from clay.

إِذْ قَالَ اللَّهُ يَا عِيسَى ابْنَ مَرْيَمَ اذْكُرْ يَعْمَتِي عَلَيْكَ وَعَلَى وَالِدَتِكَ إِذْ أَيْدَتُكَ بِرُوحِ الْقُدْسِ
تُكَلِّمُ النَّاسَ فِي الْمَهْدِ وَكَهْلًا وَإِذْ عَلَمْتُكَ الْكِتَابَ وَالْحِكْمَةَ وَالْفُرَزَادَ وَالْإِنْجِيلَ وَإِذْ
تَخْلُقُ مِنَ الطَّلَيْنِ كَهِيَّةً الطَّيْرِ يَادِنِ فَتَنْفُخُ فِيهَا فَتَكُونُ طَيْرًا يَادِنِ وَثَبِرِيُّ الْأَكْمَةِ

وَالْأَبْرَصَ يَأْذِنِي ۖ وَإِذْ تُخْرِجُ الْمُؤْتَىٰ يَأْذِنِي ۖ وَإِذْ كَفَّتُ بَنِي إِسْرَائِيلَ عَنْكَ إِذْ حَتَّتْهُمْ
بِالْبَيْنَاتِ فَقَالَ الَّذِينَ كَفَرُوا مِنْهُمْ إِنْ هُدَا إِلَّا سِحْرٌ مُّبِينٌ

5:110 (Remember) Allah said: “O Jesus the son of Mary! Remember My favour to you and to your mother. I strengthened you with *Rooh-ul-Qudusi* (Jibreel) to enable you to speak to the people from the cradle (as infant) and in adulthood. I taught you the Book and wisdom, the *Taurat* (i.e., the Book revealed to Prophet Moses) and the *Injeel* (i.e., the Book revealed to himself). And behold, you made clay mould of a bird by My permission, then you breathed into it and it became a bird by My permission, and you cured the blind and the lepers by My permission. And you brought out the dead (alive from the grave) by My permission. And behold, I did restrain the Children of Israel from (violence to) you when you approached them with clear signs and the unbelievers among them said, “This is nothing but sheer magic.”

إِذْ قَالَ الْحَوَارِيُّونَ يَا عِيسَى ابْنَ مَرْيَمَ هَلْ يَسْتَطِيعُ رَبُّكَ أَنْ يُنْزِلَ عَلَيْنَا مَائِدَةً مِنَ السَّمَاءِ
قَالَ أَتَقْتُلُوكُمْ مُّؤْمِنِينَ قَالُوا نُرِيدُ أَنْ نَأْكُلَ مِنْهَا وَأَطْمَئِنَ فَلُوِّنَا وَاعْلَمَ أَنْ قَدْ
صَدَقْنَا وَنَكُونُ عَلَيْهَا مِنَ الشَّاهِدِينَ قَالَ عِيسَى ابْنُ مَرْيَمَ اللَّهُمَّ رَبِّنَا أَنْزِلْ عَلَيْنَا مَائِدَةً
مِنَ السَّمَاءِ ثُكُونْ لَنَا عِيدًا لِأَوْلَانَا وَآخِرِنَا وَآيَةً مِنْكَ ۖ وَازْرَقْنَا وَأَنْتَ خَيْرُ الرَّازِقِينَ قَالَ
اللَّهُ أَعْلَمُ مُنْرَفُّ عَلَيْكُمْ ۖ فَمَنْ يَكْفُرُ بَعْدُ مِنْكُمْ فَإِنِّي أَعْذُّهُ عَذَابًا لَا أُعْذِّهُ أَحَدًا مِنَ
الْعَالَمِينَ

5:112-115 Behold! The disciples said: “O Jesus the son of Mary! Can your Lord send down to us a plate of food from the sky?” Jesus said: “Fear Allah, if you are believers.” They said: “We only wish to eat from it for our mental satisfaction and to know that you have indeed told us the truth. And we ourselves (want to) be the witnesses to it (i.e. the food plate from the sky).” Jesus the son of Mary said: “O Allah our Lord! Send down to us a plate of food from the sky so that it will be a festival for us - from the first to the last of us, and a sign from

You. And give us sustenance for You are the best of providers of sustenance." Allah said: "I will send it down to you. But if any of you rejects Faith thereafter, then I will punish him with a penalty such as I have not inflicted on any one in the world."

Prophet Solomon communicated with birds and ants. His army included members from *Jinn* race and birds. Solomon was also given power to control wind.

وَوَرَثَ سُلَيْمَانَ دَأْوِودَ ۖ وَقَالَ يَا أَيُّهَا النَّاسُ عَلِمْنَا مِنْطِقَ الطَّيْرِ وَأَوْتَيْنَا مِنْ كُلِّ شَيْءٍ ۖ
إِنَّ هَذَا لَهُ الْفَضْلُ الْمُبِينُ وَخَشِرَ لِسُلَيْمَانَ جُنُودُهُ مِنَ الْجِنِّ وَالْإِنْسِ وَالْطَّيْرِ فَهُمْ يُوزَعُونَ
حَتَّىٰ إِذَا أَتَوْا عَلَىٰ وَادِ النَّمْلِ قَالَ ثُمَّةٌ يَا أَيُّهَا النَّمْلُ اذْخُلُوا مَسَاكِنَكُمْ لَا يَخْطُمْنَكُمْ
سُلَيْمَانُ وَجُنُودُهُ وَهُمْ لَا يَشْعُرُونَ فَتَبَسَّمَ ضَاحِكًا مِنْ قَوْلِهَا وَقَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ
بِعِنْدِكَ الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَىٰ وَالْدَّيْنِ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَدْبِحْنِي بِرَحْمَتِكَ فِي
عِبَادَكَ الصَّالِحِينَ

27:16-19 And Solomon became the successor of David. He said: O people! We have been taught the mode of communication of birds and we are given all (necessary) things. This is indeed a clear blessing (from Allah.). And for Solomon, soldiers were gathered from *jinn* race, mankind and birds, and they were all kept under control. Thus when they came to a valley of ants, one of the ants said: O you ants, get into your homes, lest Solomon and his army should crush you (under their feet) unknowingly. Then he smiled amused by her (i.e., ant's) words and he said: O my Lord! Inspire me to be grateful to You for Your favours, which You bestowed on me and on my parents, and to do righteous deeds to Your satisfaction. And admit me by Your mercy to the ranks of Your righteous servants.

وَلِسُلَيْمَانَ الرِّيحَ عُدُوُّهَا شَهْرٌ وَرَوَاحُهَا شَهْرٌ ۖ وَأَسْلَنَا لَهُ عَيْنَ الْقِطْرِ ۖ وَمِنَ الْجِنِّ مَنْ
يَعْمَلُ بَيْنَ يَدَيْهِ بِإِذْنِ رَبِّهِ ۖ وَمَنْ يَرْغُبُ مِنْهُمْ عَنْ أَمْرِنَا نُذْفَهُ مِنْ عَذَابِ السَّعِيرِ

34:12 And (We made) the wind (obedient) to Solomon. Its morning course was a month's (journey) and its evening course

was a month's (journey). And We made a fountain of molten copper to flow for him. And there were *jinns* who worked for him by the command of his Lord and if any of them turned away from Our command, We would make him (i.e., the *jinn*) suffer the penalty of the Blazing Fire.

فَسَخْرَنَا لَهُ الرَّيْحَ بَحْرِيٍّ بِأَمْرِهِ رُحَاءً حَيْثُ أَصَابَ وَالشَّيَاطِينُ كُلُّ بَنَاءٍ وَغَوَّاصٍ وَآخَرِينَ
مُقْرِبِينَ فِي الْأَصْفَادِ

38:36-38 Then We subjected the wind to him (i.e., Solomon) to blow gently under his order wherever he wanted, and the Satans (who are) building constructors and divers, and also others who were tied together in fetters.

To Prophet David iron was made soft, and hills and birds chanted with him.

وَلَقَدْ آتَيْنَا دَاوُودَ مِنَّا فَضْلًا ۝ يَا جِبَالُ أَوَّيْ مَعَهُ وَالطَّيْرُ ۝ وَاللَّهُ لَهُ الْحَدِيدَ

34:10 We had bestowed mercy on David from Us: “O you hills and birds! Chant (the praises of Allah) with him!” And We softened the iron for him,

Prophet Job (Ayyub) could make water gush forth on stamping on the ground.

وَادْكُنْ عَبْدَنَا أَيُّوبَ إِذْ نَادَى رَبَّهُ أَيْ مَسَئِي الشَّيْطَانُ بِنُصْبٍ وَعَذَابٍ ازْكَضْ بِرْجِلِكَ ۝
هَذَا مُغْسَلٌ بَارِدٌ وَشَرَابٌ

38:41-42 Remember Our servant Job. Behold, he called upon his Lord: The Satan has afflicted me with distress and suffering. (We instructed him:) “Stamp (on the ground) with your foot.” Lo! Here is cool (water) to wash and drink!

Prophet Joseph (Yusuf) was given the ability to interpret dreams.

وَكَذَلِكَ يَجْتَبِيكَ رَبُّكَ وَيُعَلِّمُكَ مِنْ تَأْوِيلِ الْأَحَادِيثِ وَيُنِيمُ نَعْمَةَ عَلَيْكَ وَعَلَى آلِ يَعْقُوبَ
كَمَا أَنْتَهَا عَلَى أَبْوَيْكَ مِنْ قَبْلِ إِنْرَاهِيمَ وَإِسْحَاقَ ۝ إِنَّ رَبَّكَ عَلِيمٌ حَكِيمٌ

12:6 Thus your Lord will choose you (Prophet Joseph) and He will teach you the interpretation of the stories (i.e., dreams) and complete His favour on you and on the family of Jacob as He completed it on your fathers Abraham and Isaac before! Verily, Allah is full of knowledge and wisdom.

وَقَالَ الَّذِي اشْتَرَاهُ مِنْ مِصْرَ لِأَمْرَأِهِ أَكْرَمِي مَتْوَاهُ عَسَى أَنْ يَنْفَعَنَا أَوْ تَسْخِدَهُ وَلَدًا ۝
وَكَذَلِكَ مَكَّنَّا لِيُوسُفَ فِي الْأَرْضِ وَلَنْعَلَّمَهُ مِنْ تَأْوِيلِ الْأَحَادِيثِ ۝ وَاللَّهُ عَالِيٌّ أَمْرُهُ
وَلِكُنْ أَكْثَرُ النَّاسِ لَا يَعْلَمُونَ

12:21 The man from Egypt who bought him (Joseph) said to his wife: "Make his stay (with us) honourable. Maybe he will be of benefit to us or we will adopt him as son." Thus We established Joseph on the earth. (That was also) for Us to teach him the interpretation of stories (i.e., dreams). And Allah has full control over His affairs, but most people do not realize it.

وَدَخَلَ مَعَهُ السَّجْنَ فَتَبَانَ ۝ قَالَ أَحَدُهُمَا إِلَيْيَ أَرَانِي أَعْصِرُ حِمْرًا ۝ وَقَالَ الْآخَرُ إِلَيْيَ أَرَانِي
أَحْمَلُ فَوْقَ رَأْسِي خُبْرًا تَأْكُلُ الطَّيْرُ مِنْهُ ۝ تَبَانَ بِتَأْوِيلِهِ ۝ إِنَّا نَرَاكَ مِنَ الْمُحْسِنِينَ قَالَ
لَا يَأْتِيكُمَا طَعَامٌ شُرَقَانِهِ إِلَّا بَأْثُكُمَا بِتَأْوِيلِهِ قَيْلَ أَنْ يَأْتِيَكُمَا ۝ ذَلِكُمَا مِمَّا عَلِمْنِي رَبِّي ۝
إِلَيْيَ تَرَكْتُ مِلَّةً قَوْمًا لَا يُؤْمِنُونَ بِاللَّهِ وَهُمْ بِالْآخِرَةِ هُمْ كَافِرُونَ

12:36-37 Two young men were also jailed with him. One of the two said: I see myself (in a dream) pressing wine. The other said: I see myself (in a dream) carrying bread on my head and the birds eat from it. (Joseph, please) explain to us their meaning. We see you as a good man. Joseph said: I will surely explain to you their meaning before the food provided to you comes to you,. (Interpretation of dreams) is one of the things what my Lord has taught me. I have indeed rejected the religion of a people who do not believe in Allah and who deny the Hereafter.

The miracles shown by the prophets may possibly be acts performed by Jibreel, the *rooh* that transmits the divine revelations to the prophets (see chapter 15).

Prophet Muhammad was not endowed with superhuman abilities. Although people asked Prophet Muhammad for miracles so that they could believe in the message he conveyed, Allah did not give because even if they are shown signs, they would not have believed (Q. 4:153; 6:37, 109, 111; 29:50-51).

يَسْأَلُكُ أَهْلُ الْكِتَابِ أَنْ تُنْزِلَ عَلَيْهِمْ كِتَابًا مِنَ السَّمَاءِ فَقَدْ سَأَلُوا مُوسَى أَكْبَرُ مِنْ ذَلِكَ فَعَلَوْا أَرِنَا اللَّهَ جَهَنَّمَ فَأَخَذْنَاهُمُ الصَّاعِقَةَ بِظُلْمِهِمْ ثُمَّ أَخْذُوا الْعِجْلَ مِنْ بَعْدِ مَا جَاءَتْهُمُ الْبَيِّنَاتُ فَعَفَوْنَاهُ عَنْ ذَلِكَ وَآتَيْنَا مُوسَى سُلْطَانًا مُبِينًا

4:153 The People of the Book ask you (Prophet Muhammad) to bring down a Book to them from the sky. Indeed they asked Moses for an even greater (miracle) when they said: "Show us Allah in His real Self". Then they were seized by thunder and lightning for their crime. Later they worshipped the calf after clear signs had come to them; but we forgave them for that and We gave Moses clear authority.

وَقَالُوا لَوْلَا نُزِّلَ عَلَيْهِ آيَةٌ مِنْ رَبِّهِ فُلِّ إِنَّ اللَّهَ قَادِرٌ عَلَى أَنْ يُنْزِلَ آيَةً وَلَكِنَّ أَكْثَرَهُمْ لَا يَعْلَمُونَ

6:37 They say: Why is not a sign sent down to him (i.e., Prophet Muhammad) from his Lord? Say: "Certainly Allah has power to send down a sign." But most of them do not realize.

وَأَقْسَمُوا بِاللَّهِ حَهْدَ أَيْمَانِهِمْ لَئِنْ جَاءَتْهُمْ آيَةٌ لَيُؤْمِنُنَّ هُنَّ فُلِّ إِنَّمَا الْآيَاتُ عِنْدَ اللَّهِ وَمَا يُنْتَهِيُوكُمْ أَنَّهَا إِذَا جَاءَتْ لَا يُؤْمِنُونَ

6:109 They swear their strongest oaths by Allah that if a sign comes to them, they will believe in it. Say: "Certainly the signs are with Allah (alone)." But what do you (i.e., Prophet Muhammad) know (about their oath)? (Even) if a sign comes (to them), they will not believe.

وَلَوْ أَنَّا نَزَّلْنَا إِلَيْهِمُ الْمَلَائِكَةَ وَكَلَمْهُمُ الْمَوْعِدَ وَحَشِّرْنَا عَلَيْهِمْ كُلَّ شَيْءٍ فُبْلًا مَا كَانُوا لَيُؤْمِنُوا إِلَّا أَنْ يَشَاءَ اللَّهُ وَلَكِنَّ أَكْثَرَهُمْ يَجْهَلُونَ

6:111 Even if We did send down angels to them, and the dead did speak to them, and We brought all things to them in heaps, they would not believe unless Allah wills. But most of them ignore (the truth).

وَقَالُوا لَوْلَا أُنْزِلَ عَلَيْهِ آيَاتٌ مِّنْ رَّبِّهِ قُلْ إِنَّا أَلْمَعُ بِأَنَّا نَذِيرٌ مُّبِينٌ

29:50 They (i.e., unbelievers) say: Why are not signs (i.e., miracles) sent down to him from his Lord? Say: The signs are indeed with Allah and I am only a clear warner.

The miracle of Prophet Muhammad is the Quran itself.

أَوْلَمْ يَكْفِيهِمْ أَنَّا أَنْزَلْنَا عَلَيْكُمُ الْكِتَابَ يُتَلَوَّ عَلَيْهِمْ إِنَّ فِي ذَلِكَ لَرْجُمَةً وَذِكْرًا لِّقَوْمٍ يُؤْمِنُونَ

29:51 Is the Book (the Quran) We sent down to you (Prophet Muhammad), which is recited to them, not enough (of a proof) for them? Verily, in that is mercy and Reminder to the believers.

Term for the people of a prophet

Several nations had gone by prior to the coming of Prophet Muhammad. Allah has stipulated a fixed term for the people of each prophet. Neither will it be advanced nor delayed. Once punished for their sins, the community cannot make a fresh comeback.

وَلِكُلِّ أُمَّةٍ أَجَلٌ قَدِيرٌ إِذَا جَاءَ أَجَلُهُمْ لَا يَسْتَأْخِرُونَ سَاعَةً وَلَا يَسْتَقْدِمُونَ

7:34 To each people there is a term. When their term is reached, they will not be delayed by an hour nor will they be advanced.

قُلْ لَا أَمْلِكُ لِنَفْسِي ضَرًا وَلَا نَفْعًا إِلَّا مَا شاءَ اللَّهُ لِكُلِّ أُمَّةٍ أَجَلٌ قَدِيرٌ إِذَا جَاءَ أَجَلُهُمْ فَلَا يَسْتَأْخِرُونَ سَاعَةً وَلَا يَسْتَقْدِمُونَ

10:49 (O Prophet Muhammad!) Say: I have no power (to do) any harm or benefit to myself except what Allah wills. To

every community is a stipulated term. When their time limit is reached, they will not be delayed (even for) a short while or advanced.

قَالَتْ رُسُلُهُمْ أَفِي اللَّهِ شَكٌ فَاطِرُ السَّمَاوَاتِ وَالْأَرْضِ يَدْعُوكُمْ لِيَغْفِرَ لَكُمْ مِنْ ذُنُوبِكُمْ
وَيُؤْخِرُكُمْ إِلَى أَجَلٍ مُسَمَّى قَالُوا إِنَّ أَنْتَمْ إِلَّا بَشَرٌ مِثْنَا ثَرِيدُونَ أَنْ تَصُدُّونَا
عَمَّا كَانَ يَعْبُدُ آباؤُنَا فَأَنْثَوْنَا بِسُلطَانٍ مُبِينٍ

14:10 Their apostles said: Is there a doubt about Allah, the Creator of the skies and the earth? It is He who invites you to forgive you your sins and to give you a fixed term. They said: Ah! You are just men like us. You want to turn us away from what our fathers were worshipping. Then bring us a clear authoritative proof.

وَيَسْتَعْجِلُونَكَ بِالْعَذَابِ وَلَوْلَا أَجَلٌ مُسَمَّى جَاءَهُمُ الْعَذَابُ وَلَيَأْتِيهِمْ بَعْتَةً وَهُمْ لَا
يَشْعُرُونَ

29:53 They ask you to hasten the punishment (for them). Had there not been a decreed term (for them), the punishment would have come to them. And it will certainly come to them all of a sudden while they do not perceive (it)!

يَغْفِرُ لَكُمْ مِنْ ذُنُوبِكُمْ وَيُؤْخِرُكُمْ إِلَى أَجَلٍ مُسَمَّى إِنَّ أَجَلَ اللَّهِ إِذَا جَاءَ لَا يُؤْخِرُ
لَوْ كُنْتُمْ تَعْلَمُونَ

71:4 So He may forgive you your sins and give you respite for a fixed term. When the term given by Allah ends it will not be postponed, if only you knew!

مَا تَسْبِقُ مِنْ أُمَّةٍ أَجَلَهَا وَمَا يَسْتَأْخِرُونَ

15:5 No community can advance its term or delay it.

وَكُنْ أَهْلَكْنَا قَبْلَهُمْ مِنْ قَرِينٍ هُلْ نُحْسِنُ مِنْهُمْ مِنْ أَحَدٍ أَوْ تَسْمَعُ لَهُمْ رِكْزِيزًا

19:98 But how many generations We had destroyed before them! Do you recognize any one of them (now) or hear (so much as) their whisper?

وَحَرَامٌ عَلَىٰ قَرْيَةٍ أَهْلَكْنَاهَا أَنَّهُمْ لَا يَرْجِعُونَ

21:95 And it is impossible for any nation, which We have destroyed, to revive.

Fate of earlier nations

The earlier peoples did not accept their prophets and Allah's guidance. Through many verses Allah informs us that when the people rejected Allah's guidance, they were destroyed on reaching their term and in their place new generations were brought. But they also had the same fate.

فَدَخَلْتُ مِنْ قَبْلِكُمْ سَنَنٌ فَسَيِّرُوا فِي الْأَرْضِ فَانظُرُوا كَيْفَ كَانَ عَاقِبَةُ الْمُنْكَرِينَ

3:137 Many ways of life (civilizations) have passed before you. So, travel through the earth and see what was the end of the rejecters.

وَالَّذِينَ كَذَّبُوا بِآيَاتِنَا سَيَسْتَدِرُ رُحْمُنَمْ مِنْ حِينَ لَا يَعْلَمُونَ وَأُمْلِي لَهُمْ إِنَّ كَيْدِي مَتِينٌ

7:182-183 Those who reject Our signs (messages), We will seize (i.e., punish) them gradually in ways unknown to them. And We will give them time. Indeed My plot is strong.

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ إِلَّا رِجَالًا نُوحِي إِلَيْهِمْ مِنْ أَهْلِ الْقَرْبَىٰ أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ فَيُنْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِهِمْ وَلَكِنْ أَخْرَهُ خَيْرُ لِلَّذِينَ آتَقْنَاهُمْ أَفَلَا تَعْقِلُونَ حَتَّىٰ إِذَا اسْتَيْأَسَ الرُّسُلُ وَظَنُّوا أَنَّهُمْ قُدْرَبُوا حَاءُهُمْ نَصَرْنَا فَنُحْجِي مِنْ نَشَاءٍ وَلَا يُرِدُّ بَأْسُنَا عَنِ الْقَوْمِ الْمُجْرِمِينَ لَقَدْ كَانَ فِي قَصَصِهِمْ عَبْرَةٌ لِأُولَئِكَ الْأَلْبَابِ مَا كَانَ حَدِيبًا يُفْتَرِي وَلَكِنْ تَصْدِيقَ الدِّيْنِ بَيْنَ يَدَيْهِ وَتَفْصِيلَ كُلِّ شَيْءٍ وَهُدًى وَرَحْمَةٌ لِلنَّاسِ يُرْمِنُونَ

12:109-111 We had not sent before you anyone (as apostle) except men from among the people of the country (concerned) conveying Our message. Had they not travelled through the earth and seen what was the end of those before them? The home of the Hereafter is best for the righteous. Will you not

then understand? When the apostles became disappointed (with their people) and (began to) think they were being treated as liars, Our help came to them and those whom We wish were saved. And Our punishment will not be blocked from the sinning people. There is indeed a lesson in their story for the intelligent people. This (Quran) is not a concocted account. On the other hand it is a confirmation of what went before it and a detailed explanation of all things. And it is a guide and mercy to believing people.

وَإِذَا أَرْدَنَا أَنْ تُهْلِكَ قَرِيَّةً أَمْرَنَا مُتَرْفِيهَا فَفَسَقُوا فِيهَا فَحَقَّ عَيْنَاهَا الْعَوْلُ فَدَمَرْنَاهَا تَدْمِيرًا
وَكُنْ أَفْلَكْنَا مِنَ الْفَرِّونَ مِنْ بَعْدِ نُوحٍ ۖ وَكَفَى بِرِّبِّكَ بِذُئْبَوبِ عِبَادِهِ خَبِيرًا بَصِيرًا

17:16-17 When We decide to destroy a country, We send out an order to the enjoyers of life there, then they commit mischief there. Thus the word is proved true against it (i.e., the country). Then We destroy it completely. How many generations We have destroyed after Noah! And enough is your Lord as meticulous observer of the sins of His servants.

كَذَّبُ الَّذِينَ مِنْ قَبْلِهِمْ فَأَتَاهُمُ الْعَذَابُ مِنْ حَيْثُ لَا يَشْعُرُونَ فَأَذَّاقَهُمُ اللَّهُ الْجَزِيرَىٰ فِي
الْحَيَاةِ الدُّنْيَا ۖ وَلَعَذَابَ الْآخِرَةِ أَكْبَرُ ۖ لَوْ كَانُوا يَعْلَمُونَ

39:25-26 Those before them had (also) rejected (the revelations) and so the punishment came to them in ways unknown to them. So Allah gave them a taste of humiliation in the life of this world but the punishment of the Hereafter is the biggest, if only they knew!

أَوْلَمْ يَسِيرُوا فِي الْأَرْضِ فَيُنْظِرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ كَانُوا مِنْ قَبْلِهِمْ ۖ كَانُوا هُمْ أَشَدَّ
مِنْهُمْ فُؤُدًا وَلَآتَاهُمُ اللَّهُ بِذُئْبَوبِهِمْ وَمَا كَانَ لَهُمْ مِنْ اللَّهِ مِنْ وَاقِ ذِلِكَ
بِأَنَّهُمْ كَانُوا تَأْتِيَهُمْ رُسُلُهُمْ بِالْبَيِّنَاتِ فَكَفَرُوا فَأَخْذَهُمُ اللَّهُ ۖ إِنَّهُ فَوِيقُ شَدِيدُ الْعِقَابِ

40:21-22 Did they not travel through the earth and see how was the end of those before them? They were mightier than them in strength and had left behind (rich) heritages on the earth. But Allah seized (i.e., punished) them for their sins and there was

none to protect them from (the wrath of) Allah. That was because their apostles had come to them with clear signs but they rejected them. So Allah seized them. Verily He is mighty and severe in punishment.

وَالَّذِينَ كَفَرُوا فَتَعْسَى لَهُمْ وَأَضَلَّ أَعْمَالَهُمْ ذَلِكَ بِأَنَّهُمْ كَرِهُوا مَا أَنْزَلَ اللَّهُ فَأَخْبَطَ أَعْمَالَهُمْ
أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ فَيَنْظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِهِمْ ۝ دَمَرَ اللَّهُ عَلَيْهِمْ ۝
وَلِلْكَافِرِينَ أَمْثَالُهَا ذَلِكَ بِأَنَّ اللَّهَ مُؤْمِنُ الَّذِينَ آمَنُوا وَأَنَّ الْكَافِرِينَ لَا مُؤْمِنٌ لَهُمْ

47:8-11 But those who do not believe, for them is destruction and He will render their deeds futile. That is because they hate what is sent down (i.e., the message) by Allah. Then He made their deeds fruitless. Have they not travelled through the earth and seen how was the end of their predecessors? Allah destroyed them utterly and a similar (fate awaits) the unbelievers. That is because Allah is the protector of the believers and there is no protector for the unbelievers.

كَذَّبُتْ قَبْلَهُمْ قَوْمُ نُوحٍ فَكَذَّبُوا عَبْدَنَا وَقَالُوا مَجْنُونٌ وَازْدَجَرَ فَدَعَا رَبَّهُ أَيْ مَغْلُوبٌ فَانْتَصَرَ
فَفَتَحْنَا أَبْوَابَ السَّمَاءِ بِمَا مُهْمِرٌ وَفَجَرْنَا الْأَرْضَ عُيُونًا فَأَنْتَقَيَ الْمَاءُ عَلَىٰ أَمْرٍ قَدْ قُرِرَ
وَحَمْلَنَا عَلَىٰ ذَاتِ الْوَاحِدِ وَدُسِرْ تَجْرِي بِأَعْيُنِنَا جَزَاءً لِمَنْ كَانَ كُفَّارٌ وَلَقَدْ تَرْكَنَاهَا آيَةً فَهَلْ
مِنْ مُدَكَّرٍ فَكَيْفَ كَانَ عَذَابِي وَنُذرِ

54:9-16 Before them, the people of Noah rejected (their apostle). They rejected Our servant calling him mad and he was driven out. Then Noah prayed to his Lord: I have failed; so You help (me). Then We opened the gates of the sky for pouring down water. And We caused the earth to gush forth with springs. Subsequently, (all) the water collected together for an already decided matter. And We put Noah on an (Ark) of planks and nails sailing before Our eyes. It was recompense to the rejected one (i.e., Noah)! And We have preserved the Ark as a sign (for posterity). But is there any who remembers? Then how (terrible) were My penalty and warning!

كَذَّبُتْ عَادٌ فَكَيْفَ كَانَ عَذَابِي وَنُذُرٍ إِنَّا أَرْسَلْنَا عَلَيْهِمْ رِيحًا صَرَصَرًا فِي يَوْمٍ نَّحْسٍ مُّسْتَوْرٌ
تَنْزِعُ النَّاسَ كَأَنَّهُمْ أَعْجَارٌ تَخْلِي مُنْقَعِرٍ فَكَيْفَ كَانَ عَذَابِي وَنُذُرٍ

54:18-21 The 'Ad (people) rejected (their apostle). Then how (terrible) were My penalty and warning! Indeed We sent against them a raging wind on a day of incessant disaster. It pulled out people as if they were boles of uprooted date palms. Then how (terrible) were My penalty and warning!

كَذَّبُتْ ثُمُودٌ بِالنُّذُرِ فَقَالُوا أَبْشِرُ مِنَا وَاحِدًا تَنْبَغِعُ إِنَّا إِذَا لَفِي ضَلَالٍ وَسُعْرٍ أَلْقِي الْذُكْرُ
عَلَيْهِ مِنْ بَيْنَنَا بَلْ هُوَ كَذَّابٌ أَتَشْرِكُ سَيِّعَلْمُونَ عَدًا مِنِ الْكَذَّابِ الْأَشْرِقُ إِنَّا مُرْسِلُ النَّافَّةِ فِتْنَةً
لَهُمْ فَارْتَقَبُهُمْ وَاصْطَبِرْ وَبَتَّهُمْ أَنَّ الْمَاءَ قِسْمَةٌ بَيْنَهُمْ ۖ ۖ كُلُّ شَرِبٍ مُخْتَصَرٌ فَنَادُوا
صَاحِبَهُمْ فَتَعَاطَى فَعَقَرَ فَكَيْفَ كَانَ عَذَابِي وَنُذُرٍ إِنَّا أَرْسَلْنَا عَلَيْهِمْ صِيْحَةً وَاحِدَةً فَكَأْلُوا
كَهْشِيمَ الْمُحْتَظِرِ

54:23-31 The Thamud people rejected the warnings. They said: Are we to follow a man (i.e., Salih) from among ourselves? Then we will surely be in error and mad! Has the reminder been sent down to him among us? Nay, he is an insolent liar! Ah! They will know tomorrow who the insolent liar is! We are sending the she-camel by way of trial for them. So watch them (O Salih!) and be patient. And inform them that the water is to be shared among them. (They have) to be present for all drinking times (by turns). Then they called their friend. He took (a sword) and killed (it). Then how (terrible) were My penalty and warning! We sent against them a single mighty blast. Then they became like stable maker's twigs.

كَذَّبُتْ قَوْمٌ لُوطٌ بِالنُّذُرِ إِنَّا أَرْسَلْنَا عَلَيْهِمْ حَاصِبًا إِلَّا آلُ لُوطٍ ۖ بَجَنِينَاهُمْ بِسَحْرٍ نِعْمَةً
مِنْ عِنْدِنَا ۖ كَذَلِكَ بَجَزِي مِنْ شَكَرٍ

54:33-35 The people of Lut rejected the warnings. We sent against them a violent tornado with showers of stones excepting Lut's folks. We saved them by early dawn as favour from Us. That is how We reward the grateful.

وَكَأَيْنَ مِنْ قَرْيَةٍ عَتَّثُ عَنْ أَمْرِ رَبِّهَا وَرُسُلِهِ فَحَاسَبْنَاهَا حِسَابًا شَدِيدًا وَعَذَّبْنَاهَا عَذَّابًا
نُكْرًا فَنَاقَثْ وَبَالَ أَمْرِهَا وَكَانَ عَاقِبَةُ أَمْرِهَا حُسْنًا

65:8-9 How many countries had insolently opposed the instructions of their Lord and His apostles! Then We called them to account and We gave them a severe punishment. Thus they tasted the evil consequence of their conduct and their affair ended up in loss.

تِلْكَ أُمَّةٌ قَدْ حَلَتْ ۖ لَمَّا مَا كَسَبَتْ وَلَكُمْ مَا كَسَبْتُمْ ۖ وَلَا تُسْأَلُونَ عَمَّا كَانُوا يَعْمَلُونَ

2:141 That was a people who have passed away. They will have what they earned and you will have what you earned. You will not be asked about what they did.

أَفَلَمْ يَهْدِ لَهُمْ كُمْ أَهْلَكْنَا قَبْلَهُمْ مِنَ الْمُقْرَبِينَ يَعْشُونَ فِي مَسَاكِنِهِمْ ۖ إِنَّ فِي ذَلِكَ لَآيَاتٍ
لِأُولَئِنَّهُمْ وَلَوْلَا كَلِمَةً سَبَقَتْ مِنْ رَبِّكَ لَكَانَ لِرَبِّاً وَأَجْلَ مُسَمَّى

20:128-129 Is not the destruction of so many earlier generations by Us a guiding factor to them? They are (in fact) walking through the (ruins) of their settlements. Verily, in this are signs for intelligent people. Had it not been for a word that went forth before from your Lord, (their punishment) would have become inevitable but there is a term fixed (for respite).

اللَّهُ الَّذِي خَلَقَكُمْ ثُمَّ رَزَقَكُمْ ثُمَّ مُهِبِّتُكُمْ ثُمَّ يُحِسِّنُكُمْ ۖ هُلْ مِنْ شُرَكَاءَ لَكُمْ مَنْ يَعْلَمُ مِنْ
ذَلِكُمْ مِنْ شَيْءٍ ۖ سُبْحَانَهُ وَتَعَالَىٰ عَمَّا يُشَرِّكُونَ

30:40 It is Allah who created you; then provided for your sustenance; then He makes you die and then gives you life (again). Is there any among your partners who can do any one of these things? Glory to Him! And high is He above the partners they attribute (to Him)!

ظَاهِرَ الْفَسَادُ فِي الْبَرِّ وَالْبَحْرِ إِمَّا كَسَبَتْ أَيْدِي النَّاسِ لِيُذِيقَهُمْ بَعْضَ الَّذِي عَمِلُوا لَعَلَّهُمْ
يَرْجِعُونَ

30:41 Calamity has appeared on land and sea because of what the human hands have earned, in order to give them a taste of

some of their (evil) deeds so that they may come back (from evil).

فُلِّ سَيْرُوا فِي الْأَرْضِ فَانظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِنْ قَبْلِكُمْ كَانَ أَكْثَرُهُمْ مُشْرِكِينَ
30:42 Say: "Travel through the earth and see how was the end of those before (you). Most of them were *mushriks*."

The verses quoted above indicate the kind of punishment Allah had given to the early people when they rejected His guidance and continued to practise polytheism. It may be noted that verse 30:41 is occasionally cited by Muslims to support the argument that it is human activities by way of overexploitation of natural resources and unscientific management of the environment that led to environmental pollution, climate change, etc. being experienced now. The verse however does not indicate any of these. It pertains to the shirk (attribution of partners to Allah) practised by the early people. The verses preceding and following 30:41 confirm that.

Besides the total destruction of the nations, the Quran also mentions about several other methods of dealing with wrongdoers by God so that they receive admonition. To this list of punishments belong drought, food scarcity (crop failures), mass death, outbreak of locusts, lice, etc. (Q. 7:130,133).

وَلَقَدْ أَخْذَنَا آلَ فِرْعَوْنَ بِالسَّيِّئَاتِ وَنَفَصٌ مِنَ الشَّمَرَاتِ لَعَلَّهُمْ يَدْكُرُونَ
7:130 We (i.e., Allah) seized the people of Pharaoh with years of (drought) and reduced crop produce (i.e., famine) to make them remember (their wrongdoing).

فَأَرْسَلْنَا عَلَيْهِمُ الطُّوفَانَ وَالْجِرَادَ وَالْفَمَلَ وَالصَّيْدَادَ وَاللَّمَ آيَاتٍ مُّفَصَّلَاتٍ فَاسْتَكْبَرُوا وَكَانُوا
فَوْمًا بُخْرِمِينَ

7:133 So We sent on them (calamities like) flood, locusts, lice, frogs and blood as clear signs (of divine displeasure). Then they were arrogant; they had become sinners.

From the foregoing, it can be understood that Allah punished earlier peoples with natural calamities when they rejected Allah's guidance. There is also punishment in the Hereafter. Allah asks us whether this is not a guiding lesson to us who came after them. Allah also asks us to travel to those places of ancient civilization and see for ourselves what the end of our predecessors was (see chapter 4 for a detailed discussion).

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15. PROPHET MUHAMMAD AND THE REVELATION OF THE QURAN

Prophet Muhammad

Muhammad was born to a Quraish family in Makkah. His father Abdulla died prior to his birth and his mother Amina died when he was six years old. It was at the age of forty Muhammad received the first revelations of the Quran and became prophet or messenger of Allah. He is the last prophet of Islam. His arrival was prophesied in the earlier Scriptures.

وَإِذْ قَالَ عِيسَى ابْنُ مَرْيَمَ يَا بَنِي إِسْرَائِيلَ إِنِّي رَسُولُ اللَّهِ إِلَيْكُمْ مُّصَدِّقًا لِمَا بَيْنَ يَدَيَّ مِنَ التَّوْرَةِ وَمُبَشِّرًا بِرَسُولٍ يَأْتِي مِنْ بَعْدِي أَنْهُمْ فَلَمَّا جَاءُهُمْ بِالْبُيُّنَاتِ قَالُوا هُدًى سِحْرٌ مُّبِينٌ

61:6 And remember, Jesus the son of Mary, said: “O Children of Israel! I am apostle of Allah to you, confirming the *Taurat* (which came) before me and giving good news of a messenger to come after me. His name will be Ahmad.” But when he (Prophet Muhammad) came to them with clear evidence, they said: “This is evident sorcery!”

Prophet Muhammad died at the age of sixty three. It was during a period of twenty three years of his life as Allah’s Prophet, he received the divine revelation – the Quran – and conveyed the same to the people.

Wahy – the mode of revelation of the Quran

The Quran reveals that Allah does not speak to man by appearing before him. He communicates with man in three ways namely, a) through *wahy*, b) behind a veil, and c) by sending messenger (angel) with the message (Q. 42:51).

وَمَا كَانَ لِيَشْرِيْرُ أَنْ يُكَلِّمَهُ اللَّهُ إِلَّا وَحْيًا أَوْ مِنْ وَرَاءِ حِجَابٍ أَوْ يُرْسِلَ رَسُولًا فَيُوحِيَ بِإِذْنِهِ مَا يَشَاءُ إِنَّهُ عَلَيْ حَكِيمٍ

42:51 It is not fitting for man that Allah should speak to him except by *wahy* or from behind a veil or by sending a messenger to reveal with His permission what He wills. Verily, He is high, wise.

Of these methods, it was through *wahy* the Quran was revealed to Prophet Muhammad. *Wahy* was also the mode of transmission of Scripture (Book) to all the prophets with the exception of Prophet Moses. This is revealed through verses 4:163-164. The case of Prophet Moses will be discussed later.

إِنَّا أَوْحَيْنَا إِلَيْكَ كَمَا أَوْحَيْنَا إِلَىٰ نُوحٍ وَالْسَّيِّئَ مِنْ بَعْدِهِ ۝ وَأَوْحَيْنَا إِلَىٰ إِبْرَاهِيمَ
وَإِسْمَاعِيلَ وَإِسْحَاقَ وَيَعْقُوبَ وَالْأَسْبَاطِ وَعِيسَىٰ وَأَتُورَبَ وَيُونُسَ وَهَارُونَ وَسُلَيْمانَ ۝
وَآتَيْنَا دَاوُودَ زَبُورًا وَرَسُلًا قَدْ فَصَّلَاهُمْ عَلَيْكَ مِنْ قَبْلٍ وَرَسُلًا لَمْ نَفْصُلْهُمْ عَلَيْكَ ۝
وَكَلَمَ اللَّهُ مُوسَىٰ تَكْلِيمًا

4:163-164 Indeed We transmitted (the message) to you (Prophet Muhammad) as We transmitted to Noah and the messengers after him. We conveyed the message to Abraham, Ismail, Isaac, Jacob, the descendants of Jacob, Jesus, Job, Jonah, Harun, and Solomon. And We gave David the *Zaboor*. We have already told you the story of some apostles and We have not told you the story of other apostles. And Allah had spoken to Moses.

Since the mode of transmission of divine revelations to all prophets except Prophet Moses is the same, the process of *wahy* described in the Quran for the transmission of the Quranic messages to Prophet Muhammad is equally applicable to other prophets as well.

Although it is through *wahy* the Quran was revealed to Prophet Muhammad, the exact mechanism of this mode of transmission is not understood. Allah reveals that the Quran was sent down to Prophet Muhammad in the Night of Power (*Lailatil Qadir*) in the month of Ramadan. But yet the whole of the Quran was not available then. The verses of the Quran

were revealed intermittently over a period of about 23 years of Prophet's life. How does this happen? There are such unresolved issues regarding the revelation of the Quran.

وَقَالَ الَّذِينَ كَفَرُوا لَوْلَا تُنْزَلَ عَلَيْهِ الْقُرْآنُ جُلْمًا وَاحِدَةً ۝ كَذِيلَكَ لِتُبَثِّتَ بِهِ فُؤَادَكَ
۝ وَرَئْلَنَاهُ تَرْتِيلًا

25:32 The unbelievers said: "Why is the Quran not sent down to him (Prophet Muhammad) in full as one (single revelation)?" It is like that (i.e., it is revealed in installments) to strengthen your (faculty of) feeling with it and We have recited it to you unhurriedly (in stages).

Scientific approach is required to understand the processes involved in the transmission of divine messages through *wahy*. It involves *Al-Lauh Mahfooz*, Jibreel and human biosystem (Prophet). Roles of all these players need to be examined to bring clarity in our understanding of the process.

a) *Al-Lauh Mahfooz* – the Scripture Server

The Books Allah sent to the prophets at different times of human history contained only Allah's instructions. They were Allah's Words. This is made clear through the example of the Quran.

فَلَمْ يَأْتِهَا النَّاسُ إِلَّيْ رَسُولُ اللَّهِ إِلَيْكُمْ حَيْثُمَاً الَّذِي لَهُ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ ۝ لَا
إِلَهَ إِلَّا هُوَ يُحْكِي وَيُبَيِّنُ ۝ فَامْتُوْ بِاللَّهِ وَرَسُولِهِ النَّبِيِّ الْأَمِيِّ الَّذِي يُؤْمِنُ بِاللَّهِ وَكَلِمَاتِهِ
وَاتِّبِعُوهُ لَعَلَّكُمْ تَهْتَدُونَ

7:158 (O Muhammad) say: O people! To all of you, I am messenger of Allah to whom belongs the dominion of the skies and the earth; there is no God but He; He gives life and death. So believe in Allah and His messenger, the unlettered Prophet who believes in Allah and His Words. Follow him so that you may attain (the right) guidance.

This verse makes it clear that the Quran is Allah's Word. It is the guidance to the nation of Prophet Muhammad. Further Allah informs that the Quran is kept preserved in *Al-Lauh Mahfooz*.

بَلْ هُوَ قُرْآنٌ مَّجِيدٌ فِي لَوْحٍ مَّحْفُوظٍ

85:21-22 Nay, it is a Glorious Quran in a Guarded Tablet (*Al-Lauh Mahfooz*).

Verses 85:21-22 indicate *Al-Lauh Mahfooz* as the source Book where the Quran is kept with Allah. This is further indicated in verses 2:1-2.

الْمَدِيلُكُ الْكِتَابُ لَا رَبِّ بِهِ ۖ هُدًى لِّلْمُتَّقِينَ

2:1-2 *Alif Lam Meem*. That is the Book. No doubt about it. It is guidance to the God-conscious.

In these verses the abbreviation *Alif Lam Meem* is used to indicate that source Book, *Al-Lauh Mahfooz*. There are twenty nine chapters (*surahs*) in the Quran that begin with Arabic letters singly or in combinations of two, three, four and five letters. Chapters 38 (*Saad*), 50 (*Qaaf*) and 68 (*Nun*) start with one letter (indicated in parentheses); chapters 20 (*Taa Haa*), 27 (*Taa Seen*), 36 (*Yaa Seen*), and 40, 41, 43, 44, 45 and 46 (*Haa Meem*) start with two letters; chapters 2, 3, 29, 30, 31 and 32 (*Alif Lam Meem*), 10, 11, 12, 14 and 15 (*Alif Lam Ra*), 26 and 28 (*Taa Seen Meem*) with three letters; Chapters 7 (*Alif Lam Meem Sad*) and 13 (*Alif Lam Meem Ra*) with four letters; and chapters 19 (*Kaaf Haa Yaa Ayn Saad*) and 42 (*Haa Meem Ayin Seen Qaaf*) with five letters. There is no clear understanding of the significance of these letters. It may be noted that most of the abbreviations mentioned are immediately followed by verse(s) referring to either the source Book or the Quran. It is particularly noteworthy that *Alif Lam Meem* comes at the beginning of six chapters (2, 3, 29, 30, 31 and 32). Although in two chapters (29 and 30) this abbreviation is not followed by a verse mentioning the source Book or the Quran, the other four

chapters do indicate its relationship with it. Abbreviation *Alif Lam Meem* (or ALM) offers clear hint that it stands for *Al-Lauh Mahfooz* because the three letters *Alif, Lam* and *Meem* are the first letters of the three Arabic words *Al, Lauh* and *Mahfooz*. This inference is supported by verse 2:1 quoted above which immediately after the abbreviation says “that is the Book”. The word “that” (*dhalika*) is used here and not the word “this” (*haadha*). If it were the word “this”, then the abbreviation would be indicating the Quran. But since it is “that”, the abbreviation indicates the source Book, *Al-Lauh Mahfooz*. The abbreviation *Alif Lam Meem* can be explained that way. It is from *Al-Lauh Mahfooz*, Allah’s Scriptures were sent to the prophets. Evidently verse 2:1 describes *Al-Lauh Mahfooz* as the guidance Book for entire mankind. Other abbreviations given below also signify the source Book from which the Scriptures were sent to the prophets.

الْمَصْ كِتَابٌ أُنْزَلَ إِلَيْكُ فَلَا يَكُنْ فِي صَدْرِكَ حَرْجٌ مِّنْ يُشْنَدَرُ بِهِ وَذَكْرٌ لِلْمُؤْمِنِينَ

7:1-2 *Alif Lam Meem Sad*. A Book sent to you. So let your memory have no difficulty on that account. You warn (the people) with this and it is a Reminder to the believers.

الرَّ تِلْكَ آيَاتُ الْكِتَابِ الْحَكِيمِ

10:1 *Alif Lam Ra*. Those are the verses of the Book of Wisdom.

الرَّ كِتَابٌ أُحْكِمَتْ آيَاتُهُ ثُمَّ فُصَلَّتْ مِنْ لَدُنْ حَكِيمٍ خَبِيرٍ

11:1 *Alif Lam Ra*. A Book with verses of wisdom (that are) explained subsequently, from Wise, All-Knowing (Allah)

الرَّ تِلْكَ آيَاتُ الْكِتَابِ الْمُبِينِ إِنَّا أَنْزَلْنَاهُ قُرْآنًا عَرِيقًا لَعَلَّكُمْ تَعْقِلُونَ

12:1-2 *Alif Lam Ra*. Those are verses of the clear Book. We have sent it (i.e., the Book) as a read in Arabic (i.e., the Quran) to make you think (and learn).

Al-Lauh Mahfooz is also referred to in the Quran as *Kitab Maknoon* (Q. 56:77-80), *Ummul Kitab* (Q. 13:38-39, 43:1-4) and *Suhuf Mukarramah* (Q. 80:11-16).

إِنَّهُ لِقُرْآنٌ كَرِيمٌ فِي كِتَابٍ مَكْنُونٍ لَا يَمْسُهُ إِلَّا الْمُطَهَّرُونَ تَنزِيلٌ مِنْ رَبِّ الْعَالَمِينَ

56:77-80 That (this) is indeed a noble Quran in a Well-Guarded Book (*Kitab Maknoon*), which none except the pure will touch – a Revelation from the Lord of the Worlds.

وَلَقَدْ أَرْسَلْنَا رُسُلًا مِنْ قَبْلِكَ وَجَعَلْنَا لَهُمْ أُرْواجًا وَدُرْرَةً ۝ وَمَا كَانَ لِرَسُولٍ أَنْ يَأْتِي بِآيَةٍ
إِلَّا بِإِذْنِ اللَّهِ ۝ لِكُلِّ أَجْلٍ كِتَابٌ يَمْحُو اللَّهُ مَا يَشَاءُ وَيُثْبِتُ ۝ وَعِنْدَهُ أُمُّ الْكِتَابِ ۝

13:38-39 We had sent apostles before you and given them wives and children. It is impossible for an apostle to bring a revelation without Allah's permission. For each period there is a Book. Allah deletes or retains what He wants. With Him is the Mother of the Book (*Ummul Kitab*).

حَمْ وَالْكِتَابُ الْمُبِينُ إِنَّا جَعَلْنَاهُ قُرْآنًا عَرَبِيًّا لَعَلَّكُمْ تَعْقِلُونَ وَإِنَّهُ فِي أُمِّ الْكِتَابِ لَدَنَا أَعْلَى
حَكِيمٌ

43:1-4 *Ha-Mim* - the clarifying Book. We have made it a read in Arabic (the Quran) to make you think and understand. And verily, it is in the Mother of the Book (*Ummul Kitab*), high (in dignity) full of wisdom, with Us.

كَلَّا إِنَّهَا تَذْكِرَةٌ فَمَنْ شَاءَ ذَكَرَهُ فِي صُحْفٍ مُكَرَّمَةٍ مَرْفُوعَةٍ مُطَهَّرَةٍ بِأَيْدِي سَفَرَةٍ كَرَامٍ بَرَزَةٍ
80:11-16 Nay, but verily it (the Quran) is an admonishment. So whoever wills, let him pay attention to it. (It is) in Honoured Records (*Suhuf Mukarramah*), exalted and purified, in the hands of scribes (angels) noble and righteous.

It is evident from these verses that *Al-Lauh Mahfooz*, *Kitab Maknoon*, *Ummul Kitab* and *Suhuf Mukarramah* refer to one and the same source. It forms the common source of all the Scriptures sent to the prophets by Allah. In other words, it contains all the Books sent to the prophets at different times in the history of mankind. Technically, therefore, *Al-Lauh Mahfooz* can be described as Scripture Server. It may be visualized as a sector in the divine Memory (see Fig. 7.2 in chapter 7).

b) The process of *wahy*

It was *rooh* (program) Jibreel that transmitted Allah's revelations – the Quran – to the mind of Prophet Muhammad (Q. 2:97).

فُلٌّ مَنْ كَانَ عَدُوًّا لِجِبْرِيلَ فَإِنَّهُ أَنَّ رَزَكَهُ عَلَىٰ قَلْبِكَ يُأْذِنُ اللَّهُ مُصَدِّقًا لِمَا بَيْنَ يَدِيهِ وَهُدًى
وَبُشْرَىٰ لِلْمُؤْمِنِينَ

2:97 Say (O Muhammad!): Whoever is an enemy of Jibreel (a *rooh*) that certainly it was that (Jibreel) which transmitted the (revelation) onto your mind by Allah's order confirming the (revelations) that came before it and as guidance and glad tidings to the believers.

Jibreel is described in the Quran as *rooh* (program) and not as *malak* (see chapter 9). Jibreel is referred to in the Quran as *Rooh-ul-Qudusi* (Q. 2:87, 2:253 and 5:110) and *Rooh-ul-Ameen* (Q. 26:193). In different verses it is stated that the Quran was transmitted to the *qalb* (mind) of Prophet Muhammad by *Rooh-ul-Qudusi* (Q. 16:102), *Rooh-ul-Ameen* (Q. 26:193) or Jibreel (Q. 2:97). Further the Quran is also described as *rooh* (Q. 40:15, 42:52). All these revelations about *rooh*, Jibreel and Scripture are discussed in detail in chapter 9.

Allah reveals that the *rooh* is sent with angel (*malak*). In other words, the *malak* serves as the carrier of *rooh*.

يُنَزَّلُ الْمَلَائِكَةُ بِالرُّوحِ مِنْ أَمْرِهِ عَلَىٰ مَنْ يَشَاءُ مِنْ عِبَادِهِ أَنْ أَنذِرُوا اللَّهَ إِلَّا أَنَا
فَأَتَقُولُ

16:2 He (Allah) sends down angels with *rooh* from His command to whom He likes from among His servants to warn (man) that: "There is no God but I (Allah); so you fear Me."

لُكِنَ اللَّهُ يَشْهُدُ بِمَا أَنْزَلَ إِنِّي لَكَ بِعِلْمٍ ۖ وَالْمَلَائِكَةُ يَشْهُدُونَ ۖ وَكَفَىٰ بِاللَّهِ
شَهِيدًا

4:166 But Allah bears witness for (the message) He sent to you. He sent (the message) with His knowledge and the angels bear witness (to that). But enough is Allah for a witness.

From these revelations it can be deduced that Allah sends down an angel with the Book and the program Jibreel to the prophet. That angel is also witness to that Book. The Book comes from *Al-Lauh Mahfooz*. In computer parlance the process may be visualized as downloading (*nazzala*) the Book from a faraway Scripture Server (*Al-Lauh Mahfooz*) to the *sadr* of Prophet Muhammad (Fig. 15.1).

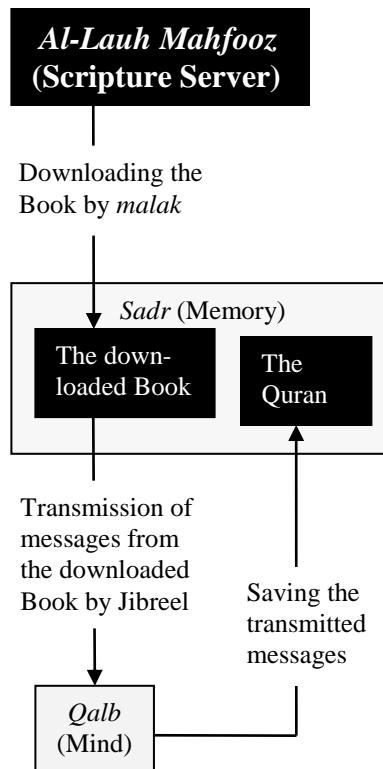


Fig. 15.1 Mode of transmission (*wahy*) of divine messages (the Quran) to Prophet Muhammad

Since both the Book and Jibreel are *rooh*, these can be stored as biological information on the chromosomes of biorobot system. The entire event had taken place in *Lailathil Qadr* (Night of Power) in the month of Ramadan (Q. 44:1-6, 97:1-5), the month ordained by Allah for fasting (Q. 2:185).

حَمْ وَالْكِتَابِ الْمُبِينِ إِنَّا أَنزَلْنَاهُ فِي لَيْلَةٍ مُّبَارَكَةٍ ۝ إِنَّا كُنَّا مُنْذِرِينَ فِيهَا يُفْرَقُ كُلُّ أُمَّةٍ
حَكِيمٌ أَمْرًا مِنْ عِنْدِنَا ۝ إِنَّا كُنَّا مُرْسِلِينَ رَحْمَةً مِنْ رَبِّكَ ۝ إِنَّهُ هُوَ السَّمِيعُ الْعَلِيمُ

44:1-6 Ha-Mim. The clear Book. We sent it down (downloaded) in a blessed night. Indeed We have (ever) been sender of warnings. In that (night) every wise order is made distinct as command from Us. Verily We have been sender of (apostles) as mercy from your Lord. Indeed He hears and knows (all things).

The blessed night mentioned in verses 44:1-6 refers to Night of Power (*Lailathil Qadr*) when Allah sends angels with *rooh* for various affairs.

إِنَّا أَنْزَلْنَاهُ فِي لَيْلَةِ الْقُدْرِ وَمَا أَذْرَكَ مَا لَيْلَةُ الْقُدْرِ لَيْلَةُ الْقُدْرِ خَيْرٌ مِنْ أَلْفِ شَهْرٍ تَنَزَّلُ
الْمَلَائِكَةُ وَالرُّوحُ فِيهَا يَأْذِنُ رَبُّهُمْ مِنْ كُلِّ أَمْرٍ سَلَامٌ هِيَ حَتَّىٰ مَطْلَعِ الْفَجْرِ

97:1-5 We have indeed sent down (downloaded) this (Quran) in the Night of Power. And what will explain to you what the Night of Power is? The Night of Power is better than a thousand months. The angels and *rooh* descend in that (night) with the permission of their Lord for every affair. Peace, it is – till the early dawn!

شَهْرُ رَمَضَانَ الَّذِي أُنْزِلَ فِيهِ الْقُرْآنُ هُدًى لِلنَّاسِ وَبَيِّنَاتٍ مِنَ الْهُدَىٰ وَالْفُرْقَانِ ۝ فَمَنْ
شَهِدَ مِنْكُمُ الشَّهْرَ فَإِلَيْهِ مُمْنَعٌ ۝ وَمَنْ كَانَ مَرِيضًا أَوْ عَلَىٰ سَفَرٍ فَعَدْدُهُ مِنْ أَيَّامٍ أُخْرَ ۝
يُبَيِّدُ اللَّهُ بِكُمُ الْيُسُرَ وَلَا يُبَيِّدُ بِكُمُ الْعُسُرَ وَلَئِنْكُمْلُوا الْعِدَّةَ وَلَتُنَجِّبُو اللَّهَ عَلَىٰ مَا هَدَأُكُمْ
وَلَعَلَّكُمْ تَشَكُّرُونَ

2:185 Ramadan is the month in which the Quran was sent down (downloaded) as guidance to mankind and clear proofs

for guidance and criterion. So whoever among you is present in that month, let him fast in it..."

The downloaded Book that is stored in Prophet's *sadr* serves as the source of divine instructions and messages to be transmitted to the mind of Prophet Muhammad. Prophet is neither aware of the downloading of the Book to his memory nor its contents. The prophet becomes aware of a message contained in the Book only when it is transmitted from the memory to his mind. It is this transmission that was carried out by the program (*rooh*) Jibreel with the consent of Allah the way He wanted.

فُلٌّ مَنْ كَانَ عَدُوًّا لِجِبْرِيلَ فَإِنَّهُ نَزَّلَهُ عَلَىٰ قَلْبِكَ يَأْذِنُ اللَّهُ مُصَدِّقًا لِمَا بَيْنَ يَدَيْهِ وَهُدًى
وَبُشْرَىٰ لِلْمُؤْمِنِينَ

2:97 Say (O Muhammad!): Whoever is an enemy of Jibreel, (let him understand) that certainly it was that (Jibreel) which transmitted the (revelation) onto your mind by Allah's permission confirming the (revelations) that came before it and as guidance and glad tidings to the believers.

The revelations were transmitted by Jibreel in Arabic, the language of Prophet Muhammad.

إِنَّا أَنزَلْنَاهُ قُرْآنًا عَرَبِيًّا لَعَلَّكُمْ تَعْقِلُونَ

12:2 We have sent it (the Quran) as a read in Arabic to make you think.

وَكَذَلِكَ أَنْزَلْنَاهُ قُرْآنًا عَرَبِيًّا وَصَرَّفْنَا فِيهِ مِنَ الْوَعِيدِ لَعَلَّهُمْ يَتَّقُونَ أَوْ يُحَذِّرُونَ

20:113 Thus We sent it (the Quran) as a read in Arabic and explained some of the warnings in it in detail so that they may fear Allah or it may cause an awareness (of Him) in them.

وَإِنَّهُ لَنَذِيرٌ رَبُّ الْعَالَمِينَ نَزَّلَ بِهِ الرُّوحُ الْأَمِينُ عَلَىٰ قَلْبِكَ لِتَكُونَ مِنَ الْمُنذِرِينَ بِلِسَانٍ
عَرَبِيًّا مُبِينٍ

26:192-195 Verily this (Quran) is a revelation from the Lord of the worlds. The *Rooh-ul-Ameen* (Jibreel) descended with it (transmitted) onto your mind to make you one of the warners in clear Arabic language.

فُرَآنًا عَرِيبًا عَيْرَ ذِي عَوْجٍ لَعَلَّهُمْ يَتَّقُونَ

39:28 (This Quran is) a read in Arabic without crookedness in order that they may fear Allah.

حَمْ تَنْزِيلٌ مِنَ الرَّحْمَنِ الرَّحِيمِ كِتَابٌ فُصِّلَتْ آيَاتُهُ فُرَآنًا عَرِيبًا لِقَوْمٍ يَعْلَمُونَ بَشِيرًا وَنَذِيرًا
فَأَعْرَضُ أَكْثَرُهُمْ فَهُمْ لَا يَسْمَعُونَ

41:1-4 Ha-Mim. (This is) a revelation from (Allah), Most Merciful, Most Beneficent, a Book whose verses are described as a read in Arabic for people who understand, conveying good news and warning. Yet most of them turn away and they do not listen.

وَلَوْ جَعَلْنَاهُ فُرَآنًا أَعْجَمِيًّا لَعَالُوا لَوْلَا فُصِّلَتْ آيَاتُهُ ۖ الْأَعْجَمِيُّ وَعَرِيبُ ۖ قُلْنَ هُوَ لِلَّذِينَ
آمُنُوا هُدًى وَشِفَاءٌ ۖ وَالَّذِينَ لَا يُؤْمِنُونَ بِي آذَانُهُمْ وَقُرْ وَهُوَ عَلَيْهِمْ عَمَىٰ ۖ أُولُئِكَ
يُنَادَوْنَ مِنْ مَكَانٍ بَعِيدٍ

41:44 Had We sent this (Quran) as a read in a language other than Arabic, they would have said, “Why are not its verses explained? What! (The Book) not in Arabic and (the apostle) an Arab?” Say: “It is a guide and a healing to those who believe; and in the ears of those who do not believe, there is heaviness and it is a (kind of) blindness on them. (It is like) they are being called from a far-off place.”

حَمْ وَالْكِتَابِ الْمُبِينِ إِنَّا جَعَلْنَاهُ فُرَآنًا عَرِيبًا لَعَلَّكُمْ تَعْقِلُونَ

43:1-3 Ha-Mim – the clarifying Book. We have made it (the Quran) a read in Arabic to make you think and understand.

In several verses relating to the process of revelation already quoted, the word ‘nazala’, ‘nazzala’ or ‘anzala’ meaning ‘sent down’ is used. This word is generally translated

as implying “Jibreel descended with the Quranic verses each time from Heaven”, which is wrong. The word is translated here to mean the initial ‘downloading’ of the Book by angel from *Al-Lauh Mahfooz* to the *sadr* of Prophet Muhammad, and also subsequent transmission of the messages contained in the downloaded Book by Jibreel from Prophet’s *sadr* to his mind. Thus two stages can be distinguished in the process of *wahy*.

The prophet receives a message as and when Jibreel transmits it from the Book (downloaded from *Al-Lauh Mahfooz* to his *sadr*) to his *qalb* (mind). The transmission has taken place at intervals.

إِنَّا نَحْنُ نَزَّلْنَا عَلَيْكَ الْقُرْآنَ تَسْرِيًّا

76:23 It is We who sent down the Quran in stages.

Allah also asks Prophet Muhammad not to be in haste to get the message implying that its transmission by Jibreel to his mind will be in accordance with Allah’s wishes.

فَتَعَالَى اللَّهُ الْمَلِكُ الْحَقُّ ۝ وَلَا تَعْجَلْ بِالْقُرْآنِ مِنْ قَبْلِ أَنْ يُفْصَىٰ إِلَيْكَ وَحْيُهُ ۝ وَقُلْ
رَبِّ رِزْنِي عَلِمًا

20:114 High above all is Allah, the true King! You should not be in haste with the Quran before its message is transmitted to you as programmed (by Allah) and say: “O my Lord! Increase my knowledge.”

It is not known with certainty which verse(s) is the first and which is the last to be revealed. There are several views on this issue.

Prophet becomes aware of a verse on its transmission to his mind. Simultaneously the message will also get saved (stored) in his memory as is the case with any information received by the mind. Hence Prophet will be able to retrieve it from his *sadr*. Such an inference can be drawn from the following verse in which Allah asks Prophet Muhammad to

recite what is transmitted (*oohiya*) by Jibreel from the downloaded Book.

وَاتُّلْ مَا أُوحِيَ إِلَيْكَ مِنْ كِتَابٍ رَّبِّكَ لَا مُبْدِلٌ لِكَلِمَاتِهِ وَلَنْ تَجِدَ مِنْ دُونِهِ مُتَحَدِّداً

18:27 And you (Prophet Muhammad) recite what is transmitted to you from the Book (downloaded from *Al-Lauh Mahfooz*) of your Lord. None can alter His Words and you will not find a refuge besides Him.

Technically recitation involves retrieval of the verses from the memory to mind as and when Prophet desires. It is also stated in the Quran that Prophet will not forget any verse transmitted to him. However, if Allah wants the prophet to forget any verse, he will forget it. That means such verses will be deleted from his *sadr* (memory) by Jibreel.

سَنُقْرِئُكَ فَلَا تَنْسَى إِلَّا مَا شَاءَ اللَّهُ ۚ إِنَّهُ يَعْلَمُ الْجُهْرَ وَمَا يَخْفِي

87:6-7 We will recite to you, so you will not forget except what Allah wants. Verily, He knows what is open and what is hidden.

Such situation arises, for instance, if Satan conveys wrong messages to Prophet Muhammad. This has happened to earlier prophets also. Consider the following.

وَمَا أَرْسَلْنَا مِنْ قَبْلِكَ مِنْ رَسُولٍ وَلَا نَبِيٍّ إِلَّا إِذَا تَمَّنَّى الشَّيْطَانُ فِي أُمَّيَّتِهِ فَيُنَسِّخُ اللَّهُ
مَا يُنْفِي الشَّيْطَانُ ثُمَّ يُنْكِمُ اللَّهُ آيَاتِهِ ۖ وَاللَّهُ عَلَيْمٌ حَكِيمٌ

22:52 Never did We send before you (Prophet Muhammad) an apostle or a prophet but when he recited (a revelation), the Satan would put (evil suggestion) into what he recited. But Allah removes what the Satan put in; then Allah establishes His revelations. And Allah is All-Knowing, Wise.

The statement “Then Allah establishes His revelations” given in the above verse indicates deletion of satanic messages and saving (storing) the true revelations in the *sadr* of the Prophet. Similar inferences can be made from other verses also.

وَلَئِنْ شِئْنَا لَكَذْهَبَنَ بِالَّذِي أَوْحَيْنَا إِلَيْكَ ثُمَّ لَا تَجِدُ لَكَ يَهُ عَلَيْنَا وَكِيلًا

17:86 If We wish, We would have taken away what We have transmitted to you (the Quran). Then you will not find any guardian for it against Us.

The verse indicates that if Allah so wishes, the revelations saved in the *sadr* (memory) of Prophet Muhammad would be deleted. If Allah wants to substitute any revelation, that would also be done.

مَا نَسْخَ مِنْ آيَةٍ أَوْ نُنسِهَا نَأْتِ بِخَيْرٍ مِنْهَا أَوْ مِثْلَهَا ۖ أَمْ تَعْلَمُ أَنَّ اللَّهَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

2:106 None of Our revelations do We abrogate or cause to be forgotten, but We substitute something better or similar. Do you not know Allah has power over all things?

All these tasks are carried out by *rooh* Jibreel in accordance with the wish of Allah.

As already mentioned, what Jibreel transmits from the downloaded Book onto the *qalb* of Prophet is not verbatim. The message will be so worded to suit the context and the way Allah wants it to be conveyed to the prophet. It is these messages that form the verses of the Quran. In this way the mode of transmission of Scripture to Allah's prophets can be explained based on the computer model.

The Quran contains all the messages of the downloaded Book but conveyed in a different version to suit the context. We find in the Quran instructions on religious matters (Islam), stories of earlier prophets, verses of scientific import, verses of wisdom (*hikmat*), explanatory verses, instructions and warnings to Prophet Muhammad, instructions to the people of Prophet Muhammad's time, special instructions to the wives of Prophet Muhammad, messages relating to future aspects, etc. The messages in most cases are given in spoken style and befitting to the contexts. We also find verses mentioning Allah

in first person as well as in third person, repetition of the same message, and several other extraordinary features. All these characteristics do suggest that the Quran is not verbatim transmission of the messages contained in the original Book downloaded from *Al-Lauh Mahfooz*. Consider the following verses.

فَرِحَ الْمُخَلَّفُونَ بِمَغْعِدِهِمْ بِخَالَفَ رَسُولَ اللَّهِ وَكَرِهُوا أَنْ يُجَاهِدُوا بِأَمْوَالِهِمْ وَأَنْفُسِهِمْ فِي سَبِيلِ اللَّهِ وَقَالُوا لَا تَتَفَرَّوْا فِي الْحَرِّ ۖ قُلْ نَارٌ جَهَنَّمَ أَشَدُ حَرًّا ۖ لَوْ كَانُوا يَفْقَهُونَ فَإِنْضَحَكُوا قَلِيلًا وَلَيْكُوا كَثِيرًا جَزَاءً إِمَّا كَانُوا يَكْسِبُونَ

9:81-82 Those who stayed back (without going to war) rejoiced in their sitting against (the instructions of) the messenger of Allah. They hated to fight (i.e., *jihad*) with their wealth and their bodies in the cause of Allah. They also told (the others), “Do not set out (to war) in this heat.” (O Muhammad! You) tell them: “The fire of Hell is the severest in heat.” If only they could understand! Let them laugh a little and weep more, a recompense for what they have been earning.

This message was revealed during a war. It cannot be considered as the original version of the message contained in the Book downloaded from *Al-Lauh Mahfooz* but the message was so worded by Jibreel as to suit the war context.

When people approached Prophet Muhammad asking him to convey message other than the Quran or modify the Quranic revelation, Jibreel transmitted the following verses warning him of severe punishment if he does any such thing.

وَإِذَا تُشَأِ عَلَيْهِمْ آيَاتِنَا بَيِّنَاتٍ ۖ قَالَ الَّذِينَ لَا يَرْجُونَ لِقَاءَنَا أَئْتِ بِعْرَآنٍ غَيْرُ هَذَا أَوْ بَدْلًا ۖ قُلْ مَا يَكُونُ لِي أَنْ أُبَدِّلَهُ مِنْ تِلْقَاءِ نَفْسِي ۖ إِنْ أَتَيْتُ إِلَّا مَا يُوَحَّى إِلَيَّ ۖ إِنِّي أَخَافُ إِنْ عَصَيْتُ رَبِّي عَذَابَ يَوْمٍ عَظِيمٍ

10:15 But when Our clear verses (the Quran) are recited to them, those who do not anticipate meeting with Us would say: “Bring a Quran other than this or alter this.” Say: “I (Prophet Muhammad) cannot change it on my own accord. I only follow

what is conveyed (the Quran) to me. Indeed I fear the penalty of a great Day if I disobey my Lord.”

وَإِنْ كَادُوا لِيَقْتُلُوكُمْ عَنِ الَّذِي أُوحِينَا إِلَيْكُمْ لِتُفْتَرِي عَلَيْنَا عَيْرًا ۝ وَإِذَا لَا تَخْدُلُوكُمْ حَلِيلًا
وَلَوْلَا أَنْ يَبْشِّنَاكُمْ لَقَدْ كِدْنَا تَرَكُنُ إِلَيْهِمْ شَيْئًا فَلَيْلًا إِذَا لَا دَفْنَاكُمْ ضَعْفَتِ الْحَيَاةِ وَضَعْفَ
الْمَمَاتِ ۝ لَا تَجِدُ لَكُمْ عَلَيْنَا نَصِيرًا

17:73-75 They are almost ready to put you (Prophet Muhammad) in trouble over what We had transmitted (the Quran) to you (by asking) you to fabricate in Our name something other (than the Quran) in which case they will accept you as a friend. And had We not made you stand firm, you would have certainly swayed a little towards them. In that case We would have made you taste double (punishment) in this life and double (punishment) at death. Thereafter, you would not have found anyone to defend you against Us!

These verses are transmitted by Jibreel in such a way as to convey Allah's warnings to Prophet Muhammad if he conveys any message other than the Quran or different from the Quran. The verses cannot be considered as verbatim transmission of messages from the Book downloaded from *Al-Lauh Mahfooz*. The verses are a clear indication of how Jibreel transmits the divine messages as warranted by the occasion.

When Prophet Muhammad instructed his wives differently from the Quran, Jibreel transmitted a verse worded in such a way as to caution Prophet Muhammad (Q. 66:1).

يَا أَيُّهَا النَّبِيُّ لَمْ تُحِرِّمْ مَا أَحَلَ اللَّهُ لَكَ ۝ تَبْغِي مَرْضَاتَ أَزْوَاجِكَ ۝ وَاللَّهُ عَفُورٌ رَّحِيمٌ

66:1 O Prophet (Muhammad)! Why do you forbid what Allah has made lawful to you? You seek the pleasure of your wives. But Allah is Oft-Forgiving, Most Merciful.

Consider another verse:

فَدْ تَرَى تَقْلِبَ وَجْهَكَ فِي السَّمَاءِ ۝ فَلَئِلَّتِينَ قِبْلَةً تَرْضَاهَا ۝ فَوْلَ وَجْهَكَ شَطْرُ
الْمَسْجِدِ الْحَرَامِ ۝ وَحَيْثُ مَا كُنْتُمْ فَوَلُوا وُجُوهُكُمْ شَطْرُهُ ۝ وَإِنَّ الَّذِينَ أَوْتُوا الْكِتَابَ
لَيَعْلَمُونَ أَنَّهُ الْحُقُوقُ مِنْ رَبِّهِمْ ۝ وَمَا اللَّهُ بِعَافٍ عَمَّا يَعْمَلُونَ

2:144 We see you (O Prophet Muhammad!) turning your face towards the sky (for guidance). So We will turn you to a direction (*qibla*) pleasing to you. You turn your face in the direction of the *Masjid-al-haram*. Wherever you are, turn your faces in its direction. The People of the Book certainly know that it is the truth from their Lord. And Allah is not unmindful of what they do.

Allah made the Sacred Mosque (*Masjid-al-haram*) in Makkah as the direction (*qibla*) for Muslims. Allah ordained this direction when He saw Prophet Muhammad turning his face towards the sky for guidance from Him in this regard. The verse reveals that Allah's instruction regarding the *qibla* came on such an occasion. Clearly Jibreel conveyed the message so worded.

The Quran is replete with such verses. Evidently, *rooh* Jibreel transmitted the messages from the downloaded Book as Allah wished. The name *Rooh-ul-Qudusi* describes Jibreel as 'holy *rooh*'. *Rooh-ul-Ameen* describes Jibreel as the 'trusted *rooh*'. These names are suggestive of the fact that Jibreel transmitted Allah's messages from the downloaded Book to the mind of Prophet Muhammad the way Allah wants it to convey them. In other words, the program Jibreel is so designed by Allah as to operate the way Allah wishes. Thus it becomes Allah's mouthpiece by transmitting Allah's messages to the prophet's mind the way Allah wants. Therefore, the Quran is Allah's Word.

Although verses 4:163-164 (quoted earlier) indicate that the mode of transmission of the Scripture to all the prophets is the same, there is one exception to this rule – the case of Prophet Moses. The verses also mention that Allah had spoken

to Prophet Moses. Further, verses 7:144-145 not only mention about Allah's conversation with Prophet Moses but also reveal that the Scripture *Taurat* was transmitted directly to Prophet Moses in written form on tablets.

قَالَ يَا مُوسَى إِنِّي أَصْطَفَيْتُكَ عَلَى النَّاسِ بِرِسَالَاتِي وَبِكَلَامِي فَخُذْ مَا آتَيْتُكَ وَكُنْ مِنَ الشَّاكِرِينَ وَكَبَّنَا لَهُ فِي الْأَلْوَاحِ مِنْ كُلِّ شَيْءٍ مَوْعِظَةً وَتَفْصِيلًا لِكُلِّ شَيْءٍ فَخُذْهَا بِقُوَّةٍ وَأَمْرُ قَوْمَكَ يَا خُلُدُوا بِأَحْسَنِهَا سَارِكُمْ ذَارُ الْفَاسِقِينَ

7:144-145 Allah said: O Moses! I have chosen you over (all other) human beings with My message and with my conversation. So take what I have given you and be among the grateful. And We wrote (i.e., the *Taurat*) for him in the tablets instructions and explanations about all matters, (and We told him:) You hold on to them firmly and enjoin your people to accept its excellent content. I will show you afterwards the home of the wicked.

Besides Prophets, there are a few others mentioned in the Quran with whom Allah had communicated through *wahy*.

وَأَوْحَيْنَا إِلَى أُمِّ مُوسَى أَنْ أَرْضِعِيهِ فَإِذَا جِئْتِ عَلَيْهِ فَأَلْقِيهِ فِي الْيَمِّ وَلَا تَخَافِي وَلَا تَحْزُنِي إِنَّا رَادُونَا إِلَيْكَ وَجَاءَلُوهُ مِنَ الْمُرْسَلِينَ

28:7 So We transmitted message to the mother of Moses: "Suckle (your child). But if you have fears about him, put him (i.e., infant Moses) into the sea, and do not fear or grieve. We will bring him back to you and We will make him one of Our apostles."

إِذْ أَوْحَيْنَا إِلَى أُمِّكَ مَا يُوحِي أَنْ أَقْرِيبِيهِ فِي التَّابُوتِ فَأَقْرِبِيهِ فِي الْيَمِّ فَأَلْقِيهِ الْيَمِّ بِالسَّاحِلِ يَا أَنْخُذْهُ عَدُوُّ لِي وَعَدُوُّ لَهُ وَأَلْقِيْتُ عَلَيْكَ حَكَّةً مِنِّي وَلِتُصْنَعَ عَلَى عَيْنِي

20:38-39 When We transmitted to your (Prophet Moses) mother what was to be transmitted (to her): "Place him (i.e., infant Moses) in the box and put it (i.e., the box with baby) in the sea. The sea will bring it to the coast and (from there) an

enemy of Mine and an enemy of his (i.e., Moses') will take it. And I gave you (i.e., Moses) love from Me in order to bring you up before My eye (i.e., under My special care).”

وَإِذْ أَوْحَيْتُ إِلَى الْحَوَارِيّْيْنَ أَنْ آمِنُوا بِي وَبِرَسُولِي قَالُوا آمَنَّا وَاشْهَدْ بِأَنَّنَا مُسْلِمُونَ

5:111 And behold, I transmitted (the message) to the disciples (of Jesus) to believe in Me and in My messenger. They said: We believe and You bear witness that we are Muslims.

In these cases also, transmission is mentioned as *wahy*. It may also be through *rooh* although it is not possible to say whether Jibreel is involved.

The word *wahy* is also used to indicate instructions conveyed to other organisms also.

وَأَوْخَى رِئَّاتٍ إِلَى النَّحْلِ أَنِ الْخَيْرِيٌّ مِنَ الْجِبَالِ يُبُوَّنَا وَمِنَ الشَّجَرِ وَمِمَّا يَعْرِشُونَ
ثُمَّ كُلَّيٌّ مِنْ كُلِّ الشَّمَرَاتِ فَاسْكُنْكِي سُبْلَ رِئَّاتٍ دُلَّاً يَخْرُجُ مِنْ بُطُونِهَا شَرَابٌ مُخْتَلِفٌ
الْوَانُّهُ فِيهِ شِفَاءٌ لِلنَّاسِ إِنَّ فِي ذَلِكَ لَآيَةً لِلْقَوْمِ يَتَفَكَّرُونَ

16:68-69 And your Lord transmitted (instructions) to the honeybee to build hives in the mountains, on trees, and in man's high structures; then to eat from all kinds of produce and freely enter the paths of your Lord. A drink of varying colours comes out of their abdomen. It has medicinal value for mankind. Verily in this is a sign for people who think.

The term '*awha*' in this case refers to the divine instructions about building hives and production of honey, which are available in the biosoftware (*rooh*) of the honeybee itself. Hence, this is not comparable with the *wahy* to human beings.

Another mode of divine communication is behind a veil. The Quran reveals that Allah had spoken to Prophet Moses directly. Since Prophet Moses did not and could not see Allah, the conversation would have taken place behind a veil.

وَرَسُّلًا قَدْ فَصَصَنَا هُمْ عَلَيْكَ مِنْ قَبْلٍ وَرَسُّلًا لَمْ نَفْصُصْهُمْ عَلَيْكَ وَكَلَمُ اللَّهِ مُوسَى تَكْلِيمًا

4:164 We have already told you the story of some apostles and We have not told you the story of other apostles. And Allah had spoken to Moses.

وَلَمَّا حَانَ حَيَّةً مُوسَى لِمِيقَاتِنَا وَكَلَمَهُ رَبُّهُ قَالَ رَبِّ أَرِنِي أَنْظُرْ إِلَيْكَ ۝ قَالَ لَنْ تَرَانِي وَلَكِنْ أَنْظُرْ إِلَى الْجَبَلِ فَإِنِ اسْتَفَرْ مَكَانَهُ فَسَوْفَ تَرَانِي ۝ فَلَمَّا جَاءَهُ رَبُّهُ لِلْجَبَلِ جَعَلَهُ دَكَّاً وَحَرَّ مُوسَى صَعِقًا ۝ فَلَمَّا أَفَاقَ قَالَ سُبْحَانَكَ تُبْتُ إِلَيْكَ وَأَنَا أَوَّلُ الْمُؤْمِنِينَ قَالَ يَا مُوسَى إِنِّي أَصْطَفَيْتُكَ عَلَى النَّاسِ بِرِسَالَاتِي وَبِكَلَامِي فَخُذْ مَا آتَيْتُكَ وَلَا مِنَ الشَّاكِرِينَ وَكَبَّنَا لَهُ فِي الْأَلْوَاحِ مِنْ كُلِّ شَيْءٍ مَوْعِظَةً وَتَفْصِيلًا لِكُلِّ شَيْءٍ فَخُذْهَا بِقُوَّةٍ وَأَمْرُ قُوَّتِكَ يَا خُذُوا بِأَحْسَنِهَا ۝ سَأُرِيكُمْ ذَارَ الْفَاسِقِينَ

7:143-145 When Moses came to Our place of appointment and his Lord spoke to him, He said: O my Lord! Show me (Your real self) and let me look at You. Allah said: You cannot see Me but you look towards that mountain. If it remains firm in its place, then you will see Me. When his Lord made Himself manifest on the mountain, it (i.e., the mountain) became powder and Moses collapsed in a swoon. When he recovered his senses, he said: Glory be to You! I turn to You in repentance and I am the foremost among the believers. Allah said: O Moses! I have chosen you over (all other) human beings with My message and with my conversation. So take what I have given you and be among the grateful. And We wrote (i.e., the *Taurat*) for him in the tablets instructions and explanations about all matters, (and We told him:) You hold on to them firmly and enjoin your people to accept its excellent content. I will show you afterwards the home of the wicked.

A third method of divine communication with human beings is via angel. There are several instances cited in the Quran in which Allah sent messengers (angels) to convey messages.

وَلَقَدْ جَاءَتْ رُسُلًا إِنْرَاهِيمَ بِالْبُشْرِيَّ قَالُوا سَلَامًا ۖ قَالَ سَلَامٌ ۖ فَمَا لَيْثَ أَنْ جَاءَ
بِعِجْلٍ حَتَّىٰ قَلَمَّا رَأَىٰ أَيْدِيهِمْ لَا تَصِلُ إِلَيْهِ نَكِرُهُمْ وَأَوْجَسَ مِنْهُمْ حِيَةً ۖ قَالُوا لَا
تَحْفَ ۖ إِنَّا أُرْسَلْنَا إِلَىٰ قَوْمٍ لُوطٍ

11:69-70 There came Our messengers (angels) to Abraham with glad tidings. They said: Peace! He answered: Peace! And hastened to treat them to a roasted calf. But when he saw that they did not extend their hands towards it (meal, he got scared); he concealed his fear about them. They said: Do not fear; we have been sent against the people of Lut.

فَلَمَّا جَاءَ آلَ لُوطٍ الْمَرْسُلُونَ قَالَ إِنَّكُمْ قَوْمٌ مُنْكَرُونَ قَالُوا بَلَ جَعْنَاكَ إِمَّا كَانُوا فِيهِ يَمْتَرُونَ
وَأَتَيْنَاكَ بِالْحَقِّ وَإِنَّا لَصَادِقُونَ فَأَسْرِ بِأَهْلِكَ بِقِطْعٍ مِنَ اللَّيلِ وَاتَّبِعْ أَذْبَارَهُمْ وَلَا يَلْتَفِتُ
مِنْكُمْ أَحَدٌ وَامْضُوا حِينَ ثُؤْمُرُونَ وَقَضَيْنَا إِلَيْهِ ذَلِكَ الْأَمْرُ أَنَّ دَابِرَ هُوَلَاءَ مَقْطُوْعٌ
مُصْبِحِينَ

15:61-66 And when the messengers (i.e., angels) came to Lut's family, (Lut) said: You are certainly strangers (to us). They (i.e., the angels) said: Yea, we have come to you with (the punishment) they (i.e., the rejecters) are in doubt. We have come to you with the truth and certainly we are telling truth. Therefore you travel by night with your followers just before dawn and you (i.e., Lut) be in the rear following them. And none of you should look back but walk to the place where you are ordered to go. And We revealed to him the decree that the base of those (rejecters) will be cut off by the morning.

وَإِذْ قَالَتِ الْمَلَائِكَةُ يَا مَرْيَمُ إِنَّ اللَّهَ اصْطَفَاكِ وَطَهَّرَكِ وَاصْطَفَاكِ عَلَىٰ نِسَاءِ الْعَالَمِينَ

3:42 Behold! The angels said: O Mary! Allah has chosen you and purified you and selected you above the women in the world.

In these cases, Allah's messages were conveyed to the persons concerned through angel. The angel appears before the person concerned and conveys the message to him.

The modes of transmission of divine messages do not involve meeting with Allah by the prophet. Except for the behind veil conversation, other modes of transmission of divine message are indirect – through agents. Nevertheless the transmission of the message takes place the way Allah wanted it to be conveyed.

The Quran – divine guidance to the people of Prophet Muhammad

Muhammadan era is the final era till the end of this world. The Quran is the divine guidance prescribed for that era. Clearly therefore Allah's commandments in the Quran form the basis for testing the people of Prophet Muhammad. It is the Quran that Prophet Muhammad propagated and followed. And it is the Quran the world should follow.

فَإِنْ يَا أَيُّهَا النَّاسُ إِلَيْ رَسُولِ اللَّهِ إِلَيْكُمْ جِئِنَّا الَّذِي لَهُ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ ۖ لَا إِلَهَ إِلَّا هُوَ يُؤْمِنُ بِهِ وَيُبَيِّنُ ۖ فَامْتُوا بِاللَّهِ وَرَسُولِهِ الَّتِي أَلْمَى الَّذِي يُؤْمِنُ بِاللَّهِ وَكَلِمَاتِهِ وَأَتَّبِعُوهُ لَعَلَّكُمْ تَتَهَدُونَ

7:158 (O Muhammad) say: “O people! To all of you, I am messenger of Allah to whom belongs the dominion of the skies and the earth; there is no God but He; He gives life and death. So believe in Allah and His messenger, the unlettered Prophet who believes in Allah and His words. Follow him so that you may attain (the right) guidance.”

كِتَابٌ أُنزِلَ إِلَيْكَ فَلَا يَكُنْ فِي صَدْرِكَ حَجَّ مِنْهُ لِتُشَذِّرَ بِهِ وَذِكْرِي لِلْمُؤْمِنِينَ

7:2 (This is) a Book (the Quran) revealed to you. So let your (Prophet Muhammad) memory have no difficulty on that account. You warn (the people) with this (the Quran) and it is a Reminder to the believers.

The duty of Prophet Muhammad is to convey the Quranic messages clearly to the people.

فَذَكِّرْ إِنَّمَا أَنْتَ مُذَكِّرٌ

88:21 Therefore you remind (them). Verily you are only a reminder.

فَإِنْ أَعْرَضُوا فَمَا أَرْسَلْنَاكَ عَلَيْهِمْ خَفِيفًا ۝ إِنْ عَيْنَكَ إِلَّا الْبَلَاغُ ۝ وَإِنَّا إِذَا أَدْفَتَنَا إِلَيْنَاهُ رَحْمَةً فَرَحِ بِهَا ۝ وَإِنْ تُصْبِهِمْ سَيِّئَةً بِمَا قَدَّمْتُ أَيْدِيهِمْ فَإِنَّ الْإِنْسَانَ كَمُورٌ

42:48 If they still turn away, We have not sent you (O Prophet Muhammad) as a guard over them. Your duty is only to convey (the message). And truly, when We give man a taste of mercy from Us, he rejoices in that; and when some evil afflicts them because of what their (own) hands have done, then man is indeed ungrateful!

يَا أَيُّهَا الرَّسُولُ بَلَغْ مَا أُنزَلَ إِلَيْكَ مِنْ رَبِّكَ ۝ وَإِنْ مَمْ تَفْعَلْ فَمَا بَلَغْتُ رِسَالَتَهُ ۝ وَاللَّهُ يَعْصِمُكَ مِنَ النَّاسِ ۝ إِنَّ اللَّهَ لَا يَهْدِي الْقَوْمَ الْكَافِرِينَ

5:67 O messenger! Convey (to the people) what was sent to you (the Quran) from your Lord. If you did not, then you had not conveyed His message. And Allah will defend you from the people. Verily, Allah does not guide the unbelievers.

Prophet was directed by Allah to follow the Quran and he followed only the Quran

وَاتَّبِعْ مَا يُوحَى إِلَيْكَ مِنْ رَبِّكَ ۝ إِنَّ اللَّهَ كَانَ بِمَا تَعْمَلُونَ خَبِيرًا

33:2 And follow what is communicated to you from your Lord. Verily, Allah knows well what you do.

اتَّبِعْ مَا أُوحِيَ إِلَيْكَ مِنْ رَبِّكَ ۝ لَا إِلَهَ إِلَّا هُوَ ۝ وَأَغْرِضْ عَنِ الْمُشْرِكِينَ

6:106 Follow what is conveyed to you from your Lord. There is no God but He. And turn away from the *mushriks*.

Allah orders mankind to follow the Quran. It is the guidance from Him.

إِنَّا أَنْزَلْنَا عَلَيْنَاكَ الْكِتَابَ لِلنَّاسِ بِالْحَقِّ ۝ فَمَنْ اهْتَدَى فَإِنَّهُمْ سَاءٌ ۝ وَمَنْ ضَلَّ فَإِنَّمَا يَضْلُلُ
عَلَيْهِمْ ۝ وَمَا أَنْتَ عَلَيْهِمْ بِوَكِيلٍ

39:41 Verily We have sent down the Book (the Quran) to you (Prophet Muhammad) in truth for mankind. Then whoever attains guidance (from it) benefits his own soul and whoever strays (from it) does so against it (i.e., his own soul). You are not given the responsibility over them.

اللَّهُ نَرَأَ أَحْسَنَ الْخَدِيثِ كِتَابًا مُتَشَاءِمًا مَثَانِي تَفْسِيرُ مِنْهُ جُلُودُ الَّذِينَ يَحْسَنُونَ رَبَّهُمْ شَمَّ
تَلِيُّنْ جُلُودُهُمْ وَقُلُوبُهُمْ إِلَى ذِكْرِ اللَّهِ ۝ ذَلِكَ هُدَى اللَّهِ يَهْدِي بِهِ مَنْ يَشَاءُ ۝ وَمَنْ
يُضْلِلُ اللَّهُ فَمَا لَهُ مِنْ هَادٍ

39:23 Allah sent down the best message, a Book (the Quran), resembling each other and being repeated. Those who fear their Lord will get goose-skin by that (while reciting). Then their skins and their minds soften towards the remembrance of Allah. Such is the guidance of Allah. He guides with it (the Quran) whom He pleases. And whoever Allah leads astray, then he will have none to guide (him).

اتَّبِعُوا مَا أَنْزَلَ إِلَيْكُمْ مِنْ رَبِّكُمْ وَلَا تَتَبَعُوا مِنْ دُونِهِ أُولَيَاءَ ۝ قَلِيلًا مَا تَذَكَّرُونَ

7:3 Follow (O mankind!) what is sent to you from your Lord (the Quran) and do not follow ‘protectors’ other than Him. Little it is that you understand.

وَلَقَدْ أَنْزَلْنَا إِلَيْكَ آيَاتٍ بَيِّنَاتٍ ۝ وَمَا يَكُفُرُ بِهَا إِلَّا الْفَاسِقُونَ

2:99 We have sent down to you clear verses (the Quran) and none but the miscreants would reject it.

وَالَّذِينَ كَفَرُوا وَكَذَّبُوا بِآيَاتِنَا أُولَئِكَ أَصْحَابُ النَّارِ ۝ هُمْ فِيهَا خَالِدُونَ

2:39 “But those who reject and treat Our verses (the Quran) false, they shall be companions of the Fire; they shall reside therein.”

لَقَدْ أَنْزَلْنَا إِلَيْكُمْ كِتَابًا فِيهِ ذِكْرُنَا ۖ أَفَلَا تَعْقِلُونَ

21:10 We have sent down to you a Book (the Quran); there is reminder to you in it. Still you do not think?

Allah informs us that the Quran contains complete information on Islam (Q. 5:3). Following the Quran is compulsory for the nation of Prophet Muhammad (Q. 28:85). Allah also directs us not to follow any other path (Q. 45:6, 6:153). Any path other than the Quran, if followed, will lead to splitting of the community (Q. 6:153).

حُرِّمَتْ عَلَيْكُمُ الْمِيَةُ وَاللَّدُمُ وَلَخْمُ الْخِنْبِرِ وَمَا أَهْلَ لِعَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِقَةُ وَالْمُؤْوِذَةُ
وَالْمُتَرَدِّيَةُ وَالنَّاطِيْخَةُ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا دَكَيْتُمْ وَمَا دُبَحَ عَلَى النُّصُبِ وَأَنْ تَسْتَفْسِمُوا
بِالْأَزْلَامِ ۚ ذِكْرُكُمْ فِيْسَقٌ ۚ الْيَوْمَ يَكُسُّ الَّذِينَ كَفَرُوا مِنْ دِيْنِكُمْ فَلَا تَخْشُوْهُمْ وَاحْشُوْنَ ۚ
الْيَوْمَ أَكْمَلْتُ لَكُمْ دِيْنَكُمْ وَأَتَمَّتُ عَلَيْكُمْ بِعْدِي وَرَضِيْتُ لَكُمُ الإِسْلَامَ دِيَنًا ۚ فَمَنِ
اضْطَرَّ فِي حَمْصَةٍ غَيْرَ مُتَجَاهِنٍ لِإِيمَنٍ ۚ فَإِنَّ اللَّهَ عَفُورٌ رَّحِيمٌ

5:3 "...Today I have completed for you your religion, completed My favour upon you, and have chosen for you Islam as your religion...."

إِنَّ الَّذِي فَرَضَ عَلَيْكَ الْقُرْآنَ لَرَادُكَ إِلَى مَعَادٍ ۚ فُلَنْ رَبِّي أَعْلَمُ مَنْ جَاءَ بِالْهُدَىٰ وَمَنْ هُوَ
فِي ضَلَالٍ مُّبِينٍ

28:85 Verily He who made the Quran compulsory on you, will bring you back to a destination. Say: "My Lord knows best who is on true guidance and who is in manifest error."

تِلْكَ آيَاتُ اللَّهِ تَسْلُوْهَا عَلَيْكَ بِالْحَقِّ ۚ فِيْأَيِّ حَدِيْثٍ بَعْدَ اللَّهِ وَآيَاتِهِ يُؤْمِنُونَ

45:6 These are the verses of Allah, which We recite to you in truth. Then in what message will they believe after (rejecting) Allah and His verses (the Quran)?

وَإِنْ هُنَّا صِرَاطٌ مُّسْتَقِيمًا فَاتَّبِعُوهُ ۝ وَلَا تَتَبَعُوا السُّبُّلَ فَتَفَرَّقَ يُكْمَ عَنْ سَبِيلِهِ ۝ دُلُكْمَ
وَصَّاكُمْ بِهِ لَعَلَّكُمْ تَتَعَثَّرونَ

6:153 And this (the Quran) is My path, the straight one; therefore follow it. And do not follow (other) paths because they will split you from His path. Thus He instructs you with it (the Quran) that you may become careful.

Allah reveals that the Quran is the divine guidance for the nation of Prophet Muhammad and therefore it is the directives given in the Quran that the people of Prophet Muhammad should follow. This means the test life of an individual will be evaluated on the basis of that; that is, whether he has lived in accordance with Allah's instructions in the Quran or not.

16. THE PROCESS OF HUMAN ROBOT TESTING

We have already dealt in detail the purpose of creating human species, unique attributes of human biosystem especially the mind and memory and the need to test human biosystem by Allah (see chapters 5 and 11). Scientific explanations advanced here based on the Quran would help clarify several issues relating to the process of the test, which human beings are subjected to in this life.

Qalb (mind) is the unique and most important feature of *Homo sapiens* that not only distinguishes man from other organisms but also puts man in a class of his own. It is a conscious processor with the ability to learn, think and understand, and endowed with freewill to take decision and act. God created the conscious human biosystem with all these attributes to serve Him. Since human mind is given the freewill by Allah, it is necessary to test and identify those who obey Allah and live according to His directions by accepting Him consciously and voluntarily as his Master. This is the reason for testing human beings. In other words, Allah is testing the decisions taken and actions commanded by the mind. Technically speaking, the test of human individual is the test of his *qalb*. It is not surprising therefore that the *qalb* is invariably referred to in the Quran in relation to the test of human beings. This is very much evident from the following verses.

اذْعُوهُمْ لِآبَائِهِمْ هُوَ أَقْسَطُ عِنْدَ اللَّهِ ۝ فَإِنْ لَمْ تَعْلَمُوا آبَاءَهُمْ فَإِخْرُونَكُمْ فِي الدِّينِ
 وَمَوَالِيْكُمْ ۝ وَلَيْسَ عَلَيْكُمْ جُنَاحٌ فِيمَا أَخْطَأْتُمْ بِهِ وَلَكُنْ مَا تَعْمَدُتْ ثُلُوبَكُمْ ۝ وَكَانَ
 اللَّهُ عَفُورًا رَّحِيمًا

33:5 Call them (i.e., adopted sons) with (the names of) their fathers. That is fair with Allah. But if you do not know their fathers, they are your brethren in religion and your friends. There is no blame on you if you erred in it (by mistake). But

what your mind did intentionally (is sin). And Allah is Oft-Forgiving, Most Merciful.

إِذْ جَاءُوكُم مِّنْ فَوْقِكُمْ وَمِنْ أَسْفَلَكُمْ وَإِذْ رَأَيْتِ الْأَبْصَارَ وَبَلَغَتِ الْفُلُوْبُ الْمُتَاجِرَ
وَنَطَّنُوا بِاللَّهِ الظَّلُّوْنَا هُنَالِكَ ابْتِلَى الْمُؤْمِنُونَ وَزَيَّنُوا زِلَّا شَدِيدًا

33:10-11 When they (i.e., the army) came on you from above you and from below you, and when (your) eyes became blurred and the minds reached the throats, and you began to have diverse thoughts of Allah. There the believers were tested and they were totally shaken.

لَا يُؤَاخِذُكُمُ اللَّهُ بِاللَّغْوِ فِي أَيْمَانِكُمْ وَلَكُنْ يُؤَاخِذُكُمْ بِمَا كَسَبْتُمُ ۖ وَاللَّهُ عَفُورٌ
حَلِيمٌ

2:225 Allah will not call you to account for thoughtlessness in your oaths, but He will make you answerable for what your minds have earned (i.e., for the deeds carried out at the behest of mind). And He is Oft-Forgiving, Most Forbearing.

بَلْ ظَنَّتُمْ أَنْ لَنْ يَنْقَلِبَ الرَّسُولُ وَالْمُؤْمِنُونَ إِلَى أَهْلِيهِمْ أَبَدًا وَزَيَّنَ ذَلِكَ فِي قُلُوبِكُمْ
وَظَنَّتُمْ ظَنَّ السَّوْءِ وَكُنْتُمْ قَوْمًا بُورًا

48:12 Nay, you thought that the messenger and the believers would never return to their families. That seemed pleasing to your minds and you entertained that evil thought. And you became a people doomed to perish.

لَعْدَ رَضِيَ اللَّهُ عَنِ الْمُؤْمِنِينَ إِذْ يُبَايِعُونَكَ تَحْتَ الشَّجَرَةِ فَعَلِمَ مَا فِي قُلُوبِهِمْ فَأَنْزَلَ
السَّكِينَةَ عَلَيْهِمْ وَأَنَّابَهُمْ فَتَحَّا قَرِيبًا

48:18 Allah was pleased with the believers when they pledged (loyalty) to you under that tree. Then He knew what was in their minds. So He sent down tranquility on them and He rewarded them with an imminent victory.

قَالَتِ الْأَعْرَابُ آمَنَّا ۖ قُلْنَمْ تُؤْمِنُوا وَلَكِنْ قُولُوا أَسْلَمْنَا وَلَمَّا يَدْخُلِ الْإِيمَانُ فِي قُلُوبِكُمْ
وَإِنْ تُطِيعُوا اللَّهَ وَرَسُولَهُ لَا يَلْتَكُمْ مِنْ أَعْمَالِكُمْ شَيْئًا ۖ إِنَّ اللَّهَ عَفُورٌ رَحِيمٌ

49:14 The desert Arabs say, “We have believed”. Tell (them), “You have not believed; but you (merely) say, “We have submitted (to the will of Allah)”. The Faith has not entered your minds. But if you obey Allah and His messenger, He will not reduce any from your deeds. Verily, Allah is Oft-Forgiving, Most Merciful.”

أَمْ يَأْنِ لِلَّذِينَ آمَنُوا أَنْ تَخْشَعَ قُلُوبُهُمْ لِذِكْرِ اللَّهِ وَمَا نَزَّلَ مِنَ الْحَقِّ وَلَا يَكُونُوا كَالَّذِينَ
أُولُوا الْكِتَابَ مِنْ قَبْلِنَا فَطَالَ عَلَيْهِمُ الْأَمْدُ فَقَسَّتْ قُلُوبُهُمْ ۖ وَكَثِيرٌ مِنْهُمْ فَاسِقُونَ

57:16 Is it not yet time for the believers to humble their minds with the remembrance of Allah and what descended (the Quran) in truth and be not like the people who received the Book before? Their (earlier people's) term was extended; so their minds hardened. Most of them were rebellious transgressors.

وَمِنَ النَّاسِ مَنْ يُعْجِبُكَ قَوْلُهُ فِي الْحَيَاةِ الدُّنْيَا وَيُشَهِّدُ اللَّهَ عَلَىِ مَا فِي قَلْبِهِ وَهُوَ أَلْذُ
الْحَصَامِ

2:204 There are some people whose talk about the life of this world will surprise you and he will also call Allah to witness as to what is in his mind; yet he is the most quarrelsome of the opponents.

كَلَّا ۖ بَلْ ۖ زَانَ عَلَىِ قُلُوبِهِمْ مَا كَانُوا يَكْسِبُونَ

83:14 Not at all! But what they had earned (from their evil deeds) had stained their minds.

وَإِنْ كُنْتُمْ عَلَىِ سَفَرٍ وَمَمْ بَنِدُوا كَاتِبًا فَرِهَانٌ مَغْبُوضَةً ۖ فَإِنْ أَمْنَ بَعْضُكُمْ بَعْضًا فَلَيُؤَدِّ
الَّذِي أَوْتُمْ أَمَانَتَهُ وَلَيَتَقَرَّ اللَّهَ رَبَّهُ ۖ وَلَا تَكُنُمُوا الشَّهَادَةَ ۖ وَمَنْ يَكْتُمْهَا فَإِنَّهُ أَثْمَ قَلْبُهُ ۖ
وَاللَّهُ يَعْلَمُ مَا تَعْمَلُونَ عَلَيْهِمْ

2:283 If you are on a journey and cannot find a scribe, a pledge in hand (may serve the purpose). And if one of you puts trust on another, let the trustee (faithfully) discharge His trust and fear his Lord Allah. Do not conceal the evidence. If anybody conceals it, his mind is a sinner. And Allah knows all that you do.

Thus it is the *qalb*'s intention in the action performed by the individual that is judged rather than the action *per se*. A wrong committed inadvertently will not come under the divine scanner. If one is forced by circumstances to do an unlawful thing there is no harm. But God knows his intention. Allah hints at this in the following verses.

مَنْ كَفَرَ بِاللَّهِ مِنْ بَعْدِ إِيمَانِهِ إِلَّا مَنْ أُكْرِهَ وَقَبْلَهُ مُطْمَئِنٌ بِالإِيمَانِ وَلَكِنْ مَنْ شَرَحَ بِالْكُفْرِ
صَدْرًا فَعَلَيْهِمْ عَذَابٌ عَظِيمٌ

16:106 Whoever, after his belief, disbelieves in Allah – except the one under compulsion with his mind remaining firm in Faith – and who expands (i.e., fills) his memory (*sadr*) with unbelief, on them is wrath of Allah and they have a dreadful penalty.

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَلَحْمَ الْخِنْزِيرِ وَمَا أُهْلَكَ بِهِ لِغَيْرِ اللَّهِ ۝ فَمَنِ اضْطُرَّ عَيْرَ بَايِعَ
وَلَا عَادٍ فَلَا إِثْمٌ عَلَيْهِ ۝ إِنَّ اللَّهَ عَفُورٌ رَّحِيمٌ

2:173 He has only forbidden you dead meat, blood, pork and that pronounced for any other than Allah. But if one is forced (to eat any of these) by necessity neither willingly nor exceeding the limits, then there is no blame on him. Verily Allah is Oft-Forgiving, Most Merciful.

If on the other hand a person knowingly does something forbidden, it is sin. There is also another side to this. Suppose a person abstains from eating pork on some health grounds, it cannot be considered an act of obedience to Allah, but if he does it because Allah directed him to do so, his deed becomes an act of obedience to Allah. Thus it is the mind of a

person Allah is testing for its intentions, decisions and actions. Every intention, decision and action should be in conformity with Allah's instructions. Since no two human beings are created alike, no two *qalbs* are alike. Obviously, the test has to be conducted on individual basis.

Being the test of human mind, if one accepts Islam and submits himself to Allah it will be a voluntary act. To that end Allah informs us there is no compulsion in Islam. It must be a voluntary submission by the individual.

لَا إِكْرَاهٌ فِي الدِّينِ ۝ قَدْ تَبَيَّنَ الرُّشْدُ مِنَ الْغَيْرِ ۝ فَمَن يَكْفُرُ بِالظَّاغُوتِ وَيُؤْمِنُ بِاللَّهِ
فَقَدِ اسْتَمْسَكَ بِالْعُرْوَةِ الْوُثْقَىٰ لَا انْفِصَامٌ لَّهُ ۝ وَاللَّهُ سَمِيعٌ عَلَيْهِ

2:256 There is no compulsion in the religion (Islam). Verily, the right path has become distinctly clear from the wrong. Whoever rejects *Tagut* (i.e., some false god the Pagan Arabs were worshipping) and believes in Allah, then he has grasped a strong rope that will never break. And Allah hears and knows all things.

Allah will select only those who willingly obeyed His directives in this test life for deployment on Earth (Heaven) of the next eternal universe as His righteous robots.

The role of Satan in the test

An important facet of the divine test is the presence of Satan virus in human biosystem (see chapter 12). Human being is by nature believer in God since the biosystem has information about the Creator God (see chapter 14). Human mind is therefore by default God-oriented. Therefore, unless there is mechanism in the biosystem to divert the processor mind from Allah's guidance, the test will be practically ineffective. The Satan virus is installed in human biosystem to do that job. It misleads human mind from the path of Allah. The Satan puts all kinds of tempting suggestions and tries to lure the mind into the worldly enjoyments and away from the divine path. If the mind falls a prey to Satan's deception, the

individual will be on the wrong path. If on the other hand, the mind accepts the divine path and submits to Allah, the individual will be a Muslim. Either of these is a voluntary decision taken by the mind. Whether the mind would accept or reject the divine path is what Allah is testing. The presence of Satan virus thus makes the test the most effective, efficient and perfect.

Biomemome (*nafs*)-based performance evaluation

We have seen (chapter 12) that intraspecific variation Allah creates in human population is so extensive that no two individuals are identical even for a single character. This indicates Allah is testing a very large population of human individuals differing widely in their potentials. Given such magnitude of variation, how is it possible to evaluate the performances of human individuals with justice? It is indeed a vexing problem from the human angle. But the most merciful Allah has His methods to do it in equal fairness to all.

وَنَصَّعُ الْمَوَازِينَ الْقِسْطَ لِيَوْمِ الْقِيَامَةِ فَلَا تُظْلِمُ نَفْسٌ شَيْئًا ۝ وَإِنْ كَانَ مِنْ قَالَ حَبَّةً مِنْ
خَرْدَلٍ أَتَيْنَا هُكَمًا ۝ وَكَفَى بِنَا حَاسِبِينَ

21:47 We shall set up scales of justice for the Day of Judgement, so that not a single individual (*nafs*) will be dealt with unjustly in the least. And if there be (no more than) the weight of a mustard seed (good or evil deed) We will bring it (to account). And enough are We to take account.

Further Allah says that He does not expect from anyone beyond his ability. At several places in the Quran Allah reiterates this.

وَالَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ لَا يُكَلِّفُنَا إِلَّا وُسْعَهَا أُولَئِكَ أَصْحَابُ الْجَنَّةِ ۝ هُمْ
فِيهَا خَالِدُونَ

7:42 And those who believe and do good deeds, We do not compel a soul (individual) beyond its ability. They are companions of the Garden; they will dwell therein (for ever).

This is indeed fair and rational. Every individual is what Allah determines him to be. We have no role in creating our abilities. Allah does not expect from an individual beyond his ability. That also implies Allah does expect from an individual a performance commensurate with the abilities He has given him.

Real-time recording of test performance

Recording of the performance of each human individual during the test life is a pre-requisite for evaluation and judgement by Allah on the Day of Judgement. Real-time recording of the conscious activities (i.e., those performed by the order of mind) is going on in human memory (*sadr*) and other tissues (see chapter 11). Therefore the information stored in *sadr* provides the complete record of one's conscious activities. The data stored in the respective tissues would provide supplementary information validating the information stored in the *sadr*. The information will be retrieved and given to the individual on the Day of Judgement (see chapter 17).

The phenomenon of divine guidance

The mechanism of divine guidance is either not understood or misunderstood by many people. There are many verses in the Quran that inform us that Allah guides whom He wills and leaves astray whom He wills. Consider the following verses.

مَنْ يُضْلِلِ اللَّهُ فَلَا هَادِي لَهُ ۝ وَيَدْرُهُمْ فِي طُغْيَانِهِمْ يَعْمَلُونَ

7:186 Whoever Allah leads astray, then there will be none to guide him. And He leaves them free to wander blindly in their trespasses.

وَلَوْ شَاءَ اللَّهُ مَا أَشْرَكُوا ۝ وَمَا جَعَلْنَاكَ عَلَيْهِمْ حَفِظًا ۝ وَمَا أَنْتَ عَلَيْهِمْ بِوْكِيلٍ

6:107 If Allah had so willed, they would not have associated partners with Him. We have not made you (Prophet Muhammad) a guard over them and you are not entrusted with their responsibility.

وَلَوْ شَاءَ اللَّهُ جَعَلَكُمْ أُمَّةً وَاحِدَةً وَلَكُنْ يُضْلِلُ مَنْ يَشَاءُ وَيَهْدِي مَنْ يَشَاءُ ۝ وَتَسْأَلُنَّ عَمَّا كُنْتُمْ تَعْمَلُونَ

16:93 If Allah had so willed, He would have made you all one community. But He leaves astray whom He pleases and He guides those whom He pleases. And you will certainly be questioned about all your actions.

وَلَوْ شَاءَ رَبُّكَ لَآمَنَ مَنْ فِي الْأَرْضِ كُلُّهُمْ جَمِيعًا ۝ أَفَأَنْتَ تُكْرِهُ النَّاسَ حَتَّىٰ يَكُونُوا مُؤْمِنِينَ وَمَا كَانَ لِنَفْسٍ أَنْ تُؤْمِنَ إِلَّا بِإِذْنِ اللَّهِ ۝ وَيَجْعَلُ الرَّحْمَنَ عَلَى الَّذِينَ لَا يَعْقُلُونَ

10:99-100 If your Lord had so wished, the entire humanity on the earth would have believed! Do you then compel people to believe? Nobody can believe without the consent of Allah and He makes filth on those who do not think (and understand).

Similarly Allah says He punishes whom He wills and shows mercy to whom He wishes.

يُعَذِّبُ مَنْ يَشَاءُ وَيَرْحَمُ مَنْ يَشَاءُ ۝ وَإِلَيْهِ تُقْلَبُونَ

29:21 He punishes whom He pleases and He grants mercy to whom He pleases. And you will be brought back to Him.

In the light of these messages, many people believe that we have no role to play in getting Allah's guidance. It is Allah's prerogative to guide or mislead an individual and man has nothing to do with it. Everything has already been decided by Allah. This is a very wrong impression they develop about Allah's guidance. If guidance and hence award of Heaven or Hell is a pre-determined thing, there is no need for testing human beings by Allah. The main reason why people are

inclined to think that way is they look at the divine affairs from human perspective. When a human being says that he will deal with a case as he wishes, it means he will handle it in any way he wants. But when Allah says He will deal with the case as He wishes, it means only one thing – with full justice. Thus statements like “as Allah wishes”, “as Allah pleases”, “as Allah wills”, etc., mean Allah’s decision or action with full justice.

Consider the following verses in which Allah indicates that the option to accept or not to accept His guidance is left to the individual. However at the end of the verses, it is stated that only if Allah wills, the individual will accept the guidance.

إِنَّ هُذِهِ تَذْكِرَةٌ فَمَنْ شَاءَ اخْتَدَ إِلَى رَبِّهِ سَبِيلًا وَمَا تَشَاءُونَ إِلَّا أَنْ يَشَاءَ اللَّهُ ۚ إِنَّ اللَّهَ كَانَ عَلَيْمًا حَكِيمًا يُدْخِلُ مَنْ يَشَاءُ فِي رَحْمَتِهِ ۖ وَالظَّالِمِينَ أَعْدَدْ لَهُمْ عَذَابًا أَلِيمًا

76:29-31 Verily this (Quran) is a Reminder. Whoever wants let him accept the (straight) path to his Lord! But you will not desire unless Allah wills. Indeed Allah is Omniscient, Wise. He will admit to His mercy (i.e., His path) whom He pleases. And He has kept a grievous penalty for the wrongdoers.

إِنْ هُوَ إِلَّا ذِكْرٌ لِلْعَالَمِينَ لِمَنْ شَاءَ مِنْكُمْ أَنْ يَسْتَقِيمْ وَمَا تَشَاءُونَ إِلَّا أَنْ يَشَاءَ اللَّهُ رَبُّ الْعَالَمِينَ

81:27-29 Verily this (Quran) is nothing but a Reminder to the people of the world to those among you who like to be on the straight path. But you will not desire unless Allah, the Lord of the Worlds, wills.

اللَّهُ نَزَّلَ أَخْسَنَ الْحَدِيثِ كَتَابًا مُتَشَابِهًًا مَثَانِيٍ تَقْشِعُرُ مِنْهُ جُلُودُ الدِّينِ يَخْشَوْنَ رَبَّهُمْ ثُمَّ تَبَيَّنُ جُلُودُهُمْ وَقُلُوبُهُمْ إِلَى ذِكْرِ اللَّهِ ۚ ذَلِكَ هُدَى اللَّهِ يَهْدِي بِهِ مَنْ يَشَاءُ ۖ وَمَنْ يُضْلِلِ اللَّهُ فَمَا لَهُ مِنْ هَادٍ

39:23 Allah has sent down the best message – a Book (the Quran) resembling each other and being repeated. Those who fear their Lord will get goose-skin by that (while reciting). Then their skins and their minds soften towards the

remembrance of Allah. Such is the guidance of Allah. He guides with it (the Quran) whom He pleases. And whoever Allah leads astray, then he will have none to guide (him).

Through these and many other verses in the Quran, Allah makes it unambiguously clear that Allah's guidance means the Quran. It is left to the individual to accept or reject Allah's guidance – the Quran. An individual attains guidance if he accepts the Quran and live accordingly. If not, he gets misled. Both these happen however according to the wish of Allah. This may sound rather queerish at first thought but it is the reality.

The Quranic revelations relating to divine guidance do not mean that Allah is guiding or misguiding people directly from His abode. The messages only indicate there is foolproof mechanism that Allah has designed to lead a person either to His guidance or away from it depending on how his mind performs. This mechanism for guidance is operating in the human biosystem itself.

Allah's guidance process can be understood as mechanism involving the operation of two special software – the guidance program and Satan virus. The guidance program will lead the human mind to the right path (the Quranic path) if it satisfies the criteria stipulated in the program. The reasons for guiding or leaving a person astray mentioned in some of the verses quoted above are in fact some of the criteria. There are several verses that clearly indicate that those who associate partners (polytheists or *mushrik*) with Allah will not get guidance. This forms another criterion.

وَيَعْبُدُونَ مِنْ دُونِ اللَّهِ مَا لَا يَضْرُبُهُمْ وَلَا يَنْفَعُهُمْ وَيَقُولُونَ هُؤُلَاءِ شَعَاعُونَا عِنْدَ اللَّهِ ۝ قُلْ أَتَتْبِعُونَ اللَّهَ بِمَا لَا يَعْلَمُ فِي السَّمَاوَاتِ وَلَا فِي الْأَرْضِ ۝ سُبْحَانَهُ وَتَعَالَى عَمَّا يُشْرِكُونَ

10:18 They worship, besides Allah, things that will neither harm them nor benefit them, and they say: "These are our intercessors with Allah." Say: "Are you informing Allah of something He does not know in the skies and on the earth?" Glory to Him! Far is He above the partners they ascribe (to Him)!

وَلَئِنْ سَأَلْتُهُم مَنْ خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ لَيَقُولُنَّ اللَّهُ ۖ فَأَنَّىٰ يُؤْفَكُونَ

29:61 If you ask them (polytheists), "Who created the skies and the earth and made the sun and the moon subservient", they will certainly say, "Allah". Then how are they misled (from the truth)!

فَإِذَا رَكِبُوا فِي الْفُلْكِ دَعَوْا اللَّهَ مُخْلِصِينَ لَهُ الدِّينَ فَلَمَّا جَنَاحُهُمْ إِلَى الْبَرِّ إِذَا هُمْ يُشْرِكُونَ
لَيَكْفُرُوا بِمَا آتَيْنَاهُمْ وَلَيَسْتَعْوِدُوا ۖ فَسَوْفَ يَعْلَمُونَ

29:65-66 When they (polytheists) board the ship, they call upon Allah with sincere devotion to Him. Then when He has brought them safely to the land, behold, they join partners with Him showing ingratitude with what We have given them. And let them enjoy the pleasures of the worldly life. But afterwards, they will know.

ذَلِكُمْ بِأَنَّهُ إِذَا دُعِيَ اللَّهُ وَحْدَةً كَفَرُوكُمْ ۖ وَإِنْ يُشْرِكُ بِهِ تُؤْمِنُوا ۚ فَالْحُكْمُ لِلَّهِ الْعَلِيِّ الْكَبِيرِ

40:12 (They will be told:) "That is because when Allah alone was invoked, you did not believe; but when partners were joined to Him, you believed. The power of judgment is with Allah, the Supreme, the Great."

Similarly, hypocrisy is another criterion. A hypocrite is not a believer but a fraud who pretends to be a believer.

وَإِذَا قِيلَ لَهُمْ تَعَالَوْا إِلَى مَا أَنْزَلَ اللَّهُ وَإِلَى الرَّسُولِ رَأَيْتَ الْمُنَافِقِينَ يَصُدُّونَ عَنْكَ صُدُودًا
فَكَيْفَ إِذَا أَصَابَتْهُمْ مُصِيبَةٌ إِمَّا فَدَمَتْ أَيْدِيهِمْ ثُمَّ حَاءُوكَ يَخْلُقُونَ بِاللَّهِ إِنْ أَرْدُنَا إِلَّا

إِحْسَانًا وَتَوْنِيقًا أُولَئِكَ الَّذِينَ يَعْلَمُ اللَّهُ مَا فِي قُلُوبِهِمْ فَأَعْرِضْ عَنْهُمْ وَاعْظُمْهُمْ وَقُلْ لَهُمْ فِي أَنفُسِهِمْ قَوْلًا بِلِيهَا

4:61-63 When it is said to them, “Come to what Allah has revealed and to the messenger”, you see the hypocrites turning away from you (in disgust). Then what will it be like when they are afflicted with some misfortune because of (the deeds) what their hands had done before, and then they come to you swearing by Allah, “We meant nothing but good and conciliation”? (Allah) knows what is in their minds. So you keep away from them and advise them and speak to them a word to reach their very souls.

فَمَا لَكُمْ فِي الْمُنَافِقِينَ فَمَتَّبِينَ وَاللَّهُ أَرْسَاهُمْ بِمَا كَسَبُوا ۝ أَتَرِيدُونَ أَنْ تَهْدُوا مِنْ أَصْلَ اللَّهِ ۝ وَمَنْ يُضْلِلِ اللَّهُ فَلَنْ يَجِدَ لَهُ سَبِيلًا وَدُوَا لَوْ تَكْفُرُونَ كَمَا كَفَرُوا تَكُونُونَ سَوَاءً ۝ فَلَا تَتَحَلَّوْا مِنْهُمْ أُولَئِءِ الْحَسَنَاتِ حَتَّىٰ يُهَا جِرْحُوا فِي سَبِيلِ اللَّهِ ۝ فَإِنْ تَوَلُّوْا فَخُذُوهُمْ وَاقْتُلُوهُمْ حَيْثُ وَجَدْنُوكُمْ ۝ وَلَا تَتَحَدُّوْهُمْ مِنْهُمْ وَلَيْا وَلَا نَصِيرُهُمْ

4:88-89 What is it that you (remain) as two parties in the matter of the hypocrites? Allah had upset them for what they had earned (i.e., for their evil deeds). Do you want to guide those whom Allah has misguided? Whomsoever Allah misguides, you will not find for him a way. They wanted you to reject Faith as they did so that you become at par (with them). Therefore do not take friends from them until they leave their land in the cause of Allah. But if they turn away, seize them and kill them wherever you find them. And do not take a friend or a helper from them

وَقَدْ نَزَّلَ عَلَيْكُمْ فِي الْكِتَابِ أَنْ إِذَا سَمِعْتُمْ آيَاتِ اللَّهِ يُكْفِرُ بِهَا وَيُشَهِّدُهُ بِهَا فَلَا تَقْعُدُوهُمْ مَعَهُمْ حَتَّىٰ يَجُوَضُوا فِي حَدِيثٍ عَيْرِهِ ۝ إِنَّكُمْ إِذَا مِثْلُهُمْ ۝ إِنَّ اللَّهَ جَامِعُ الْمُنَافِقِينَ وَالْكَافِرِينَ فِي جَهَنَّمَ حَمِيعًا الَّذِينَ يَتَرَصَّعُونَ بِكُمْ فَإِنْ كَانَ لَكُمْ فَتْحٌ مِنَ اللَّهِ قَالُوا أَمَّ نَكُنْ مَعَكُمْ وَإِنْ كَانَ لِلْكَافِرِينَ نَصِيبٌ قَالُوا أَمَّ نَسْتَحْوِدُ عَيْنَكُمْ وَمَنْعَكُمْ مِنَ الْمُؤْمِنِينَ ۝

فَاللَّهُ يَحْكُمُ بَيْنَكُمْ يَوْمَ الْقِيَامَةِ ۝ وَلَنْ يَجْعَلَ اللَّهُ لِلْكَافِرِينَ عَلَى الْمُؤْمِنِينَ سَبِيلًا إِنَّ الْمُنَافِقِينَ يُخَادِعُونَ اللَّهَ وَهُوَ خَاتِمُ الْعِلْمِ وَإِذَا قَامُوا إِلَى الصَّلَاةِ قَامُوا كُسَالَى يُرَاوِنُ النَّاسَ وَلَا يَدْكُرُونَ اللَّهَ إِلَّا قَلِيلًا مُذَبَّحِينَ بَيْنَ ذَلِكَ لَا إِلَى هُولَاءِ وَلَا إِلَى هُولَاءِ ۝ وَمَنْ يُضْلِلْ اللَّهُ فَلَنْ يَجِدَ لَهُ سَبِيلًا

4:140-143 He (Allah) had sent down (the message) to you in the book that when you hear the revelations of Allah being denied and ridiculed, you should not sit with them till they change to a different topic. (If you sit), then you are like them. Verily, Allah will gather the hypocrites and the rejecters of Faith together in Hell, who wait (for an opportunity) concerning you. If there is a victory for you from Allah, they will say: "Were we not with you?" But if there is any success to the unbelievers, they will tell (them): "Did we not gain an advantage over you and did we not guard you from the believers?" But Allah will pass judgement between you on the Day of Judgment. And Allah will not make any way for the unbelievers (to triumph) over the believers. Indeed the hypocrites (think that they) deceive Allah, but He deceives them. When they stand for prayer, they stand lazily (just) to be seen by the people and they remember Allah only very little. (They are) neither with this group (believers) nor with that group (unbelievers) (but remain undecided) in between. Whomsoever Allah leaves astray, you (i.e., Prophet Muhammad) will never find a way for him.

The individual whose mind opts for Allah's guidance will get constantly guided that way by the program until he attains full guidance. In other words, the guidance program in his biosoftware (*rooh*) leads him to that and he becomes firm in his belief in Islam. He becomes true Muslim obeying Allah's instructions in letter and spirit. This is made further clear in another verse:

لَا يَجِدُ قَوْمًا يُؤْمِنُونَ بِاللَّهِ وَالْيَوْمِ الْآخِرِ يُؤَدِّوْنَ مِنْ حَادَّ اللَّهَ وَرَسُولَهُ وَلَوْ كَانُوا آبَاءُهُمْ أَوْ أَبْنَاءُهُمْ أَوْ إِخْرَاجَهُمْ أَوْ عَشِيرَتَهُمْ أَوْ لِئَلَّكَ كَتَبَ فِي قُلُوبِهِمُ الْإِيمَانَ وَأَيْدِيهِمْ بِرُوحٍ مَّنْهُ وَيُدْحِلُهُمْ جَنَّاتٍ تَحْرِي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا رَضِيَ اللَّهُ عَنْهُمْ وَرَضُوا عَنْهُ أَوْ لِئَلَّكَ حِزْبُ اللَّهِ أَلَا إِنَّ حِزْبَ اللَّهِ هُمُ الْمُفْلِحُونَ

58:22 You will not find people who believe in Allah and the Last Day in close relationship with those who resist Allah and His messenger even if they are their fathers, their sons, their brothers or their kindred. For them (i.e., the believers) He has written belief in their minds and strengthened them with a *rooh* from Himself. And He will admit them to Gardens with rivers flowing beneath, to dwell therein (for ever). Allah is well pleased with them and they are well pleased with Him. They are the party of Allah. Truly it is the party of Allah who are successful.

Thus it is the divine guidance program (*rooh*) operating in our biosystem that guides and strengthens the belief in Islam – Allah's path. On the other hand, the individual whose mind opts for Satan's allurement gets continuously diverted from the path of Allah. Eventually, he becomes totally misled.

Thus depending on the action of mind, decision of the program as to whether an individual should be on the right path or on the wrong path comes into effect. This is a decision taken with full justice by the divine program. Since the program is designed by Allah for this purpose, the decision the program takes is the decision of Allah Himself; in other words, it is as Allah wills. The messages "Allah guides whom He pleases" and "Allah leaves astray whom He wills", etc. can be explained and understood that way. If verses about divine guidance are viewed in the light of this explanation, there will not be any confusion or ambiguity about their meaning and the process of Allah's guidance can be understood with clarity. For instance, consider the following verses.

إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ يَهْدِيهِمْ رَبُّهُمْ بِإِيمَانِهِمْ ۖ ۝ بَجْرِي مِنْ تَحْتِهِمُ الْأَنْهَارُ فِي جَنَّاتِ الْعِيْمٍ

10:9 Those who believe and do good deeds, their Lord will guide them because of their Faith. (They will be) in Gardens of bliss with rivers flowing beneath them.

إِنَّا أَنزَلْنَا عَلَيْكَ الْكِتَابَ لِلنَّاسِ بِالْحَقِّ ۝ فَمَنْ افْتَدَى فَلِنَفْسِهِ ۝ وَمَنْ ضَلَّ فَإِنَّمَا يَضِلُّ عَلَيْهَا ۝ وَمَا أَنْتَ عَلَيْهِمْ بِوْكِيلٍ

39:41 Verily We have sent down the Book (the Quran) to you (i.e., Prophet Muhammad) in truth for mankind. Then whoever accepts guidance benefits his own soul and whoever strays (from it) does so against it (i.e., his own soul). You (Prophet Muhammad) are not given the responsibility over them.

إِنَّ الَّذِينَ لَا يُؤْمِنُونَ بِآيَاتِ اللَّهِ لَا يَهْدِيهِمُ اللَّهُ وَلَهُمْ عَذَابٌ أَلِيمٌ

16:104 Those who do not believe in the verses of Allah (the Quran), Allah will not guide and they have a grievous penalty.

وَلَيَعْلَمَ الَّذِينَ أَوْتُوا الْعِلْمَ أَنَّهُ الْحُقُّ مِنْ رَبِّكَ فَيُؤْمِنُوا بِهِ فَشُكِّرَ لَهُ قُلُوبُهُمْ ۝ وَإِنَّ اللَّهَ هَمَّادُ الَّذِينَ آمَنُوا إِلَى صِرَاطِ مُسْتَقِيمٍ

22:54 And (that trial is also) for the possessors of knowledge to know that it (the Quran) is the truth from your Lord and thereby they believe in it and their minds become humble towards it. Verily Allah is the Guide of the believers to the straight path.

وَالَّذِينَ اهْتَدَوْ رَأَهُمْ هُدًى وَآتَاهُمْ تَقْوَاهُمْ

47:17 To those who accept the right path, He will increase the guidance and bestow God-consciousness on them.

وَيَقُولُ الَّذِينَ كَفَرُوا لَوْلَا أُنْزَلَ عَلَيْهِ آيَةٌ مِنْ رَبِّهِ ۝ فَلَنِ إِنَّ اللَّهَ يُضِلُّ مِنْ يَشَاءُ وَيَهْدِي إِلَيْهِ مَنْ أَنْتَابَ

13:27 And the unbelievers say: "Why is a sign not sent to him from his Lord? Say: "Truly Allah leaves to stray whom He wills and He guides to Himself those who turn to Him in penitence, those who believe and pacify their minds with the remembrance of Allah. Does the remembrance of Allah not pacify minds? Those who believe and do good deeds, they have (every) blessing and excellent destination.

وَمَنْ أَرَادَ الْآخِرَةَ وَسَعَى لَهَا سَعْيَهَا وَفُقِرَ مُؤْمِنٌ فَأُولَئِكَ كَانَ سَعْيُهُمْ مَشْكُورًا

17:19 Whoever wishes for the Hereafter and strives for that as believer, they are the ones whose effort will be thanked (rewarded).

ذَلِكَ بِأَنَّهُمْ اسْتَحْبُوا الْحَيَاةَ الدُّنْيَا عَلَى الْآخِرَةِ وَأَنَّ اللَّهَ لَا يَهْدِي الْقَوْمَ الْكَافِرِينَ أُولَئِكَ الَّذِينَ طَبَعَ اللَّهُ عَلَى قُلُوبِهِمْ وَسَعْيُهُمْ وَأَبْصَارُهُمْ طُغٌّ وَأُولَئِكَ هُمُ الْغَافِلُونَ

16:107-108 That is because they love the life of this world more than the Hereafter and that Allah will not guide the disbelieving people. They are the ones whose minds, hearing and vision Allah has sealed up and they are the ones (who are) the unmindful.

وَالَّذِينَ كَذَّبُوا بِاِيَاتِنَا صُمٌّ وَبُكْمٌ فِي الظُّلُمَاتِ ۖ مَنْ يَشَاءُ اللَّهُ يُصْلِلُهُ وَمَنْ يَشَاءُ يَجْعَلُهُ عَلَى صِرَاطٍ مُسْتَقِيمٍ

6:39 Those who reject our revelations (the Quran) are deaf and dumb in the darkness. Whom Allah wills, He leaves him to go astray and whom He wills, He places him on the straight way.

وَنُنَقِّلُ بَأْفَيْدَتَهُمْ وَأَبْصَارَهُمْ كَمَا لَمْ يُؤْمِنُوا بِهِ أَوْلَ مَرَّةً وَنَذَرُهُمْ فِي طُقْنَانِهِمْ يَعْمَلُونَ

6:110 We will make their mental faculties and their sights waver as in the first instance when they refused to believe in it and We will leave them free to wander blindly in their trespasses.

سَأَصْرِفُ عَنْ آيَاتِي الَّذِينَ يَتَكَبَّرُونَ فِي الْأَرْضِ بِعَيْنِ الْحُقْقِ وَإِنْ يَرَوْا كُلَّ آيَةٍ لَا يُؤْمِنُوا بِهَا
وَإِنْ يَرَوْا سَبِيلَ الرُّشْدِ لَا يَتَخَذِّلُونَ سَبِيلًا وَإِنْ يَرَوْا سَبِيلَ الْعَيْقَنِ يَتَخَذِّلُونَ سَبِيلًا ۝ ذَلِكَ
بِأَنَّهُمْ كَذَّبُوا بِآيَاتِنَا وَكَانُوا عَنْهَا غَافِلِينَ

7:146 I (Allah) will divert from My revelations (the Quran) those who are unjustly arrogant (rejecters) on the earth. Even if they see all (Our) revelations (the Quran), they will not believe in them. And when they see the right path, they will not accept it as the (right) path. But if they see the path of error, they will accept it as the (right) path. That is because they have treated Our revelations (the Quran) as falsehood and they were heedless of them.

وَأَنْلَأْتُ عَنْهُمْ نَبَأً الَّذِي آتَيْنَا آيَاتِنَا فَأَسْلَخَ مِنْهَا فَأَتَبَعَهُ الشَّيْطَانُ فَكَانَ مِنَ الْغَاوِلِينَ

7:175 Recite to them the story of the man to whom We gave Our revelations (the Quran), but he got out of them. So Satan made him its (Satan's) follower and he went astray.

اسْتَعْفِرْ لَهُمْ أَوْ لَا تَسْتَعْفِرْ لَهُمْ إِنْ تَسْتَعْفِرْ لَهُمْ سَبْعِينَ مَرَّةً فَلَئِنْ يَعْفُرَ اللَّهُ لَهُمْ ۝ ذَلِكَ
بِأَنَّهُمْ كَفَرُوا بِاللَّهِ وَرَسُولِهِ ۝ وَاللَّهُ لَا يَهْدِي الْقَوْمَ الْفَاسِقِينَ

9:80 Whether you (O Muhammad!) ask for their forgiveness or not, (they will not be forgiven). If you ask seventy times for their forgiveness, Allah will not forgive them. That is because they did not believe in Allah and His messenger. And Allah does not guide the rebellious people.

إِنْ تَخْرِصْ عَلَىٰ هُدَاهُمْ فَإِنَّ اللَّهَ لَا يَهْدِي مِنْ يُضِلُّ ۝ وَمَا لَهُمْ مِنْ نَاصِرِينَ

16:37 (Even) if you (O Muhammad!) crave for their guidance, (it will be of no avail). Verily, Allah will not guide the one who goes (himself) astray. And there is none to help them.

فَلَوْ مَنْ كَانَ فِي الصَّالَاتِ فَلَيَمِدُّ لَهُ الرَّحْمَنُ مَدًا ۝ حَتَّىٰ إِذَا رَأَوْا مَا يُوعَدُونَ إِمَّا الْعَذَابَ
وَإِمَّا السَّاعَةَ فَسَيَعْلَمُونَ مَنْ هُوَ شَرٌّ مَكَانًا وَأَصْعَفُ جُنْدًا وَنَزِدُ اللَّهُ الَّذِينَ اهْتَدَوْا هُدًى
۝ وَالْباقِيَاتُ الصَّالِحَاتُ خَيْرٌ عِنْدَ رَبِّكَ ثُوابًا وَخَيْرٌ مَرَدًا

19:75-76 Say: If anyone is on the wrong path, the Most Merciful (i.e., Allah) gives a long (rope) to them until they see the warning of Allah – either the punishment or the (Final) Hour. Then they will realize who is worse in position and weaker in army. And Allah enhances guidance to those who are on the right path. Lasting good deeds are the best as reward with your Lord and the best in respect of (their) eventual returns.

ذَلِكَ بِمَا فَعَلْتُمْ أَيْدِيكُمْ وَأَنَّ اللَّهَ لَيْسَ بِظَلَامٍ لِلْعَبْدِ

8:51 That is because of (the deeds) your hands had done before and (because) Allah is never unfair to His servants.

ذَلِكَ بِأَنَّ اللَّهَ لَمْ يَكُنْ مُعَيِّرًا نِعْمَةً أَنْعَمَهَا عَلَى قَوْمٍ حَتَّى يُعَيِّرُوا مَا يَأْنَفُسُهُمْ ۝ وَأَنَّ اللَّهَ سَمِيعٌ عَلِيمٌ

8:53 That is because Allah will not change the mercy He bestowed on a people until they bring about change in themselves. And verily, Allah hears and knows (all things).

وَالَّذِينَ جَاهَدُوا فِيهَا لَنَهْدِيَنَّهُمْ سُبْلَنَا ۝ وَإِنَّ اللَّهَ لَمَعِ الْمُحْسِنِينَ

29:69 And those who strive in Our (cause), We will certainly guide them to Our path. And verily Allah is with those who do good.

بَلِ اتَّبَعُ الَّذِينَ ظَلَمُوا أَهْوَاءَهُمْ بِعَيْرٍ عِلْمٍ ۝ فَمَنْ يَهْدِي مِنْ أَضَلَّ اللَّهُ ۝ وَمَا لَهُمْ مِنْ نَاصِرِينَ

30:29 But the wrongdoers follow their own lusts without any knowledge. Then who can guide those whom Allah leaves astray? There is none to help them.

إِنَّ رَبَّكَ هُوَ أَعْلَمُ مَنْ يَضِلُّ عَنْ سَبِيلِهِ ۝ وَهُوَ أَعْلَمُ بِالْمُهْتَدِينَ

6:117 Verily, your Lord knows best who goes astray from His path and He also knows best who attains true guidance.

فَإِنْ لَمْ يَسْتَحْجِبُوا لَكَ فَاعْلَمْ أَنَّمَا يَتَّبِعُونَ أَهْوَاءَهُمْ ۝ وَمَنْ أَضَلُّ مِنْ إِنْ تَبَعَ هَوَاهُ بِعَيْرٍ هَذِهِ
مِنَ اللَّهِ ۝ إِنَّ اللَّهَ لَا يَهْدِي الْقَوْمَ الظَّالِمِينَ

28:50 But if they do not answer you (O Prophet Muhammad), then understand that they only follow their own lusts. And who is more misguided than the one who follows own lusts without an iota of guidance from Allah. Verily, Allah will not guide the wrongdoers.

وَمَا أَنْتَ بِحَادِي الْعُمُّي عَنْ ضَلَالِهِمْ ۝ إِنْ تُسْمِعُ إِلَّا مَنْ يُؤْمِنُ بِآيَاتِنَا فَهُمْ مُسْلِمُونَ

27:81 And you (Prophet Muhammad) cannot guide the blind out of their straying. You can make listen only those who believe in Our revelations (the Quran) submitting themselves (to Allah).

وَمَنْ يَهْدِ اللَّهُ فَمَا لَهُ مِنْ مُضِلٌ ۝ أَلَيْسَ اللَّهُ بِعَزِيزٍ ذِي الْتَّقَ�مِ

39:37 And whoever Allah guides, none can mislead him either. Is not Allah mighty to mete out punishment?

Thus it is clear that Allah's program guides only those who take initiative to accept Allah's guidance (the Quran) and submit to Him voluntarily. Conversely, Allah's program does not guide the one who accepts the Satan and ignore Allah's revelations. And if a person gets Allah's guidance none can mislead him or if a person does not get Allah's guidance, none can guide him either.

In the overall guidance process, Satan virus acts against man. Allah describes it as the avowed enemy of man (see chapter 12). One's success in getting divine guidance therefore rests on his preparedness to counter the action of Satan virus effectively. Allah warns against it.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَتَّبِعُوا خُطُواتِ الشَّيْطَانِ ۝ وَمَنْ يَتَّبِعُ خُطُواتِ الشَّيْطَانِ فَإِنَّهُ يَأْمُرُ
بِالْمُحْسَنَاتِ وَالْمُنْكَرِ ۝ وَلَوْلَا فَضْلُ اللَّهِ عَلَيْكُمْ وَرَحْمَةً مَا زَگَى مِنْكُمْ مِنْ أَحَدٍ أَبَدًا وَلَكِنَّ
اللَّهَ يُرِيَّكُمْ مَنْ يَشَاءُ ۝ وَاللَّهُ سَمِيعٌ عَلَيْهِ

24:21 “O you who believe! Follow not the footsteps of Satan. If any will follow the footsteps of Satan, it will (but) command what is shameful and wrong....”

The Satan cannot influence Allah's obedient sincere servants (Q. 38:79-83). Only those who do not resist its temptations fall an easy prey to it and get themselves trapped and strayed.

قَالَ رَبِّيْ فَأَنْظُرْنِي إِلَى يَوْمٍ يُبَعْثُوْنَ قَالَ فَإِنَّكَ مِنَ الْمُنْظَرِيْنَ إِلَى يَوْمٍ الْوَقْتِ الْمَعْلُومِ قَالَ فَعِزِّزْنِي لَأَغْوِيْنَهُمْ أَجْمَعِينَ إِلَّا عِبَادَكَ مِنْهُمُ الْمُخْلَصِيْنَ

38:79-83 (*Iblis*) said: O my Lord! Give me then respite till the day of their resurrection. (Allah) said: Respite is indeed granted to you till the day of the appointed time. (*Iblis*) said: Then with Your power, I will put them all in the wrong except Your sincere servants among them.

Allah further reminds us to remember Him and seek refuge in Him in order to foil Satan's attempt when its action is detected.

وَإِنَّمَا يَنْزَعُنَّكَ مِنَ الشَّيْطَانِ نَزْعٌ فَاسْتَعِدْ بِاللَّهِ إِنَّ اللَّهَ سَمِيعٌ عَلَيْهِ إِنَّ الَّذِيْنَ اتَّقُوا إِذَا مَسَّهُمْ طَائِفٌ مِنَ الشَّيْطَانِ تَذَكَّرُوا إِنَّمَا هُمْ مُبْصِرُوْنَ

7:200-201 If a suggestion from Satan assails your (mind), seek refuge with God; for He hears and knows (all things). Those who fear God, when an evil thought from Satan assaults them, bring God to remembrance when lo! They see alright.

How to detect Satan's interference on our minds is an important question in this context. Since the Satan's aim is to divert man from Allah's path, it is imperative that we should have full knowledge of Allah's directives in the Quran to identify whether a suggestion or information that pops up on mind is in conformity or at variance with the Quran. If it is at variance with the Quran, it can be adjudged as from Satan virus. Then seek refuge with Allah. That will effectively

counter the satanic influence. We should be always on guard against Satan to stay on the path of Allah. This will indeed be impossible for a person who does not have sufficient knowledge of Allah's commandments in the Quran. Expansion or shrinking of one's memory (meaning increased or reduced size of one's Islamic knowledgebase) mentioned in some verses is suggestive of this. This aspect has been dealt in detail earlier (see discussion on *sadr* in chapter 11). Therefore study of the Quran to have a thorough understanding of Allah's directives is a must to keep ourselves from the clutches of Satan and on the right track.

A Muslim is not just a believer (*mu'min*). He is one who voluntarily submits to Allah in all humility by leading his life as per Allah's directives. Based on verse 3:83, religion Islam has been defined in chapter 5 as Allah's instructions and Muslim as the one who follows Allah's instructions (i.e., Islam). Accordingly all the components (excluding man) of the universe (both nonliving and living systems) are considered Muslims as they all obediently and compulsorily submit to Him. Islam is therefore the natural religion (see chapter 5 for a detailed discussion). Their's is a compulsory submission as they function as per Allah's instructions (software) immanent in them. They are all totally programmed systems like man-made robots. But the case of human being is different. Man can either obey or disobey Allah as he is bestowed with freewill. An individual attains guidance through voluntary acceptance of Allah's instructions and living accordingly. What does the voluntary transformation into Muslim mean? A human individual can become Muslim if he performs his conscious activities (i.e., those decided by mind) as per Allah's directives. To the nation of Prophet Muhammad, the divine instructions conveyed in the Quran constitute the religious software. One should therefore study and comprehend all the instructions in the Quran. That in fact forms the first and foremost duty of an individual. Learning Allah's commandments means, to use the computer jargon, to store the divine directives in one's

memory. This is like installing a software in his biosystem. Now the mind should follow these directives in all its functions. The person will then be leading his life in accordance with Allah's directives. That will make the individual a Muslim. He is now comparable to any of Allah's creations.

The voluntary submission can be made clearer with an example. We come across situations in our daily life wherein human mind does not exercise its freewill but accepts certain things as such. A typical example is the citizens of a country accept the rules and laws prescribed by the government. For instance, while driving car one obeys traffic rules. If the red light is on, he stops the vehicle. No one violates this rule. This is equivalent to forgoing one's freewill and acting as per the installed instructions; in this case, the traffic rules. Similarly voluntary acceptance of Allah's directives by an individual will make him a totally programmed robot of Allah despite having freewill. The individual who accepts the Quranic directives and lives accordingly in effect forgoes his freewill and transforms himself into a totally programmed robot of Allah. In other words, not only the biological activities (that go on inside his biosystem as per the biosoftware) but also the conscious activities commanded by mind (*qalb*) will also be now governed by the divine directions. He will no longer be living according to his likes and dislikes but only according to the will of his Creator. He will have no intention or interest of his own in this life other than living to the best satisfaction of Allah. He becomes a dedicated robot of Allah – the true Muslim. Allah's interests will become his interests, Allah's desires will become his desires, Allah's dislikes will become his dislikes, and so on. Every action of his will be as directed by Allah. Allah's free-willed robot is now a totally programmed dedicated robot. Functionally he becomes a robot without freewill. It is such people whom Allah refers to as "*muttaqeen*" – the God-fearing or God-conscious robots. They are the true Muslims.

Death - termination of the test period

Death in the life of human beings on this Earth is ordained to terminate the divine test. It marks the end of one's test life.

الَّذِي خَلَقَ الْمَوْتَ وَالْحَيَاةَ لِيَتُؤْكِنَ أَيُّهُمْ أَحْسَنُ عَمَلاً ۝ وَمَوْعِدُ الْغَيْرِ الْغَافِرُ

67:2 (He) who created death and life to test which of you is best in deed. And He is the Mighty, Oft-Forgiving.

Allah has fixed lifespan for each individual. This means one's period of testing is pre-determined by Allah.

هُوَ الَّذِي خَلَقَكُمْ مِنْ طِينٍ ثُمَّ قَضَى أَجَلًا ۝ وَأَجَلٌ مُسَمَّىٌ عِنْدَهُ ۝ ثُمَّ أَتَتْمُ تَمَرُونَ

6:2 It is He Who created you from clay and then decreed a term (for you). And there is with Him another pre-determined term; yet you doubt!

وَيَوْمَ يَجْشُرُهُمْ جَمِيعًا يَا مَعْشَرَ الْجِنِّ ۖ قَدْ اسْتَكْرِئُمْ مِنَ الْإِنْسَنِ ۝ وَقَالَ أَوْلَاهُمْ مِنَ الْإِنْسَنِ
رَبَّنَا اسْتَمْتَعْ بَعْضُنَا بِعْضٍ وَتَلَقَّنَا أَجَلُنَا الَّذِي أَجَّلْتَ لَنَا ۝ قَالَ النَّارُ مَثُواً كُمْ حَالِدِينَ
فِيهَا إِلَّا مَا شَاءَ اللَّهُ ۝ إِنَّ رَبَّكَ حَكِيمٌ عَلِيمٌ

6:128 The Day He gathers them (humans and *jinns*) all together (and say): "O assembly of *jinns*! You have (misled) many of the human beings." The (*jinn*'s) friends among human beings will say: "Our Lord! We took advantage with each other and we have reached the end of our term assigned for us by You." Allah will say: "The Fire is your dwelling place. You (all) except whom Allah wishes will dwell therein for ever." Verily your Lord is Wise, Omniscient.

هُوَ الَّذِي خَلَقَكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ يُخْرِجُكُمْ طَفْلًا ثُمَّ يَتَبَلَّغُو أَشَدَّكُمْ
ثُمَّ لَتَكُونُوا شُيُوخًا ۝ وَمِنْكُمْ مَنْ يُتَوَفَّ مِنْ قَبْلُ ۝ وَلَتَبَلَّغُوا أَجَلًا مُسَمَّىٌ وَلَعَلَّكُمْ تَعْقِلُونَ

40:67 It is He who created you from dust, then from a sperm-drop, then from a leech-like clot. Then He brings you out (from the womb) as a baby, then you (grow) to attain your full development and then you become old – (although there are)

some among you who die earlier – and to reach a pre-determined term and that you may think (and understand).

وَلَنْ يُؤَخِّرَ اللَّهُ نَعْمَسًا إِذَا حَانَ أَجَلُهَا ۚ وَاللَّهُ خَيْرٌ إِمَّا تَعْمَلُونَ

63:11 But Allah does not grant respite to any soul when (the end of) its term is reached. And Allah knows well (all) that you do.

Since lifespan has already been fixed by Allah, death becomes a programmed phenomenon. It is pre-determined in the biosoftware of the individual (Q. 3:145; 4:78).

وَمَا كَانَ لِنَفْسٍ أَنْ تَمُوتَ إِلَّا بِإِذْنِ اللَّهِ كَيْنَانِ مُؤَجَّلًا ۖ وَمَنْ يُرِدُ ثَوَابَ الدُّنْيَا نُؤْتِهِ مِنْهَا
وَمَنْ يُرِدُ ثَوَابَ الْآخِرَةِ نُؤْتِهِ مِنْهَا ۚ وَسَخَّرِي الشَّاكِرِينَ

3:145 None can die without Allah's consent, the term being fixed as by writing. Whoever desires the reward of this world, We will give it to him; and whoever desires the reward of the Hereafter, We will give that to him. And We will reward the grateful.

أَيْنَمَا تَكُونُوا يُدْرِكُكُمُ الْمَوْتُ وَلَوْ كُنْتُمْ فِي بُرُوجٍ مُشَيَّدَةٍ ۖ وَإِنْ تُصِبُّهُمْ حَسَنَةٌ يَقُولُوا
هُنَّا مِنْ عِنْدِ اللَّهِ ۖ وَإِنْ تُصِبُّهُمْ سَيِّئَةٌ يَقُولُوا هُنَّا مِنْ عِنْدِكَ ۖ قُلْ كُلُّ مِنْ
عِنْدِ اللَّهِ ۖ فَمَالِ هُؤُلَاءِ الْقَوْمُ لَا يَكَادُونَ يَفْعَلُونَ حَدِيثًا

4:78 Wherever you are, death will find you out, even if you are in forts built strong and high! If some good befalls them, they will say, "This is from Allah". But if some bad happens to them, they will say, "This is from you (i.e., Prophet Muhammad)". Say: "All things are from Allah." What happened to these people? They do not understand a thing!

Death of a person in the normal course occurs when the END instruction in his biomemome (*nafs*) is reached. Deletion of the biomemome from the body cells takes place then (Q. 6:93). The software is no longer present in the body and the body loses all its life properties (also see chapter 9). Death thus terminates one's test life on Earth.

وَمَنْ أَظْلَمُ مِنْ افْتَرَى عَلَى اللَّهِ كَذِبًا أَوْ قَالَ أُوحِيَ إِلَيَّ وَمَنْ يُوحِي إِلَيْهِ شَيْءًا وَمَنْ قَالَ
سَأَنْهَا مِثْلًا مَا أَنْزَلَ اللَّهُ ۖ وَلَوْ تَرَى إِذ الظَّالِمُونَ فِي عَمَرَاتِ الْمَوْتِ وَالْمَلائِكَةُ بِاسْطُو
أَيْدِيهِمْ أَخْرِجُوا أَنْفُسَكُمْ ۖ الْيَوْمَ بُخْرُونَ عَذَابَ الْمُهُونِ إِمَّا كُنْتُمْ تَعْلُوْنَ عَلَى اللَّهِ عَيْرَ
الْحَقِّ وَكُنْتُمْ عَنْ آيَاتِهِ تَسْتَكِبِرُونَ

6:93 Who is more wicked than the one who fabricates lie about Allah or (who) says, “I have received message (i.e., *wahy* from Allah)” when he has received nothing or who says, “I can reveal the like of what Allah has sent down (i.e., the Quran)”? If you could see the wicked in their panicky state at death when the angels stretch forth their hands (saying), “Release your souls (*anfus*). On the Day (the Day of Judgement) you will be rewarded the shameful penalty because you were telling untruth about Allah and you were arrogant towards His revelation (the Quran).”

وَهُوَ الْفَاعِلُ فَوْقَ عِبَادِهِ ۖ وَيُرِسِّلُ عَلَيْكُمْ حَفَظَةً حَتَّىٰ إِذَا جَاءَ أَحَدُكُمُ الْمَوْتُ نَوْفَتُهُ
رُسُلُنَا وَهُمْ لَا يُفَرِّطُونَ

6:61 He is the Supreme Authority over His servants and He sends sentinels (to watch) over you. And when death approaches one of you, Our messengers (angels) takes him (his soul) and they never fail in their duty.

فُلُونَ يَتَوَفَّ أَكُمْ مَلِكُ الْمَوْتِ الَّذِي وُكِلَّ بِكُمْ ثُمَّ إِلَى رَبِّكُمْ تُرْحَمُونَ

32:11 Say: The angel of death put in charge of you will take your (soul at death); then you will be brought back to your Lord.

اللَّهُ يَتَوَفَّ الْأَنْفُسَ حِينَ مَوْتِهَا وَالَّتِي لَمْ يَمْتُ فِي مَنَامِهَا ۖ فَيُمْسِكُ أَنَّىٰ قَضَىٰ عَلَيْهَا
الْمَوْتَ وَيُرِسِّلُ الْأُخْرَىٰ إِلَى أَجْلٍ مُّسَمَّىٰ ۖ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِّقَوْمٍ يَتَعَكَّرُونَ

39:42 Allah takes the souls at the time of death; and those who did not die (He takes) during their sleep. Those on whom He has passed the decree of death, He retains (the soul), but the

rest He sends (back to their bodies) for a term appointed. Verily in that are signs for people who think.

وَهُوَ الَّذِي يَتَوَفَّ أَكْثَرَهُمْ بِاللَّيْلِ وَيَعْلَمُ مَا جَرَحْتُمْ بِالنَّهَارِ ثُمَّ يَعْشُكُمْ فِيهِ لِيُقْضَى أَجَلٌ مُسَمًّى
ثُمَّ إِلَيْهِ مَرْجِعُكُمْ ثُمَّ يُبَيِّنُكُمْ إِمَّا كُنْتُمْ تَعْمَلُونَ

6:60 It is He who takes your (soul) in the night and He knows what you do in the day. Then He wakes you up in it (i.e., in the day) until you complete a prescribed term (i.e., one's life span). Thereafter it is to Him you will return; then He will inform you what you had been doing (in this life).

Verses 39:42 and 6:60 also mention about taking *nafs* (biosoftware) of a person during sleep. However, the verses also subsequently state that the *nafs* is retained in the body after sleep till the expiry of lifespan. ‘Taking *nafs* during sleep’ is not everyday affair. Therefore the verses effectively convey that the *nafs* of those whose lifespan is over during the sleep will only be deleted from the body. The others will have their *nafs* intact in the body till the end of their term.

Death is a certainty (Q. 21:35); none can escape it. However, Allah may extend or shorten the lifespan of a person as He wills (Q. 35:11). Suicide committed by any has to be treated as an act of his own will as can be inferred from Allah's instruction not to take one's life (Q. 6:151). It is not a pre-determined act.

كُلُّ نَفْسٍ ذَائِقَةُ الْمَوْتِ ۖ وَنَبْلُوكُمْ بِالشَّرِّ وَالْخَيْرِ فِتْنَةً ۖ وَإِلَيْنَا تُرْجَعُونَ

21:35 Everyone will taste death. We test you by evil and by good as a trial and you will be brought back to Us.

وَاللَّهُ خَلَقَكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ جَعَلَكُمْ أَرْوَاجًا ۚ وَمَا تَحْمِلُ مِنْ أُثْنَى وَلَا تَضَعُ
إِلَّا بِعِلْمِهِ ۖ وَمَا يُعْمَرُ مِنْ مُعْمَرٍ وَلَا يُنْفَصَعُ مِنْ عُمْرِهِ إِلَّا فِي كِتَابٍ ۖ إِنَّ
ذَلِكَ عَلَى اللَّهِ يَسِيرٌ

35:11 And Allah created you from dust; then from a sperm-drop; then He made you mates. And no female conceives or

delivers without His knowledge. No man is granted extension of life nor is his lifespan shortened except in accordance with (what is given) in a Record. All that is easy for Allah.

فُلَّا تَعَالَوْا أَئْلَمَ مَا حَرَمَ رِبُّكُمْ عَلَيْكُمْ ۖ لَا تُشْكِوْنَا بِهِ شَيْئًا ۖ وَبِأَوْلَادِيْنِ إِحْسَانًا ۖ وَلَا
تَقْتُلُوا أُولَادَكُمْ مِنْ إِمْلَاقٍ ۖ تَحْنُّ نَرْقَشَكُمْ وَإِيَاهُمْ ۖ وَلَا تَقْرُبُوا الْفَوَاحِشَ مَا
ظَهَرَ مِنْهَا وَمَا بَطَنَ ۖ وَلَا تَقْتُلُوا النَّفْسَ اتَّيْ حَرَمَ اللَّهُ إِلَّا بِالْحُقْقِ ۖ ذَلِكُمْ
وَصَاحُّكُمْ بِهِ لَعْلَكُمْ تَعْقِلُونَ

6:151 Say: “You come; I will tell (you) what your Lord has forbidden to you. (These are:) Do not associate anything with Him; do good to your parents; do not kill your children due to poverty – We provide sustenance for you and for them; do not approach shameful deeds whether open or secret; do not take life, which Allah has made sacred, without justification. Thus He instructs you about it so that you may think.”

With death the test life of an individual on this earth comes to an end. It appears that one's fate whether he will go to Heaven or Hell is also known at the time of death itself. That means the evaluation of one's record of test life would also be over at the time of death. This is evident from verse 6:93 in which mention has been made of the panicky state in which a wicked person (the rejecter of Faith) will face death. There are also other verses which imply that evaluation of one's performance dossier is also completed and his fate is known at the time of death.

إِنَّ الَّذِينَ تَوَفَّاهُمُ الْمَلَائِكَةُ ظَالِمِيْنَ أَنفُسِهِمْ قَالُوا فِيمْ كُتُبْنَا ۖ قَالُوا كُنَّا مُسْتَضْعِفِينَ فِي
الْأَرْضِ ۖ قَالُوا أَلَمْ تَكُنْ أَرْضُ اللَّهِ وَاسِعَةً فَنَهَا جَرَوْنَا فِيهَا ۖ قَالُوكُمْ مَأْوَاهُمْ جَهَنَّمُ ۖ
وَسَاءَتْ مَصِيرًا إِلَّا الْمُسْتَضْعِفِينَ مِنَ الرِّجَالِ وَالنِّسَاءِ وَأَوْلَادِنَّ لَا يَسْتَطِيغُونَ حِيلَةً وَلَا
يَهْتَدُونَ سَبِيلًا

4:97-98 When angels make those who did wrong to themselves die, they (angels) will ask: “What (plight) were you in?” They (i.e., the dying persons) would reply: “We were weak and

oppressed on the earth.” They (angels) would say: “Was not the earth of Allah spacious enough for you to migrate to other places?” Their abode is Hell. What an evil destination! Except those men, women and children who are (really) weak and oppressed, who have no means in their power and do not find guidance for a way out.

فَمَنْ أَظْلَمُ مِنْ افْتَرَى عَلَى اللَّهِ كَذِبًا أَوْ كَذَبَ بِآيَاتِهِ أُولَئِكَ يَنَاهُمْ نَصِيبُهُمْ مِنَ الْكِتَابِ حَتَّىٰ إِذَا جَاءَهُمْ رُسُلُنَا يَتَوَفَّوْنَهُمْ قَالُوا أَيْنَ مَا كُنْتُمْ تَدْعُونَ مِنْ دُونِ اللَّهِ قَالُوا ضَلَّوْا عَنَّا وَشَهِدُوا عَلَى أَنفُسِهِمْ أَنَّهُمْ كَانُوا كَافِرِينَ

7:37 Then who is more wicked than the one who fabricated a lie against Allah or treated His verses as falsehood? They will get their share from the Record. Thus when our messengers (angels) arrive and take their (souls at death), they (angels) will ask: “Where are those whom you used to invoke besides Allah?” They will reply: “They all had gone away from us.” (Thus) they will bear witness against themselves (to the fact) that they were unbelievers.

وَلَوْ تَرَى إِذْ يَسْوَفُ الَّذِينَ كَفَرُوا الْمَلَائِكَةُ يَصْرِفُونَ وُجُوهَهُمْ وَأَذْبَارَهُمْ وَدُوْقُوا عَذَابَ الْحَرِيقِ

8:50 If you could see the scene of taking (the souls of) the unbelievers (at death) by the angels beating their faces and their backs (saying): “You taste the penalty of burning (Fire)! ”

فَكَيْنَتْ إِذَا تَوَفَّهُمُ الْمَلَائِكَةُ يَصْرِفُونَ وُجُوهَهُمْ وَأَذْبَارَهُمْ ذَلِكَ بِأَنَّهُمْ أَنْسَخْطُ اللَّهُ وَكَرِهُوا رِضْوَانَهُ فَأَخْبَطَ أَعْمَالَهُمْ

47:27-28 But how (will it be) when the angels take their souls at death beating their faces and their backs? That is because they followed what would anger Allah and they hated Allah’s good pleasure; so He made their deeds futile.

الَّذِينَ تَنَوَّفَاهُمُ الْمَلَائِكَةُ طَيِّبُونَ يَقُولُونَ سَلَامٌ عَلَيْكُمْ اذْهَلُوا الْجَنَّةَ إِمَا كُنْتُمْ تَعْمَلُونَ

16:32 (When) the angels take (soul at death) of those who are good, they (the angels) will tell (them): “Peace be on you. You enter the Garden for what you did.”

These verses reveal that the angels who delete human *nafs* from the body know whether the dying person is righteous or wicked. Their questions and behaviour to the dying person do reflect that. This means evaluation of the performance record stored in human *sadr* is programmed to take place at death.

The Quran also reveals that the records of the successful (who will enter Heaven) will be stored in *Illiyyoon* (Q. 83:19) and the records of the unsuccessful (who will enter Hell) will be stored in *Sijjeen* (Q. 83:7).

يَوْمَ يُثْبَوُمُ النَّاسُ لِرَبِّ الْعَالَمِينَ كَلَّا إِنَّ كِتَابَ الْفُحَارِ لَفِي سِجْنٍ وَمَا أَدْرَاكَ مَا سِجْنٌ
كِتَابٌ مَرْفُوعٌ

83:6-9 A Day when (the entire) humanity will stand before the Lord of the worlds. Nay, verily the Record of the wicked is (preserved) in *Sijjeen*. And how to explain to you what *Sijjeen* is? (That is) a Register Numbered.

كَلَّا إِنَّ كِتَابَ الْأَبْيَارِ لَفِي عِلْيَيْنَ وَمَا أَدْرَاكَ مَا عِلْيَيْنَ كِتَابٌ مَرْفُوعٌ يَسْهَدُهُ الْمُقْرِئُونَ

83:18-21 Nay, verily the Record of the righteous is (preserved) in *Illiyyoon*. And how to explain to you what *Illiyyoon* is? (That is) a Register Numbered. Those nearest (angels) witness guard) it.

Illiyyoon and *Sijjeen* may be thought of as distinct sectors in the divine Memory (see Fig. 7.2). Thus it can be seen that the record of performance of every individual during the test life on Earth retrieved by the angel at the time of death will be stored in either *Illiyyoon* or *Sijjeen* depending on the success or failure of the individual in the test. It is this record that is handed over to the individual on the Day of Judgement.

17. END OF THE DIVINE MISSION

So far we have discussed the overall human robot testing programme of Allah that is going on Earth. We have also seen that the death of human individual is to terminate the test life on Earth and the end of the universe is to terminate the whole programme of testing. We will now examine what happens to human beings after the test and how the divine mission ends. The universe will be re-created (see chapter 8) following its end and human beings and all other biological species will be resurrected. Human beings will be judged based on their performance in the test life (on the present Earth) and awarded Heaven or Hell. The Quran further indicates that it is from the earth man will be resurrected.

Resurrection of man

The resurrection scenario has been described in the Quran at many places obviously to remind man of the impending meeting with the Creator and the Final Judgement. Most people, however, ignore or do not believe in this certainty.

وَيَقُولُ الْإِنْسَانُ إِلَّا مَا مِتُّ لَسْرُوفٌ أُخْرِجَ حَيًّا أَوْلًا يَذْكُرُ الْإِنْسَانُ أَنَّا خَلَقْنَاهُ مِنْ قَبْلُ وَمَ
يَكُ شَيْئًا

19:66-67 Man says: What! When I am dead, shall I then be raised up alive? But does not man call to mind that We created him before out of nothing?

يَا أَيُّهَا النَّاسُ إِنْ كُنْتُمْ فِي رَيْبٍ مِّنَ الْبَعْثِ فَإِنَّا خَلَقْنَاكُمْ مِّنْ تُرَابٍ ثُمَّ مِّنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُضْعَةٍ مُخْلَقَةٍ وَغَيْرِ مُخْلَقَةٍ لِتَبَيَّنَ لَكُمْ ۝ وَتُنَزَّلُ فِي الْأَرْضِ مَا شَاءَ إِلَى أَجْحِلِ مُسَمَّى ثُمَّ تُخْرِجُكُمْ طِفْلًا ثُمَّ لَتَبَلُّعُوا أَشَدَّكُمْ ۝ وَمَنْ كُنْمَ مِنْ يُتَوَفَّى وَمَنْ كُنْمَ مِنْ يُرْدُ إِلَى أَزْدَلِ

الْعُمَرِ لِكَيْلًا يَعْلَمُ مِنْ بَعْدِ عِلْمٍ شَيْئًا ۝ وَتَرَى الْأَرْضَ هَامِدَةً فَإِذَا أَنْزَلْنَا عَلَيْهَا الْمَاءَ اهْتَرَّتْ وَرَبَّثَتْ وَأَبْتَسَتْ مِنْ كُلِّ رُوْحٍ نَّجِيعٍ

22:5 O mankind! if you have a doubt about the Resurrection, (consider) that 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, in order that We may manifest (our power) to you; and We cause whom We will to rest in the wombs for an appointed term, then do We bring you out as babes, then (foster you) that you may reach your age of full strength; and some of you are called to die, and some are sent back to the feeblest old age, so that they know nothing after having known (much), and (further), you see the earth barren and lifeless, but when We pour down rain on it, it is stirred (to life), it swells, and it puts forth every kind of beautiful growth.

إِذَا مِنَّا وَكُنَّا ثُرَابًا ۝ ذُلِّكَ رَجْعٌ بَعِيدٌ قَدْ عَلِمْنَا مَا تَنْفَصُ الْأَرْضُ مِنْهُمْ ۝ وَعِنْدَنَا كِتَابٌ حَفِيظٌ بِلَّا كَذَّبُوا بِالْحَقِّ لَمَّا جَاءُهُمْ فَهُمْ فِي أَمْرٍ مَّرِيجٍ

50:3-5 What! After we die and become dust, (will we come back to life again)? That return is remote! We (Allah) certainly know what the earth reduces from them. With Us is a guarded Record. But they treated the truth as falsehood when it came to them; so they are in a confused state.

أَوْلَمْ يَتَفَكَّرُوا فِي أَنْفُسِهِمْ ۝ مَا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَخْلِ مُسَمَّى ۝ وَإِنَّ كَثِيرًا مِنَ النَّاسِ بِلِقَاءَ رَبِّهِمْ لَكَافِرُونَ

30:8 Do they not reflect in their own minds? Not but for just ends and for a term appointed, did Allah create the heavens and the earth, and all between them: yet are there truly many among men who deny the meeting with their Lord (at the Resurrection)!

وَقَالُوا إِذَا كُنَّا عِظَاماً وَرُفَاتًا إِنَّا لَمْ بَعُثْنَا حَلْقًا حَدِيدًا فَلَمْ كُوْنُوا حِجَارَةً أَوْ حَدِيدًا أَوْ حَلْقًا مِمَّا يَكْبُرُ فِي صُدُورِكُمْ فَسَيَقُولُونَ مَنْ يُعِيدُنَا فَلِلَّذِي فَطَرْكُمْ أَوَّلَ مَرَّةً فَسَيُعْضُضُونَ إِلَيْكُمْ رُؤُسَهُمْ وَيَقُولُونَ مَتَى هُوَ فَلَمْ عَسَى أَنْ يَكُونَ قَرِيبًا

17:49-51 They (unbelievers) say: What! After we had become bones and dust, we will be resurrected as a new creation? Say (O Prophet Muhammad!): Let you be stone or iron or anything, which in your memories is the most difficult (to be resurrected). Then they will ask: Who will return us (to a new creation)? Say: The One who created you first time. Then they will nod their heads towards you (mockingly) and ask: When will that be? Say: Maybe, it will happen quite soon!

وَاسْتَعِنُوا بِالصَّابِرِ وَالصَّلَاةِ وَإِنَّهَا لَكَبِيرَةٌ إِلَّا عَلَى الْخَاطِئِينَ يَظْنُونَ أَنَّهُمْ مُلَاقُو رَحْمَنِ وَأَنَّهُمْ إِلَيْهِ رَاجِعُونَ

2:45-46 Seek (Allah's) help through patience and prayer (*swalat*). But that is certainly a big (burden) except for those who fear (Allah) who remember always that they are certainly to meet their Lord and that they are to return to Him.

Resurrection is something which most people find hard to believe. The Quran calls upon them to look around and find for themselves how Allah repeats creation.

أَوْمَّ يَرَوْا كَيْفَ يَبْدِئُ اللَّهُ الْحَقْقَمُ يُعِيْدُهُ إِنْ ذَلِكَ عَلَى اللَّهِ يَسِيرٌ فَلَمْ سِيرُوا فِي الْأَرْضِ فَانْظُرُوهُمْ كَيْفَ بَدَأُ الْحَقْقَمُ إِنَّمَا اللَّهُ يُنْشِئُ النَّشَاءَ الْآخِرَةَ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ

29:19-20 See they not how Allah originates creation, then repeats it: truly that is easy for Allah. Say: Travel through the earth and see how Allah did originate creation; so will Allah produce a later creation: for Allah has power over all things.

The message points to the on-going creation events on the earth. The creation of all organisms has been going on repeatedly ever since their first creation. A human being is created from the biomemome carried in the zygote; a bird is created from the biomemome carried in the egg; a plant is

created from the biomemome carried in the seed and so on. In all the biological species, the creation is repeated from their respective biomemomes. This is how Allah multiplies and perpetuates every species on the earth for various purposes. And the Quran tells us it is by the same mechanism Allah will resurrect us. The creation of human beings on the earth is from individual biomemomes (*nafs*), which was discussed in chapter 11. The Quran informs us that resurrection of human beings will also be from individual biomemomes.

مَا خَلَقْنَاهُمْ وَلَا بَعْثَرَنَا إِلَّا كَنْفِسٍ وَاحِدَةٍ ۝ إِنَّ اللَّهَ سَمِيعٌ بَصِيرٌ

31:28 And your creation or your resurrection is in no wise but as a single biomemome (*nafs*). Verily Allah hears and sees (all things).

The Quran further indicates that it is from the earth man will be resurrected.

قَالَ فِيهَا تَحْيَوْنَ وَفِيهَا تَمُوتُونَ وَمِنْهَا تُخْرَجُونَ

7:25 He (Allah) said: Therein (Earth) shall you live and therein shall you die and from there shall you be brought out (i.e., resurrection).

مِنْهَا خَلَقْنَاكُمْ وَفِيهَا تُعِيدُكُمْ وَمِنْهَا تُخْرِجُكُمْ ثَارَةً أُخْرَى

20:55 From the (earth) did We create you, and into it shall We return you, and from it shall We bring you out once again.”

وَإِنْ يَوْمَئِذٍ لِلْمُكَذِّبِينَ أَمْ بَعْلِ الْأَرْضَ كِفَائًا أَحْيَا وَأَمْوَالًا

77:24-26 Woe that Day to the falsifiers (of truth)! Have We not made the earth a receptacle (for) the living and the dead?

مِنْ أَيِّ شَيْءٍ خَلَقَهُ مِنْ نُطْفَةٍ خَلَقَهُ فَقَدَرَهُ ثُمَّ السَّيِّلَ يَسَّرَهُ ثُمَّ أَمَانَهُ فَأَفْبَرَهُ ثُمَّ إِذَا شَاءَ أَنْشَرَهُ

80:18-22 From what stuff did He create him? From a sperm-drop He created him. He designed him then programmed him. Then He made His path smooth for him. Then He caused him

to die and kept him in his grave. Then when He intends, He will raise him up (i.e., resurrection).

From the revelation of resurrection of human beings from their individual *nafs* from the earth, it is evident that *nafs* of the dead people must be available on the earth. In other words, the biomemomes (*nafs*) of human beings following their removal at the time of death are kept stored on the earth spaces for resurrection on the Day of Judgement.

a) Storage of biosoftware (*nafs*) in the earth

The Quran conveys to us in this context very important information on the special characteristics of Earth that are beyond the purview of scientific experimentation. It reveals the ability of Earth to store biological information. It may be recalled here that clay materials have the ability to store biological information as can be inferred from the breathing of *rooh* into clay to transform it into a living being (see chapter 11). That the earth can act as medium for information storage can also be deduced from other verses.

يَوْمَئِذٍ تُحَدَّثُ أَخْبَارَهَا بِأَنَّ رَبَّكَ أَوْحَى لَهَا

99:4-5 On that Day she (the earth) will declare her tidings; for that your Lord will give her (the earth) inspiration.

This verse tells us that the earth will spill its information on the Day of Judgement implying that it acts as memory storage. This revelation also supports the computer concept of the physical universe. According to Lloyd, all physical systems are at bottom quantum-mechanical, and all physical systems register and process information [1]. Another verse in the Quran (Q. 6:98) indicates the earth as “repository” (*mustawda‘un*), which also has significant connotation with storage of human *nafs*. The translation given by M. Pickthal reads as follows.

وَهُوَ الَّذِي أَنْشَأَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ فَمُسْتَقِرٌ وَمُسْتَوْدِعٌ ۝ قَدْ فَصَّلْنَا الْآيَاتِ لِقَوْمٍ يَقْهُمُونَ

6:98 And He it is Who has produced you from a single being, and (has given you) a habitation and a *repository*. We have detailed Our revelations for a people who have understanding.

M. H. Shakir translated the word *mustawda'un* in the verse as “depository”, Mohsin Khan as “storage” while A. Yusuf Ali gave quite a different meaning as “place of departure”. The dictionary meanings of the Arabic noun *mustawda'un* are stockroom, warehouse, depository, bunker, repository, store, storehouse, storeroom and depot [2]. Yusuf Ali's translation of the word is clearly wrong. The description of the earth as human habitat and storage in the verse (Q. 6:98) thus permits us to consider Earth as memory storage of human biomemomes (*nafs*). The microscopic size of the chromosomes that store the biomemome of a human individual in the body cells is suggestive of the very small space required for storing a biomemome – much smaller than the full stop at the end of this sentence. The earth spaces that store the human biosoftware (*nafs*) may be referred to as ‘biomimetic niches’. These ‘biomimetic niches’ can very well be clay surfaces because clay is silicon-based material. Since silicon is structurally related to carbon, the silicon-based clay surfaces may also have property of storing intangible biological information as carbon-based material like chromosome.

b) Mechanism of human resurrection

Allah uses the similitude of a dried up land coming back to life to explain to us the mode of resurrection of human robots from their *nafs* after their test life.

يُخْرِجُ الْحَيَّ مِنَ الْمَيِّتِ وَيُخْرِجُ الْمَيِّتَ مِنَ الْحَيِّ وَيُنْجِي الْأَرْضَ بَعْدَ مُوْتَهَا ۝ وَكَذِلِكَ تُخْرِجُونَ

30:19 It is He Who brings out the living from the dead, and brings out the dead from the living, and Who gives life to the earth after it is dead: and thus shall you be brought out (from the dead).

فَانظُرْ إِلَى آتَارِ رَحْمَتِ اللَّهِ كَيْفَ يُحْيِي الْأَرْضَ بَعْدَ مَوْتَهَا ۝ إِنَّ ذَلِكَ لَمُحْيِي الْمُمْوتَى ۝
وَهُوَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

30:50 Then (O man!) look at the manifestations of Allah's mercy; how He gives life to the earth after its death! Verily, (the same way), He will give life to the dead (humans). And He has power over all things.

وَمِنْ آيَاتِهِ أَنَّكَ تَرَى الْأَرْضَ خَاسِعَةً فَإِذَا أَنزَلْنَا عَلَيْهَا الْمَاءَ اهْتَرَزَتْ وَرَبَثَ ۝ إِنَّ الَّذِي
أَحْيَاهَا لَمُحْيِي الْمُمْوتَى ۝ إِنَّهُ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

41:39 And among His Signs is this: you see the earth barren and desolate; but when We send down rain to it, it is stirred to life and yields increase. Truly, He Who gives life to the (dead) earth can surely give life to (men) who are dead. For He has power over all things.

وَاللَّهُ الَّذِي أَرْسَلَ الرِّبَابَخَ فَتَشَيَّرُ سَحَابًا فَسُقْنَاهُ إِلَى بَلَدٍ مَيِّتٍ فَأُحْيَيْنَا بِهِ الْأَرْضَ بَعْدَ مَوْتَهَا ۝
كَذِيلَكَ النُّشُورُ

35:9 It is Allah Who sends forth the winds so that they raise up the clouds, and We drive them to a land that is dead (to cause rain), and revive the earth therewith after its death; even so (will be) the resurrection.

From the allegorical description given in the above verses of the process of giving life to dead earth by sending rain, we may infer that it will be by a similar process human beings will also be resurrected. "Giving life to a dead earth" may be considered as figurative statement. The so-called "dead earth" (or the dried up earth) is not in reality dead because it preserves seeds, spores, etc., in dormant condition. When rain occurs, water molecules break the dormancy of those seeds and spores that

lie scattered on the parched earth, enabling them to germinate and grow. In the dormant condition, the seeds do carry biomemomes and are hence ‘live’. However, the biomemome is in a sort of “rest mode” (or what is called ‘dormancy’ in biology – supposed to be a natural strategy to tide over a difficult situation) with little or no biological instruction under execution. When the biomimetic condition switches over to “operation mode” as happens when the raindrop falls on the dormant seed or spore, the biomemome starts executing in full swing. Here the water molecule acts as abiomimetic switch to activate the biomemome stored in the seed or spore. Likewise human beings will be resurrected on the Judgement Day.

From the metaphoric description of resurrection as “like giving life to dead earth”, the “biomimetic niches” discussed above may be considered to play the role of “dormant seeds” in which the biological program stays dormant. Like the rainwater acts as switch to actuate the bioprogram stored in the dormant seed into operation, it will be a single command of Allah that will bring the biomemomes of human beings stored on the clay surfaces (biomimetic niches) into ‘execution mode’ and create the phenomes of the respective individuals.

وَمِنْ آيَاتِهِ أَنْ تَقُومُ السَّمَاوَاتُ وَالْأَرْضُ بِأَمْرِهِ ۖ ثُمَّ إِذَا دَعَكُمْ دَعْوَةً مِنَ الْأَرْضِ إِذَا أَنْتُمْ
تَخْرُجُونَ

30:25 And among His signs is this, that heaven and earth stand by His command: then when He calls you by a single call, behold, you come forth from the earth.”

يَوْمَ يَدْعُوكُمْ فَتَسْتَجِيبُونَ بِحَمْدِهِ وَتَنْطَلُونَ إِنْ لَيْسُمْ إِلَّا فَلِيَّا

17:52 (It will be) the Day when He will call you and you will answer (the call) praising Him, and you will feel that you had stayed only a little while!

Allah's command is also mentioned as blast (Q. 50:41-44) or Trumpet (Q. 18:99; 36:51-52) to indicate the re-creation of the universe also on the same day.

وَاسْتَمِعْ يَوْمَ يُنَادِ الْمَنَادِ مِنْ مَكَانٍ فَرِيبٍ يَوْمَ يَسْمَعُونَ الصَّيْحَةَ بِالْحَقِّ ۝
الْمُرْجَوْجِ إِنَّا كُنُّ نُحْيِي وَمُمْتَثِّلُ وَإِلَيْنَا الْمَصْبِرُ يَوْمَ تَشَفَّقُ الْأَرْضُ عَنْهُمْ سِرَاعًا ۝ دُلَكَ حَشْرٌ
عَلَيْنَا يَسِيرٌ

50:41-44 And listen on the Day the caller will call out from a nearby place, the Day they will hear the real blast. That is the Day of Exodus! Verily it is We who give life and death, and to Us is the final destination. The Day the earth will split from the rushing (human beings). That gathering (of mankind) is quite easy for Us.

وَتَرَكْنَا بَعْضَهُمْ يَوْمَئِذٍ يَمْوِلُونَ بَعْضًا وَنُفَخَّ فِي الصُّورِ فَجَمِعُهُمْ جَمِيعًا

18:99 On that Day We will leave them to surge like waves on one another. The trumpet will be blown; then We will gather them all together.

وَيُفْعَلُ فِي الصُّورِ إِذَا هُم مِنَ الْأَجْدَاثِ إِلَى رَبِّهِمْ يَنْسِلُونَ قَالُوا يَا وَيْلَنَا مَنْ بَعَثَنَا مِنْ مَرْقَدِنَا ۝ ۝ ۝ هَذَا مَا وَعَدَ الرَّحْمَنُ وَصَدَقَ الْمُرْسَلُونَ

36:51-52 The Trumpet will be blown; then behold, from the graves they will rush forth to their Lord! They will say: Ah! Woe to us! Who has raised us up from our place of sleep? (A voice will say:) This is what (Allah) Most Gracious had promised and the truth the apostles said.

The Quranic description of “resurrection of human individual from the biomemome (*nafs*)” is the true cloning process, i.e., the creation of a person second time from his biosoftware (*nafs*).

Most people do not believe in resurrection because they think they will be raised up from the graves where their dead bodies are buried. In the normal course, the dead body soon after its burial is acted upon by numerous microbes leading to

its decomposition into carbon dioxide and water. The mineral elements contained in the dead body are left in the soil. Therefore they do not believe in resurrection from the dead body that has undergone these processes and disappeared from the site of burial. (They do forget that Allah can create anything in any way He wants). However, it is not from the disappeared dead body the resurrection will take place but from the biomemome (*nafs*) of the individual. Their understanding of grave mentioned in the Quran is wrong. The grave mentioned in the Quran indicates in reality the earth spaces where human biomemomes are stored and not where the dead bodies are buried.

Besides the word *mustawda'un* there are also other words namely *ajdathi*, *qabr* (pl. *quboor*) and *marqad* that are also used more or less synonymously.

أَفَلَا يَعْمَلُ إِذَا بُعْثَرَ مَا فِي الْقُبُورِ

100:9 “Does he not know when that which is in the graves (*quboor*) is scattered abroad....”

وَنُفَخَّ فِي الصُّورِ قَالَ إِنَّمَا مِنَ الْأَجْدَاثِ إِلَى رَبِّهِمْ يَنْسِلُونَ

36:51 The Trumpet will be blown; then behold, from the graves (*ajdathi*) they will rush forth to their Lord!

خُشَّعًا أَبْصَارُهُمْ يَخْرُجُونَ مِنَ الْأَجْدَاثِ كَانُوهُمْ جَرَادٌ مُّنْتَشِرٌ

54:7 They will come forth, their eyes humbled - from (their) graves (*ajdathi*), like locusts scattered abroad.

يَوْمَ يَخْرُجُونَ مِنَ الْأَجْدَاثِ سِرَاعًا كَانُوهُمْ إِلَى نُصُبٍ يُوْفَضُونَ

70:43 The Day whereon they will come out from their sepulchres (*ajdathi*) in sudden haste as if they were rushing to a goal-post (fixed for them).

The terms *qabr* and *ajdathi* are translated by Islamic scholars M.H. Shakir, M. Pickthal and Mohsin Khan as “graves” (Q. 36:51; 54:7; 70:43) while Yusuf Ali translated the word as

“sepulchers” (meaning “graves”) at Q. 36:51 and 70:43 and as “graves” at Q. 54:7. This conventional interpretation in fact creates confusion because the dead body no longer exists in the grave. Further not all people are buried in the soil for religious and other reasons but yet they are resurrected from their graves! There is also another word *marqad*, which is also interpreted as grave where dead body is buried.

فَالْوَا يَا وَيْلَنَا مِنْ بَعْثَتَا مِنْ مَرْقَدِنَا هُنَّا مَا وَعَدَ الرَّحْمَنُ وَصَدَقَ الْمُرْسَلُونَ

36:52 “They will say: Ah! Woe to us! Who has raised us up from our *marqad* (place of repose)...?”

The word *marqad* is generally translated as place of repose or place of sleep. It can never be the place of rest for the dead body for the reason dead body is not there. The terms *qabr*, *ajdathi*, *marqad* and *mustawda'un* do not refer to the “grave” in the ordinary sense of the term where the dead body is buried but to the myriads of biomimetic niches on the earth where *anfus* (biomemomes) of people are stored. It is the resting place of *nafs* (biosoftware or biomemome) of human being. This interpretation is further strengthened by the description of *ajdathi* as resting place or place of sleep (Q. 36:52) and the kind of feeling people will have while being resurrected. Between death and resurrection, one would feel as if he had hardly spent an hour (Q. 10:45) and was in sleep (Q. 36:52).

وَيَوْمَ يُجْشِرُهُمْ كَانُوا لَمْ يُلْبِسُو إِلَّا سَاعَةً مِنَ النَّهَارِ يَتَعَارَفُونَ بَيْنَهُمْ قَدْ خَسِرَ الَّذِينَ
كَذَّبُوا بِلِقَاءَ اللَّهِ وَمَا كَانُوا مُهْتَدِينَ

10:45 The Day He gathers them together! (They will feel on resurrection that) they had spent hardly an hour of a day. They will recognize each other. Surely those who denied the meeting with Allah had lost (everything) and they did not receive guidance.

Since the biomemomes are stored on memory (clay surface) the people (phenomes) who get resurrected from them will feel

like getting up from sleep (Q. 36:52) or they had spent hardly an hour. Insofar as the creation of the next universe represents the continuum from the big crunch of the present universe (see chapter 8), it can be expected that all the biomemetic niches on the present earth will be recovered unaltered in the next earth. It will be from those niches the human biomemomes (*anfus*) will develop into the respective human beings (phenomes) by a single command of Allah and surge forth on the Day of Judgement. This explanation of the resurrection scenario is quite like the germination of a plant from a dormant seed on breaking its dormancy by the water molecule, which is the similitude Allah used to illustrate the mode of resurrection of human robots (Q. 30:19, 50).

In this context it is pointed out here that the case of Prophet Jesus Christ has to be treated as extraordinary. His birth and death are also mysteries to mankind. It is the Quran that unravels these mysteries. Every human being who lived on the present earth was born to this earth except the first human couple, Adam and Eve. They were created in Allah's abode and sent down to the earth later. They died on this earth like everybody else. The entire humanity is created by Allah from Adam's *nafs* through biosoftware engineering during gametogenesis (see chapters 9 and 11). This means that every human being born to this earth belongs to the progeny of Adam-Eve couple. The only exception to this rule is Prophet Jesus Christ. Although Prophet Jesus Christ was created in the womb of Mary and called in the Quran as son of Mary (Q. 4:157-159 quoted below), he was created by Allah from a special *rooh* and he does not belong to Adam's lineage (see chapters 9 and 10). His creation was similar to that of Adam (Q. 3:59) in the sense both of them had not received parental germ contribution.

إِنَّ مَثَلَ عِيسَىٰ عِنْدَ اللَّهِ كَمَثَلِ آدَمَ ۖ خَلَقَهُ مِنْ تُرَابٍ ثُمَّ قَالَ لَهُ كُنْ فَيَكُونُ

3:59 Indeed the similitude of Jesus before Allah is that of Adam; He created him (Adam) from dust, then said to it, “Be” and he (Adam) came into being.

As regards his death, the Christians believe he was crucified and killed. This is also not correct. The Quran clearly reveals that Prophet Jesus Christ was neither crucified nor killed.

وَقَوْلُهُمْ إِنَّا قَتَلْنَا الْمَسِيحَ عِيسَى ابْنَ مَرْيَمَ رَسُولَ اللَّهِ وَمَا قَاتَلُوهُ وَمَا صَلَبُوهُ وَلَكُنْ شَيْءَهُ لَهُمْ
وَإِنَّ الَّذِينَ اخْتَلَفُوا فِيهِ لَفِي شَكٍ مِنْهُ مَا لَهُمْ بِهِ مِنْ عِلْمٍ إِلَّا اتِّبَاعُ الظَّنِّ
قَاتَلُوهُ يَقِيْنًا بَلْ رَفَعَهُ اللَّهُ إِلَيْهِ وَكَانَ اللَّهُ عَزِيزًا حَكِيمًا وَإِنْ مِنْ أَهْلِ الْكِتَابِ إِلَّا لَيُؤْمِنُ
بِهِ قَبْلَ مَوْتِهِ وَيَوْمَ الْقِيَامَةِ يَكُونُ عَلَيْهِمْ شَهِيدًا

4:157-159 That they said (boastfully), We killed Christ Jesus the son of Mary, the Messenger of Allah; but they killed him not, nor crucified him, but so it was made to appear to them, and those who differ therein are full of doubts, with no (certain) knowledge, but only conjecture to follow, for of a surety they killed him not. Nay, Allah raised him up to Himself; and Allah is Exalted in Power, Wise. And there is none of the People of the Book but must believe in him *before his death*; and on the Day of Judgment he will be a witness against them.

إِذْ قَالَ اللَّهُ يَا عِيسَى إِنِّي مُتَوَفِّيكَ وَرَافِعُكَ إِلَيَّ وَمُطَهِّرُكَ مِنَ الَّذِينَ كَفَرُوا وَجَاءُكُلُّ الَّذِينَ
اتَّبَعُوكَ فَوْقَ الْأَرْضِ كَفَرُوا إِلَيَّ يَوْمَ الْقِيَامَةِ مُلْتَمِسُكُمْ إِلَيَّ مُرْجِعُكُمْ فَأَنْحُكُمْ بَيْنَكُمْ فِيمَا كُشِّنَ
فِيهِ تَخْتَلِفُونَ

3:55 Behold! Allah said: O Jesus! I will complete your life (*tawaffa*) and raise (*rafa'a*) you to Myself and clear you (of the falsehoods) of those who blaspheme; I will make those who follow you superior to those who reject faith to the Day of Resurrection. Then shall you all return to me. And I will judge between you of the matters wherein you dispute.

However confusion exists among the religious scholars as to the nature of his end; whether he had died on the earth or raised to Allah alive. Yusuf Ali states that there is no consensus among interpreters as to the meaning of ‘*before his death*’ in verse 4:159 quoted above. Those who hold that Prophet Jesus did not die refer the pronoun “his” to Jesus. They say that Prophet Jesus is still living in the body and he will appear just before the end of the world in preparation to the coming of Imam Mahdi. It is during that time Prophet Jesus will die. The Arabic word *rafa'a* in the verses 3:55 and 4:158 is interpreted by them as “honoured” instead of “raised up”. Other scholars hold that the pronoun “his” refers to “none of the People of the Book” [3].

The interpretation made here is based on the usual meanings “death” and “raised up” given to words *tawaffa* and *rafa'a* respectively. This will clarify the situation. Thus from the verses quoted above, it will be clear that Prophet Jesus was not killed or crucified but it was made to appear like that to the people by Allah. What can be understood from the verses is Allah took his life (i.e., Prophet Jesus died a normal death) and raised his body to Him. The pronoun “his” in verse 4:159 therefore refers to “none of the People of the Book” and not Prophet Jesus Christ. This interpretation is straight forward and also agrees with the death of Prophet Jesus mentioned in another verse (Q. 19:33).

وَالسَّلَامُ عَلَيَّ يَوْمٌ وَلِدْنُتْ وَيَوْمٌ أُمُوتُ وَيَوْمٌ أُبَعْثَرُ حَيًّا

19:33 So peace is on me (Prophet Jesus Christ) the day I was born, the day I die and the day I will be resurrected.

This verse makes it clear that Prophet Jesus had died and he will also be resurrected. This indicates the *nafs* of Prophet Jesus Christ had also been stored in this earth as biomimetic niche and he will also be resurrected from the earth as every other human being.

c) Purposes of resurrection

The Quran indicates that besides the Final Judgement and award of Heaven or Hell, at least three more purposes are served by the resurrection of human beings and their meeting with Allah. One purpose is to convince the unbelievers of the truth about resurrection – a promise Allah had made.

وَأَقْسَمُوا بِاللَّهِ حَجَّهُمْ لَا يَبْعَثُ اللَّهُ مَنْ يَمُوتُ ۚ بَلَىٰ وَعْدًا عَيْنِهِ حَقًّا وَلَكِنْ
أَكْثَرُ النَّاسِ لَا يَعْلَمُونَ لَيْسَنَ لَهُمُ الَّذِي يَخْتَلِفُونَ فِيهِ وَلَيَعْلَمُ الَّذِينَ كَفَرُوا أَنَّهُمْ كَاذِبُونَ
كَاذِبُونَ

16:38-39 They swear their strongest oaths by Allah, that Allah will not raise up those who die: Nay, but it is a promise (binding) on Him in truth: but most among mankind realize it not. (They must be raised up), in order that He may manifest to them the truth of that wherein they differ, and that the rejecters of Truth may realize that they had indeed (surrendered to) Falsehood.

وَقَالُوا إِنْ هِيَ إِلَّا حَيَاةُ الدُّنْيَا وَمَا نَحْنُ بِمَبْعُوثِينَ ۚ وَلَوْ تَرَىٰ إِذْ وُقِفُوا عَلَىٰ رَجْمٍ ۚ قَالَ
أَلَيْسَ هَذَا بِالْحَقِّ ۚ قَالُوا بَلَىٰ وَرَبِّنَا ۚ قَالَ فَلُوْفُوا الْعَدَابَ إِمَّا كُنْتُمْ تَكُفُّرُونَ ۚ فَقُدْ خَسِيرٌ
الَّذِينَ كَذَّبُوا بِلِقَاءَ اللَّهِ ۖ حَتَّىٰ إِذَا جَاءَتْهُمُ السَّاعَةُ بَعْثَةً قَالُوا يَا حَسْرَتَنَا عَلَىٰ مَا فَرَّطْنَا
فِيهَا وَهُمْ يَحْمِلُونَ أُوزَارَهُمْ ۚ أَلَا سَاءَ مَا يَرْزُونَ ۚ

6:29-31 And they say: There is no (more life) except our life on this earth and we will not be raised up again (after death). If you could see when they are made to stand before their Lord! He will ask (them): Is this not the truth? They will say: Yea, by our Lord! He will say: Then you taste the penalty because you had been rejecters of Faith. Those who treated the meeting with Allah as falsehood had indeed lost. Thus when, all of a sudden, that (Final) Hour comes to them, they will say: Ah! Woe to us in what we have neglected. And they will carry their burdens on their backs. Look! How bad is what they bear!

Another is to show human beings the records of their performance in the test and to convince them of Allah's fairness in the judgement. That will also convince people of the justification of their reward based on their own deeds.

يَوْمَئِذٍ يَصُدُّرُ النَّاسُ أَشْتَاتًا لَيْسُوا أَعْمَالَهُمْ فَمَنْ يَعْمَلْ مِثْقَالَ ذَرَّةٍ خَيْرًا يَرَهُ وَمَنْ يَعْمَلْ
مِثْقَالَ ذَرَّةٍ شَرًّا يَرَهُ

99:6-8 That Day humanity will come out in groups to be shown their deeds. Then whoever has done good of the weight of an atom, he will see it (in his Record)! And whoever has done evil of the weight of an atom, he will see it (in his Record)!

The third purpose is to pass judgement in religious matters of dispute among the people.

اللَّهُ يَحْكُمُ بَيْنَكُمْ يَوْمَ الْقِيَامَةِ فِيمَا كُنْتُمْ فِيهِ تَخْتَلِفُونَ

22:69 Allah will judge among you on the Day of Judgment in matters in which you differ.

Finally, the award of Heaven or Hell will be made to the resurrected human robots. This happens after the record of performance is examined by every human being.

وَلِكُلِّ أُمَّةٍ رَسُولٌ ۝ فَإِذَا جَاءَ رَسُولُهُمْ فَضَيَّ بَيْنَهُمْ بِالْقِسْطِ وَهُمْ لَا يُظْلَمُونَ

10:47 To every nation (*ummah*) is an apostle. Thus upon arrival of their apostle (as witness), judgement would be passed (on the Day of Judgement) between them with justice and they will not be dealt with unjustly.

The Day of Judgement

Through many verses Allah portrays the scenario on the Day of Judgement. Only a few are quoted here.

وَيَوْمَ يُحْشِرُهُمْ حَمِيعًا يَا مَعْشَرَ الْجِنِّ فَدِ اسْتَكْثَرُوكُمْ مِنَ الْإِنْسِ ۖ ۝ وَقَالَ أُولَئِكُمْ مِنَ الْإِنْسِ رَبَّنَا اسْتَمْتَعْ بِعَضُنَا بِعَضٍ وَلَعَنَا أَجَلْنَا الَّذِي أَجَلْنَا ۚ ۝ قَالَ النَّارُ مَنْتَوْكُمْ حَالِدِينَ فِيهَا إِلَّا مَا شَاءَ اللَّهُ ۖ ۝ إِنَّ رَبَّكَ حَكِيمٌ عَلَيْمٌ

6:128 The Day He gathers them (humans and *jinns*) all together (and say): “O assembly of *jinns*! You have (misled) many of the human beings.” The (*jinn*’s) friends among human beings will say: “Our Lord! We took advantage with each other and we have reached the end of our term assigned for us by You.” Allah will say: “The Fire is your dwelling place. You (all) except whom Allah wishes will dwell therein for ever.” Verily your Lord is Wise, Omniscient.

وَاتَّقُوا يَوْمًا لَا تَجْرِي نَفْسٌ شَيْئًا وَلَا يُقْبَلُ مِنْهَا عَدْلٌ وَلَا تَنْفَعُهَا شَفَاعَةٌ وَلَا هُنْ يُنْصَرُونَ

2:123 Then fear a Day when no soul can benefit another, no penitence will be accepted from it (i.e., the soul), no intercession will benefit it (i.e., the soul) and they will not be helped.

وَاتَّقُوا يَوْمًا تُرْجَعُونَ فِيهِ إِلَى اللَّهِ ۖ ۝ ثُمَّ تُؤْتَى كُلُّ نَفْسٍ مَا كَسَبَتْ وَهُنْ لَا يُظْلَمُونَ

2:281 And fear the Day when you shall be brought back to Allah. Then every soul will be given in full what it had earned and none shall be dealt with unjustly.

يَوْمَ تَجْدُ كُلُّ نَفْسٍ مَا عَمِلَتْ مِنْ خَيْرٍ مُخْصَرًا وَمَا عَمِلَتْ مِنْ سُوءٍ تَوْدُ لَوْ أَنَّ بَيْنَهَا وَبَيْنَهُ أَمْدًا بَعِيدًا ۖ ۝ وَيُحَدِّرُكُمُ اللَّهُ نَفْسَهُ ۖ ۝ وَاللَّهُ رَءُوفٌ بِالْعِبَادِ

3:30 The Day every soul finds out what good it has done and what evil it has done! It will wish that (Day) is quite far off from it. Allah cautions you about Himself. And Allah is full of kindness to (His) servants.

يَوْمَ تَبَيَّضُ وُجُوهٌ وَتَسْوُدُ وُجُوهٌ ۝ فَأَمَا الَّذِينَ اسْوَدَتْ وُجُوهُهُمْ أَكْفَرُهُمْ بَعْدَ إِيمَانِكُمْ
فَلُدُودُهُمُ الْعَذَابُ إِمَّا كُنْتُمْ تَكْفُرُونَ وَإِمَّا الَّذِينَ ابْيَضَتْ وُجُوهُهُمْ فَقِي رَحْمَةِ اللَّهِ هُمْ فِيهَا
خَالِدُونَ

3:106-107 The Day some faces will be white (i.e., bright) and some faces will be black (i.e., gloomy) black! Then whose faces are black, (they will be said): “Did you reject Faith after believing in it? Taste then the penalty for rejecting Faith.” But those whose faces are white, they will be in Allah’s mercy (i.e., Heaven). They will dwell therein for ever.

وَيَوْمَ يَخْشِرُهُمْ جِيمًا ثُمَّ نَعْوُلُ لِلَّذِينَ أَشْرَكُوا مَكَانِكُمْ أَنْثُمْ وَشَرَكَاؤُكُمْ ۝ فَرَبِّنَا بَيْنَهُمْ ۝
وَقَالَ شَرَكَاؤُهُمْ مَا كُنْتُمْ إِيمَانًا تَعْبُدُونَ فَكَفَىٰ بِاللَّهِ شَهِيدًا بَيْنَنَا وَبَيْنَكُمْ إِنْ كُنَّا عَنِ
عِبَادَتِكُمْ لَعَافِلُينَ هُنَالِكَ تَبَلُّو كُلُّ نَفْسٍ مَا أَسْلَفَتْ ۝ وَرُدُوا إِلَى اللَّهِ مُؤْلَهُمُ الْحَقُّ ۝
وَضَلَّ عَنْهُمْ مَا كَانُوا يَعْتَرُونَ

10:28-30 The Day We gather them all together and ask those who joined partners (with Us): Be at your place, you and your partners. We shall separate them and their partners will say: “You were not worshipping us. Enough is Allah as witness between us and you. Indeed, we were unaware of your worship.” There, every soul will experience (the fruits of) the deeds it had done before. They will be returned to Allah, their true Lord, and whatever they had fabricated (against Allah) will leave them in the lurch.

وَيَوْمَ يَخْشِرُهُمْ كَانُوكُمْ يَلْبِسُونَ إِلَّا سَاعَةً مِنَ النَّهَارِ يَتَعَارِفُونَ بَيْنَهُمْ ۝ قَدْ حَسِرَ الَّذِينَ
كَذَّبُوا بِلِقَاءَ اللَّهِ وَمَا كَانُوا مُهْتَدِينَ

10:45 The Day He gathers them together! (They will feel on resurrection that) they had spent hardly an hour of a day. They will recognize each other. Surely those who denied the meeting with Allah had lost (everything) and they did not receive guidance.

وَالْوَزْنُ يَوْمَئِذٍ الْحَقُّ ۝ فَمَنْ تَقْرَبَ مَوَازِينُهُ فَأُولَئِكَ هُمُ الْمُفْلِحُونَ

7:8 The weighing (good and bad) that Day will be true. Then whose scale is heavy, they are the successful ones.

يَوْمَ تُنَبَّئُ كُلُّ نَفْسٍ بِمَا كُلُّ نَفْسٍ عَمِلَتْ وَمَنْ لَا يُظْلَمُونَ

16:111 The Day every soul comes pleading for itself and every soul will be fully recompensed for all its actions, and none will be dealt with unjustly!

As discussed earlier, the evaluation of the record of performance of human being during the test life was over at the time of death itself (see chapter 16). The Judgement Day is the occasion for mankind to meet with the Creator and hear the final verdict. On that Day every prophet will stand as witness for his people. The judgement of every individual will be passed. It is also on that Day Allah passes judgement in the presence of their prophets (witnesses) in matters in which people disputed.

وَجَاهُهُوا فِي اللَّهِ حَقًّا جَهَادِهِ هُوَ اخْبَارُكُمْ وَمَا جَعَلَ عَلَيْكُمْ فِي الدِّينِ مِنْ حَرَجٍ
مِلَّةً أَيْكُمْ إِنْرَاهِيمَ هُوَ سَمَّاكُمُ الْمُسْلِمِينَ مِنْ قَبْلِ وَفِي هَذَا لِيَكُونَ الرَّسُولُ شَهِيدًا
عَلَيْكُمْ وَتَكُونُوا شُهَدَاءَ عَلَى النَّاسِ فَأَتَيْمُوا الصَّلَاةَ وَآتُوا الزَّكَاةَ وَاعْتَصِمُوا بِاللَّهِ هُوَ
مَوْلَاؤُكُمْ فَنِعْمَ الْمُؤْمِنُ وَنِعْمَ التَّصْبِيرُ

22:78 “...He (Allah) has chosen you and He has imposed no difficulties on you in religion. It is the religion of your father Abraham. It is He who named you Muslims, both before and in this (Quran). (That is) for the messenger to be a witness for you, and you (i.e., believers) the witnesses for the mankind. So establish the Prayer, give charity and hold on to Allah firmly. He is your guardian – the best to protect and the best to help.”

إِنَّا أَرْسَلْنَا إِلَيْكُمْ رَسُولًا شَاهِدًا كَمَا أَرْسَلْنَا إِلَيْهِ فِرْعَوْنَ رَسُولًا

73:15 We have sent to you (O men!) an apostle to be a witness on you like We sent an apostle to Pharaoh.

وَنَرَعْنَا مِنْ كُلٍّ أُمَّةٌ شَهِيدًا فَقُلْنَا هَاتُوا بُرْهَانَكُمْ فَعَلِمُوا أَنَّ الْحَقَّ لِلَّهِ وَضَلَّ عَنْهُمْ مَا كَانُوا يَفْتَرُونَ

28:75 And from each people We will bring a witness (i.e., the prophet). Then We will say: “Produce your proof.” Then they will realize that the truth is with Allah and the (lies) which they had fabricated will leave them in lurch.

وَلِكُلِّ أُمَّةٍ رَسُولٌ فَإِذَا جَاءَ رَسُولُهُمْ فُضِّيَّ بَيْنَهُمْ بِالْقُسْطِ وَهُمْ لَا يُظْلَمُونَ

10:47 To every nation (*ummah*) is an apostle. Thus upon arrival of their apostle, judgement would be passed (on Day of Judgement) between them with justice and they will not be dealt with unjustly.

وَأَشْرَقَتِ الْأَرْضُ بُنُورَ رَبِّهَا وَوُضِعَ الْكِتَابُ وَجِيءَ بِالنَّبِيِّنَ وَالشُّهَدَاءِ وَفُضِّيَّ بَيْنَهُمْ بِالْحَقِّ وَهُمْ لَا يُظْلَمُونَ

39:69 And the earth will glow with the Light of its Lord; the record (of deeds) will be placed (open); the prophets and the witnesses will be brought and verdict will be passed among them (i.e., the resurrected people). And they will not be dealt with unjustly (in the least).

إِنَّمَا جُعِلَ السَّبَتُ عَلَى الدِّينِ اخْتَلَفُوا فِيهِ وَإِنَّ رَبَّكَ يَعْلَمُ بَيْنَهُمْ يَوْمَ الْقِيَامَةِ فِيمَا كَانُوا فِيهِ يَخْتَلِفُونَ

16:124 The Sabbath was made (strict) for those who disputed about it (as to its observance). And Allah will certainly pass judgement among them on the Day of Judgment in whatever matters they disputed.

وَآتَيْنَاهُمْ بَيِّنَاتٍ مِنَ الْأَمْرِ فَمَا اخْتَلَفُوا إِلَّا مِنْ بَعْدِ مَا جَاءَهُمُ الْعِلْمُ بَعْدًا بَيْنَهُمْ إِنَّ رَبَّكَ يَعْلَمُ بَيْنَهُمْ يَوْمَ الْقِيَامَةِ فِيمَا كَانُوا فِيهِ يَخْتَلِفُونَ

45:17 And We have given them (children of Israel) clear instructions (in religion). It was only after knowledge had come to them they split up because of the rivalry among them. Verily

your Lord will judge between them on the Day of Judgment in matters in which they dispute.

Every individual will have an escort also.

وَجَاءُتْ كُلُّ نَفْسٍ مَعَهَا سَائِقٌ وَشَهِيدٌ

50:21 Every soul will come with an escort and a witness.

Allah will ask the prophets about the response of the people to the divine messages they conveyed. A prophet can know the response of the people only for the period he was with them. But Allah alone knows the response of the people after the death of the prophet.

يَوْمَ يَجْمَعُ اللَّهُ الرُّسُلَ فَيَقُولُ مَاذَا أَجْبَثْنُ ۖ قَالُوا لَا عِلْمَ لَنَا ۖ إِنَّكَ أَنْتَ عَلَامُ الْغُيُوبِ

5:109 The day Allah will assemble the apostles together! He will ask: What was the response you received (from people to the message you conveyed to them)? They will say: We have no knowledge. Certainly it is You who have full knowledge of the mysteries.

The Day of Judgement offers the opportunity for all the human robots to examine records of their performance during their test life.

وَكَانَ إِنْسَانٌ أَلْزَمَاهُ طَائِرٌ فِي عُقْدَةٍ ۖ وَخُجِّلَ لَهُ يَوْمُ الْقِيَامَةِ كِتَابًا يَلْعَاهُ مَنْتُشِرًا افْرًا كِتَابَكَ
كَفَى بِنَفْسِكَ الْيَوْمَ عَلَيْكَ حَسِيبًا

17:13-14 “....On the Day of Judgement, We shall bring out for him a scroll, which he will see spread open. (He will be told): Read your (own) Record; sufficient is yourself this day to make an account about yourself.”

وَوْضَعَ الْكِتَابُ فَتَرَى الْمُحْرِمِينَ مُشْفِقِينَ مَمَّا فِيهِ وَيَقُولُونَ يَا وَيَلَّكُنَا مَالِ هَذَا الْكِتَابِ لَا
يُعَادُرُ صَغِيرًا وَلَا كَبِيرًا إِلَّا أَحْصَاهَا ۖ وَوَجَدُوا مَا عَمِلُوا حَاضِرًا ۖ وَلَا يَظْلِمُ رَبُّكَ أَحَدًا

18:49 And the dossier (of deeds of each person) will be placed. Then you will see the sinners getting frightened of what is (recorded) therein; they will say, “Ah! Woe to us! What a

dossier this is! It leaves out nothing small or great without recording it.” They will find whatever they did (in the life of this world) presented (in it): And your Lord will not treat anyone with injustice.

The record mentioned in the verses above is the information relating to one’s conscious activities stored in *sadr* (see chapter 11), which after the death of the individual is stored in *Illiyyoon* or *Sijjeen* depending on the success or failure of the individual in the test (see chapter 16).

Since the dossier of activities during the test life is given on the Day of Judgement to every individual for reading and evaluation by himself, it is necessary that the individual has information about his activities during his test life in tact in his *sadr*. Otherwise, they will not be able to recollect their past and evaluate the record given to them. The Quran also informs that the resurrected people will recognize each other (10:45 quoted above). The Quran further indicates that every one will be able to remember their past deeds. This means the information stored in the previous *sadr* has been fully restored during resurrection and is available in the *sadr* of the clone or the resurrected person. This is evident from the reactions of human individuals on seeing their records.

وَوُضِعَ الْكِتَابُ فَتَرَى الْمُجْرِمِينَ مُشْفِقِينَ إِمَّا فِيهِ وَيَقُولُونَ يَا وَيَلَّئُنَا مَالِ هُذَا الْكِتَابِ لَا يُعَادُرُ صَغِيرَةً وَلَا كَبِيرَةً إِلَّا أَخْصَاصًا هَا ۝ وَوَجَدُوا مَا عَمِلُوا حاضِرًا ۝ وَلَا يَظْلِمُ رَبُّكَ أَحَدًا ۝ 18:49 “....You will see the sinful in great terror because of what is recorded therein; they will say: Ah, woe to us! What a book is this! It leaves out nothing small or great, but takes account thereof...”

The verse indicates that the *sadr* with its stored information is in tact in the resurrected people as reflected in their reactions while going through their dossiers. Another verse on joining with own righteous spouses in Heaven also indicates we will be

able to recollect our past thereby confirming the restoration of *sadr* with its contents during resurrection.

وَالَّذِينَ آمَنُوا وَأَتَبْعَثْنَاهُمْ دُرْسَتْهُمْ بِإِيمَانٍ أَحْكَمْنَا بِهِمْ دُرْسَتْهُمْ وَمَا أَتَسْنَاهُمْ مِنْ شَيْءٍ ۝ كُلُّ اُمْرَىءٍ عِمَّا كَسَبَ رَهِينٌ

52:21 And those who believe and whose families follow them in Faith – to them shall We join their families: Nor shall We deprive them (of the fruit) of aught of their works: (Yet) is each individual in pledge for his deeds.

The installation of the dossier of one's test life during resurrection enables one to recollect his past life and examine the record to his satisfaction. It will also convince him of the fairness of Allah's judgement and His verdict. This implies that at the time of death the angel removes not only *nafs* of the individual but also all the information stored in *sadr* and other body cells. The *nafs* along with all other information is subsequently stored in biomimetic niches in the soil. At the time of resurrection, the information retrieved from the *sadr* gets stored in the *sadr* of the resurrected body and the information retrieved from other tissues of the body gets stored in the respective tissues. This would explain how one is enabled to recollect his past deeds and how his tissues could speak about their activities in support of what is stored in the *sadr*.

الْيَوْمَ نَخْتِمُ عَلَىٰ أَفْوَاهِهِمْ وَتُكَلِّمُنَا أَيْدِيهِمْ وَتَشَهَّدُ أَرْجُуُهُمْ إِمَّا كَانُوا يَكْسِبُونَ

36:65 That Day We shall seal their mouths. But their hands will speak to us, and their feet bear witness, to all that they did.

حَتَّىٰ إِذَا مَا جَاءُوهُنَا شَهَدَ عَلَيْهِمْ سَمْعُهُمْ وَأَبْصَارُهُمْ وَجَلُودُهُمْ إِمَّا كَانُوا يَعْمَلُونَ وَقَالُوا لَهُمْ لَجُلُودُهُمْ لَمْ شَهَدْنُمْ عَلَيْنَا ۝ قَالُوا أَنْطَقَنَا اللَّهُ الَّذِي أَنْطَقَ كُلَّ شَيْءٍ وَهُوَ خَلَقُكُمْ أَوَّلَ مَرَّةٍ وَإِلَيْهِ تُرْجَعُونَ وَمَا كُنْتُمْ تَسْتَرِيُونَ أَنْ يَشْهَدَ عَلَيْكُمْ سَمْعُكُمْ وَلَا أَبْصَارُكُمْ وَلَا جَلُودُكُمْ

وَلِكُنْ ظَنَّتُمْ أَنَّ اللَّهَ لَا يَعْلَمُ كَثِيرًا مِمَّا تَعْمَلُونَ وَذَلِكُمْ ظَنُّكُمُ الَّذِي ظَنَّتُمْ بِرِبِّكُمْ أَرْدَأْكُمْ فَأَصْبَحْتُمْ مِنَ الْخَاسِرِينَ

41:20-23 At length, when they reach the (Fire), their hearing, their sight, and their skins will bear witness against them, as to (all) their deeds. They will say to their skins: Why you bear witness against us? They will say: (Allah) has given us speech; (He) Who gives speech to everything: He created you for the first time and to Him you are to return. You did not seek to hide yourselves, lest your hearing, your sight, and your skins should bear witness against you! But you did think that Allah knew not many of the things that you used to do! But this thought of yours which you did entertain concerning your Lord, has brought you to destruction, and (now) you have become those utterly lost!

People will be questioned and called to explain their past deeds on that Day.

ثُمَّ لَكُنَّا لَنَّ يَوْمَئِذٍ عَنِ التَّعْبِيرِ

102:8 Then, that Day you will be questioned about the pleasures (you had indulged in the life of the world).

Allah's judgement will be with full justice. Not a single human robot will He treat with injustice.

وَوُضِعَ الْكِتَابُ فَتَرَى الْمُجْرِمِينَ مُشْفِقِينَ مِمَّا فِيهِ وَيَقُولُونَ يَا وَيَلَّتَنَا مَالِ هَذَا الْكِتَابِ لَا يُعَادُ رَصِيعِهِ وَلَا كِبِيرَةِ إِلَّا أَحْصَاهَا وَوَجَدُوا مَا عَمِلُوا حَاضِرًا وَلَا يَظْلِمُ رَبُّكَ أَحَدًا
18:49 "...They will find all that they did, placed before them and not one will your Lord treat with injustice."

وَنَصَّعُ الْمَوَازِينَ الْقِسْطَ لِيَوْمِ الْقِيَامَةِ فَلَا تُظْلَمُ نَفْسٌ شَيْئًا وَإِنْ كَانَ مِنْ قَالَ حَبَّةٍ مِنْ خَرْدَلٍ أَتَيْنَا بِهَا وَكَفَى بِنَا حَاسِبِينَ

21:47 We shall set up scales of justice for the Day of Judgement, so that not a single individual (*nafs*) will be dealt with unjustly in the least. And if there be (no more than) the

weight of a mustard seed (good or evil deed) We will bring it (to account). And enough are We to take account.

Further Allah says that He is extremely fast in Judgement.

وَالَّذِينَ كَفَرُوا أَعْمَلُهُمْ كَسَرَابٍ بِقَيْعَةٍ يَحْسِبُهُ الظَّمَانُ مَاءً حَتَّىٰ إِذَا جَاءَهُمْ لَمْ يَجِدُهُ شَيْئًا
وَوَحْدَ اللَّهُ عِنْدَهُ فَوْقَاهُ حِسَابٌ ۝ وَاللَّهُ سَرِيعُ الْحِسَابِ

24:39 "...And Allah is swift in taking account."

ثُمَّ رُدُوا إِلَى اللَّهِ مَوْلَاهُمُ الْحَقُّ ۝ أَلَا لَهُ الْحُكْمُ وَهُوَ أَسْرَعُ الْحَاسِبِينَ

6:62 Then they were returned to Allah, their real protector. The power of judgement rests with Him. And He is the swiftest in taking account.

الْيَوْمَ يُجْزَى كُلُّ نَفْسٍ بِمَا كَسَبَتْ ۝ لَا ظُلْمَ الْيَوْمَ ۝ إِنَّ اللَّهَ سَرِيعُ الْحِسَابِ

40:17 That Day every soul will be rewarded what it earned. There will be no injustice that Day. Indeed Allah is swift in taking account.

The entire process of evaluation and judgement of billions of human robots with equally numerous physical variables, biological attributes and their potentials, and their interactions is beyond human comprehension. Allah informs us that He will mete out everyone justly and no injustice will be done to anybody. We may visualize the process with our limited knowledge as follows. The judgement with full justice to all implies Allah will take into consideration all the variables that make one individual different from the other. These include one's physical potentials, mental potentials, wealth, other assets and deficiencies he had during his test life on Earth. This is evident from Allah's message that He does not expect from an individual beyond his capacity (Q. 7:42, see chapter 16). Think of an evaluation equation with weight assigned to each of the pluses and minuses. Such a judgement howsoever impossible it may appear to us will only be an easy matter for God. Allah's message that He is swiftest in taking account tells it all. In fact the evaluation of one's record of

performance is over at the time of death itself. What probably meant by the Final Judgement could be the formal declaration of the award of Heaven or Hell after the individual is convinced of the veracity of the record of his performance given to him for verification.

Heaven – the Muslim Earth

Following Judgement, the successful human robots will be awarded Heaven while the unsuccessful will get punishment in Hell (Q. 84:7-12). Allah will welcome the successful robots to His Heaven with utmost satisfaction. A lot of information is given about Heaven and Hell in the Quran. However, only a few verses that have scientific significance are considered here.

يَا أَيُّهَا النَّفْسُ الْمُطْمَئِنَةُ ارْجِعِي إِلَى رَبِّكَ رَاضِيَةً فَادْخُلْنِي
جَنَّتِي

89:27-30 (To the righteous will be said) O (you) *nafs* in (complete) rest and satisfaction; come back you to your Lord well pleased (yourself) and well pleasing to Him; enter you then among My robots; and enter you My Heaven.

Heaven is the re-created Earth (of the next universe) which the successful human robots will inherit and live there forever serving Allah.

وَلَقَدْ كَبَّنَا فِي الرَّوْبَرِ مِنْ بَعْدِ الدُّكْرِ أَنَّ الْأَرْضَ يَرْثِي هَا عِبَادِي الصَّالِحُونَ

21:105 Before this, We wrote in the *Zaboor* (the Book given to Prophet David) after the Reminder (*Taurat* given to Moses) that My righteous robots (servants) will inherit the earth.

Allah's announcement to angels that He was going to create a vicegerent (man) on Earth (Q. 2:30 discussed in chapter 11) has to be understood in this context. This message is generally understood as referring to the present Earth. That is wrong. It refers to the permanent Earth where righteous human robots will be deployed to serve Him forever.

Since only the righteous human robots will be deployed in Heaven, it may be rightly called the “Muslim Earth”, the planet inhabited by only Muslims – the human robots who submitted themselves to the will of Allah. There is only one death; that is on the present earth. The next life is eternal without death. This means there will be no more deletion of the biomemome (*nafs*) from the body as happened during the life on this earth. Present life is a test life and death is required to terminate the test period of an individual (Q. 67:2, see chapter 16). Further, Satan virus will also be absent in our biomemome of our next life and we will be free of evil influences. As the mission of *Iblis* would be over with the end of this world and he was given respite by Allah till that day (Q. 7:12-18, see chapter 12), the biomemomes of the resurrected people will not be carrying the Satan virus program. Satan virus was introduced into human biosystem (through Adam’s *nafs*) to make the human robot testing efficient. The next life is not test life. Further Satan will say goodbye to human race on that Day.

وَقَالَ الشَّيْطَانُ لِمَنْ قُضِيَ الْأَمْرُ إِنَّ اللَّهَ وَعَدَكُمْ وَعْدَ الْحَقِّ وَوَعَدْتُكُمْ فَأَخْلَقْتُكُمْ ۝ وَمَا
كَانَ لِي عَلَيْكُمْ مِنْ سُلْطَانٍ إِلَّا أَنْ دَعَوْتُكُمْ فَاسْتَجَبْتُمْ لِي ۝ فَلَا تَأْتُونِي وَلَوْمُوا
أَنفُسَكُمْ ۝ مَا أَنَا بِمُصْرِحٍ كُمْ وَمَا أَنْتُمْ بِمُصْرِحٍ ۝ إِلَيْيَ كَفَرْتُ إِمَّا أَشْرَكْتُمُونَ مِنْ قَبْلِ ۝
إِنَّ الظَّالِمِينَ لَهُمْ عَذَابٌ أَلِيمٌ

14:22 And the Satan will say when the matter is decided: “It was Allah who gave you true promise. I too promised you, but I violated (it). I had no authority over you except that I invited you (and) then you answered me. Therefore do not blame me but you blame yourselves. I am not your helper and you are not my helper. I reject your associating me earlier with Allah. Verily, the wrongdoers have a painful punishment.”

The Quran provides a fairly good account of the physical environment of the new Earth (Heaven) as well as its biosphere. The environment in Heaven will not be excessively hot or cold. It will be full of fruits hanging low in humility,

where people will wear silk and they will have everything in plenty. Insofar as the present earth is the venue for testing human robots, it represents only a miniature model of the next Earth or Heaven. To say the least, we cannot even fathom the kind of things and resources provided in Heaven. The environmental conditions of the present Earth and the next Earth must be similar as both are created as habitat for human beings. The physics, chemistry and biology of the next universe may also be expected to be more or less the same. The next Earth will have the width of the present universe, i.e., the sizes of the present Earth and skies put together.

وَسَارُوا إِلَى مَعْفِرَةٍ مِّنْ رَّبِّكُمْ وَجَنَّةٍ عَرْضُهَا السَّمَاوَاتُ وَالْأَرْضُ أُعِدَّتْ لِلْمُتَّقِينَ

3:133 Be quick in the race for forgiveness from your Lord, and for a Garden (Heaven) whose width is that (of the whole) of the skies and the earth, prepared for the righteous.

سَارُوا إِلَى مَعْفِرَةٍ مِّنْ رَّبِّكُمْ وَجَنَّةٍ عَرْضُهَا كَعَرضِ السَّمَاءِ وَالْأَرْضِ أُعِدَّتْ لِلَّذِينَ آمَنُوا
بِاللَّهِ وَرَسُولِهِ ۚ ذَلِكَ فَضْلُ اللَّهِ يُؤْتِيهِ مَنْ يَشَاءُ ۚ وَاللَّهُ ذُو الْقَوْلِ الْعَظِيمِ

57:21 Be you foremost (in seeking) Forgiveness from your Lord, and a Garden (of Bliss), the width whereof is as the width of the sky and the earth, prepared for those who believe in Allah and His apostles: that is the Grace of Allah, which He bestows on whom He pleases: and Allah is the Lord of Grace abounding.

The biosphere will be composed of not only human beings but all other living beings (plants, animals, etc.) as well.

وَمَا مِنْ ذَائِيِّ الْأَرْضِ وَلَا طَائِرٌ يَطْبِرُ بِحَتَّاحِيْهِ إِلَّا أُمَّةٌ أَمْثَالُكُمْ ۚ مَا قَوَّطْنَا فِي الْكِتَابِ
مِنْ شَيْءٍ ۖ ۝ ثُمَّ إِلَى رَحْمَمْ يُحْشَرُونَ

6:38 There is not an animal (that lives) on the earth, nor a being that flies on its wings, but (forms part of) communities like you. Nothing have we omitted from the Book, and they (all) shall be gathered to their Lord in the end.

The picture of the next Earth – the Heaven promised to the righteous – Allah gives is far beyond human imagination and perception. Only a few verses are quoted here.

مَئَلُ الْجَنَّةِ الَّتِي وُعِدَ الْمُتَّقُونَ ۖ فِيهَا أَنَهَارٌ مِنْ مَاءٍ عَيْرٍ آسِنٍ وَأَنَهَارٌ مِنْ لَبَنٍ
لَمْ يَتَعَيَّنْ طَعْمُهُ وَأَنَهَارٌ مِنْ حَمْرٍ لَذَّةُ الْلَّشَائِبِ وَأَنَهَارٌ مِنْ عَسَلٍ مَصْفَىٰ ۖ وَلَهُمْ فِيهَا مِنْ
كُلِّ الشَّمَرَاتِ وَمَعْفَرَةٌ مِنْ رَحْمٍ ۖ كَمَنْ هُوَ خَالِدٌ فِي النَّارِ وَسُقْنُوا مَاءً حَيْمًا فَقَطَّعَ
أَمْعَاءَهُمْ

47:15 “(Here is) a Parable of the Garden which the righteous are promised: in it are rivers of water incorruptible; rivers of milk of which the taste never changes; rivers of wine, a joy to those who drink; and rivers of honey pure and clear. In it there are for them all kinds of fruits; and Grace from their Lord...”

مُتَّكِّحِينَ فِيهَا عَلَى الْأَرَائِكِ ۖ لَا يَرُونَ فِيهَا سَمِسَا وَلَا زَمْهَرِيَا وَدَانِيَةً عَلَيْهِمْ ظِلَالُهَا وَدُلُكُّ
قُطْلُوُهَا تَدْلِيلًا وَيُطَافُ عَلَيْهِمْ بِأَنِيَّةٍ مِنْ فَضَّةٍ وَأَكْوَابٍ كَائِنَتْ قَوَابِرًا قَوَابِرٍ مِنْ فَضَّةٍ
قَدَرُوهَا تَقْدِيرًا وَيُسْقَوْنَ فِيهَا كَأسًا كَانَ مِرَاجُهَا رَجَبِيَّا عَيْنًا فِيهَا تُسَمَّى سَلْسِيلًا
وَيَكْلُفُ عَلَيْهِمْ وِلْدَانٌ خَلْدُونٌ إِذَا رَأَيْتُهُمْ حَسِيبُهُمْ لُؤْلُؤًا مَنْتُورًا وَإِذَا رَأَيْتَهُمْ رَأَيْتَ نَعِيَّا
وَمُلْكًا كَبِيرًا عَالِيَّهُمْ ثِيَابٌ سُنْدِسٌ خُضْرٌ وَإِسْتَبْرَقٌ ۖ وَخَلُوا أَسَاوَرٌ مِنْ فَضَّةٍ وَسَقَاهُمْ
رَزْعُهُمْ شَرَابًا طَهُورًا إِنْ هَذَا كَانَ لَكُمْ جَزَاءً وَكَانَ سَعْيُكُمْ مَشْكُورًا

76:13-22 Reclining in the (Garden) on raised thrones they will see there neither sun's (excessive heat) nor excessive cold. And the shadows of the (Garden) will come near over them and the fruit bunches there will be within their easy reach. And silver vessels and crystal goblets will be passed around them (serving food and drinks). (That is), crystal made of silver. They have fixed its measure. And they will be given a cup of drink there; it will be a mix of ginger. A spring called *Salsabil* is there. And perpetual youths will be around them. If you see them, you will think of them as scattered pearls. And when you see there, you will notice blessings and a great kingdom. They will be

wearing garments of green fine silk and thick silk, and they will be adorned with silver bracelets; and their Lord will give them pure drink. Verily, this is a reward for you. And (thus) your endeavour (on earth) finds acceptance with gratefulness (with Allah).

وَبَشِّرُ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ أَنَّ لَهُمْ جَنَّاتٍ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ ۖ كُلُّمَا رُرْفُوا مِنْهَا مِنْ ثَمَرَةٍ رِزْقًا ۖ قَالُوا هَذَا الَّذِي رُرْقِنَا مِنْ قَبْلُ ۖ وَأَنْوَاهُ يَهُ مُسْتَشَاهِدًا ۖ وَلَهُمْ فِيهَا أَرْوَاحٌ مُطَهَّرَةٌ ۖ وَهُمْ فِيهَا حَالِدُونَ

2:25 But give glad tidings to those who believe and work righteousness, that their portion is Gardens, beneath which rivers flow. Every time they are fed with fruits there from, they say: "Why, this is what we were fed with before," for they are given things in similitude; and they have therein companions pure (and holy); and they abide therein (for ever).

فَإِنَّ أَذْلِكَ خَيْرٌ أَمْ جَنَّةُ الْخُلُلِ الَّتِي وُعِدَ الْمُتَّقُونَ ۗ كَانَتْ لَهُمْ جَرَاءً وَمَصِيرًا لَهُمْ فِيهَا مَا يَسْأَلُونَ حَالِدِينَ ۗ كَانَ عَلَىٰ رِبِّكَ وَعْدًا مَسْتُوفًا

25:16 Whatever they wish they will get therein (Heaven). They will dwell (there) forever, a promise to be asked for from your Lord.

These messages are a pointer to the variety and richness of the bounties promised by Allah for His obedient robots in Heaven.

Hell – the place of punishment

Hell is the place of punishment but not of elimination. The rejecters of Faith (Islam) will be destroyed 'alive' in Hell. They will not taste death, but only continue to live under punishment in the Fire.

يَتَحَرَّعُهُ وَلَا يَكُادُ يُسْيِعُهُ وَيَأْتِيهِ الْمَوْتُ مِنْ كُلِّ مَكَانٍ وَمَا هُوَ بِمَيِّتٍ ۖ وَمِنْ وَرَائِهِ عَذَابٌ عَلِيلٌ

14:17 “....Death will come to him from every quarter, yet will he not die....”

It is impossible for us to fathom the magnitude of the eternal punishment in fire without death. Allah informs us that the body tissues will be replaced anew as soon as they wither. This would mean that the program will be so given that the regeneration of the burnt tissues occurs at the same rate as its destruction. Then the individual will experience only the punishment and pain with the body organs intact. The Holy Quran points to such a mechanism.

إِنَّ الَّذِينَ كَفَرُوا بِآيَاتِنَا سُوفَ تُصْنَلِّيهِمْ نَارًا كُلُّمَا تَضَعَّثُ جَلُودُهُمْ يَتَنَاهُمْ جَلُودًا عَيْرَهَا
لَيَدْعُوُفُوا الْعَذَابَ ۖ إِنَّ اللَّهَ كَانَ عَزِيزًا حَكِيمًا

4:56 Those who reject Our signs (the Quran), We shall soon cast them into the Fire. As often as their skins are roasted through, We shall change them for fresh skins that they may taste the penalty. For God is exalted in Power, Wise.

With the award of Heaven and Hell, the divine mission will come to an end.

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18. EPILOGUE

Scientific interpretation and explanation of the Quran provide a new dimension to our understanding of human life and the universe. The scientific exegesis (*tafsir*) of the Quran presented in this book permits us to understand the divine mission with man and the universe rationally and holistically. The Quran is the only source that provides information on God's purpose of creation. Allah created the species *Homo sapiens* as His conscious, intelligent, free-willed robot (*abd* in Arabic). Since human beings are bestowed with freedom to take decision and act, it becomes necessary to test them for their obedience to their Creator. It is a test of eligibility to become Allah's robot to serve Him. The purpose of the test is to identify those who voluntarily accept Allah unseen as their Master, obey His directives and submit to Him in all humility. The present temporary universe was created to provide infrastructure facilities for the test. The planet Earth is the human robot testing laboratory, a miniature version of the eternal Heaven (Earth of the next universe) where the successful human beings will be deployed as His robots. Every message conveyed through the Quran is centred round this divine mission and should be viewed and understood that way.

The Quranic revelations about the universe (both physical and biological components) are suggestive of a computerized set-up. Both the living and non-living components of the universe are fully automated systems. The living and nonliving segments are provided with all the necessary software and hardware for the self-propelled self-regulated functioning. The universe (seven skies and Earth as the Quran describes it) is the infrastructure facility for human robot testing. Earth is the human robot testing laboratory that serves as human habitat. The system as a whole functions like a computer and is so designed and programmed to provide all the necessary amenities, facilities and resources during the test

period. The human biosystem has all the necessary programs and hardware to suit the divine scheme. Human being has built-in mechanisms and programs to record conscious activities in real time, programs to guide or divert the mind from the divine path, etc., that make the biosystem fully automated to achieve the divine objectives. The Quran also provides sufficient hints to develop computer model of the physical universe and biological organism.

Understanding of the universe and human life based on modern science is incomplete and incoherent for the simple reason that the scientific community views the whole system as the product of chance with no purpose to serve. This view is developed and promoted by the scientific community against the well established fact that energy with which the universe is made of does not have the ability of autogenesis. Deliberate denial of this truth as it implies the need for Creator God for the universe has landed us in the most ludicrous and pitiable situation. Scientists are trying to explain a system created with specific purpose as a system with no Creator and no purpose. It is high time the Muslim community realized the hidden agenda of the scientific community and came forward to thwart the satanic designs.

Scientific exploration through research is valid only for generating new technologies. Any attempt to understand and explain the universe and human life ignoring the divine purpose will be misleading to the core. Holistic knowledge can be developed only in conjunction with the Quran. By bringing the Quran and science together, we will be able to generate holistic knowledge of the universal systems and human race. The holistic knowledge or *Islamic Science* so developed will represent the totality of the knowledge revealed by Allah to mankind. That will revolutionize our understanding of the universe and our own life, and lead us to the right path in the most scientific way.

The quantum of knowledge Allah gives to mankind is finite. Man cannot acquire any knowledge he wants no matter how much efforts he makes; he will get only the knowledge prescribed and released by Allah. This means we cannot go on discovering and inventing things and expand our knowledge base indefinitely. There is limit to it. Maybe sooner or later, we are going to realize that.

Many revelations of scientific significance but not of religious importance have been included in the Quran. This has more significance than meets the eye. These revelations have been discussed in chapter 4. What is so special about these is the fact none of the revelations of scientific value has been confirmed by researchers from the Muslim community but they were all confirmed through scientific discoveries by non-Muslim scientists. That should be seen as part of the divine scheme to prove to the unbelievers Allah's existence and scientific validity and divinity of the Quran so that they realize the truth and accept it.

There are at least three scientific evidences for the existence of God and the divinity of the Quran discussed in this book. One is the close correspondence of the created natural system with the divine purpose of creation. Another is the very amenability of the Quran to scientific explanation. The third is the rejection or the never-ending controversies associated with certain theories in science that are at variance with the Quran.

There are several subjects, issues and phenomena that do not have any explanation in modern science. There are also several phenomena that can be understood only in the light of the Quran. These are energy, process of creation, purpose of creation of the universe and *Homo sapiens*, phenomena of life and death, functioning of the universe, human mind, human memory, finite nature of human knowledge, source of *a priori* knowledge, ability of Earth to store information, source of biological information, and source of chemical information. In addition to these, there are certainties revealed through the

Quran, which are ordained to happen. These are death, end of the world, re-creation of the universe, resurrection, Final Judgement, and award of Heaven or punishment in Hell. Further it is the Quran that reveals to us the unique characteristics of human species. These are mind, memory, language, faculties of seeing, hearing and feeling, abilities to speak and write, consciousness, intelligence and freewill. It is impossible to find out through scientific experimentation whether other species also see and hear as we do or whether they have mind, consciousness, freewill, etc. It is the Quran that reveals to us that no other species has any of these features.

The Scriptural revelations about all these phenomena can be scientifically understood based on the respective computer model of the physical universe and biological organism developed in the light of the Quran. The computer analogy also helps us understand certain terms used in the Quran. To this list belong *rooh*, *nafs*, *shaitan* (Satan), *qalb*, *sadr*, *qabr*, *ajdathi*, etc. The meanings of these words still remain unclear. This is very much reflected in the confusion in meanings given in translations of the Quran.

The Quran is truth from Almighty, Omniscient Allah and is therefore the *Universal Reference Standard for Truth*. The Quran can be applied to any domain of human knowledge; be it religion, science or any other to evaluate the veracity of information originating from them. In support of this rationale we find any theory in science not in conformity with the Quran either flops and gets rejected or remains controversial. Some of these are steady state cosmology, theories of origin of life, evolutionary biology, molecular gene (genome) concept, etc. We should reject any theory not consistent with the Quran and accept any theory consistent with the Quran. That way the Quran helps to purify and preserve the factual information content of science and other epistemic domains. It may be noted that science is divine as the Quran and hence should be

complementary to each other. However, theories not consistent with or opposed to the Quran originate through the influence of Satan virus. This calls for revamping the non-tech domain of science (and not the technology domain of science) and redefining the research and academic priorities. The research and academic programmes should be developed within the framework of Islamic Science. By doing so, the scientific and technological advancement of a country will not be in any way adversely affected.

There are also revelations in the Quran such as the creation of Earth as the first component of the universe and the organization of the cosmic space as seven skies, etc. that require scientific explanation. These subjects should get priority on the research agenda of Muslim countries. Research in these areas will generate true scientific theories in cosmology.

The scope of the Quran can be understood only by subjecting it to scientific treatment. The scientific exegesis presented here makes it exceptionally clear that the Quran is not merely a religious text dealing with Islamic rites, rituals, etc., but is much more than that. It appears Allah has designed science as partner to it. Science is needed to study and comprehend the Quranic revelations especially those relating to the universe and human life. It will be with advancement of science, mankind will understand the Quranic messages better. What is to be noted in this context is the fact that Allah is upgrading the human biosystem physically and intellectually over time. People of today are more advanced in these respects than their predecessors. What earlier people could not have thought and analyzed, modern humans do. Needless to say, future generations will comprehend the Quran still better and at a higher level of scientific acumen as science advances further. However so long as science and Quran are kept apart and studied in isolation, people will either lead their lives unaware of the purpose of creation and mission of the Creator or

without understanding the Quran perfectly and convincingly. The only option left to us is to integrate science with the Quran and develop holistic knowledge. Only that knowledge, *Islamic Science*, can besides answering the billion dollar questions satiate the intellectual thirst of modern human beings scientifically and rationally. Further, that alone can claim to be true.

Without the Quran, man understands the universe and his own life solely based on the information generated through his five senses. With the Quran, man gets the knowledge of the Creator's mission and His purpose of creations. The Quran thus serves as the lens of God through which man can look at the universe and his life from the divine perspective and get the true picture. That will guide him to and through the path of Allah – Islam – until death.

The scientific *tafsir* of the Quran brings to us a new awareness of mother nature and our own life from the point of view of Allah's purpose of creation. The exegesis brings to light the scientific foundation of the Quran and Islam. More importantly, it confirms the existence of God unequivocally.