

7. 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 خَلِيفَةً قَالُوا أَتَجْعَلُ فِيهَا مَنْ يُفْسِدُ فِيهَا وَيَسْفِكُ الدِّمَاءَ 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 حَمَإٍ 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. 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 رَبَّ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً ۗ وَاتَّقُوا اللَّهَ الَّذِي تَسَاءَلُونَ 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.

خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ ثُمَّ جَعَلَ مِنْهَا زَوْجَهَا وَأَنْزَلَ لَكُمْ مِنَ الْأَنْعَامِ ثَمَانِيَةَ أَزْوَاجٍ يَخْلُقَكُمْ فِي بُطُونِ أُمَّهَاتِكُمْ خَلْقًا مِنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ ثَلَاثٍ ذَلِكُمْ اللَّهُ رَبُّكُمْ لَهُ الْمُلْكُ لَا إِلَهَ إِلَّا هُوَ فَاتَىٰ تُصْرَفُونَ

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 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 (biosoftware at the level of species) 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 وَالْإِنْسَ 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. Satan also puts evil suggestions onto the mind of man.

قُلْ مَنْ كَانَ عَدُوًّا لِجِبْرِيلَ فَإِنَّهُ نَزَّلَهُ عَلَيَّ قَلْبِكَ بِإِذْنِ اللَّهِ 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 لَتَنْزِيلُ رَبِّ الْعَالَمِينَ نَزَلَ بِهِ الرُّوحُ الْأَمِينُ عَلَيَّ 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 نَبِيٍّ إِلَّا إِذَا تَمَنَّىٰ أَلْقَى الشَّيْطَانُ فِي أُمْنِيَّتِهِ فَيَنسَخُ اللَّهُ مَا يُلْقِي الشَّيْطَانُ ثُمَّ يُحْكِمُ 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 آدَمُ اسْكُنْ أَنْتَ وَزَوْجُكَ الْجَنَّةَ فَكُلَا مِنْ حَيْثُ شِئْتُمَا وَلَا تَقْرَبَا هَذِهِ الشَّجَرَةَ فَتَكُونَا مِنَ الظَّالِمِينَ فَوَسْوَسَ لَهُمَا الشَّيْطَانُ لِيُبْدِيَ لَهُمَا مَا وُورِيَ عَنْهُمَا مِنْ سَوْآتِهِمَا وَقَالَ مَا نَهَاكُمَا رَبُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مَلَكَتَيْنِ أَوْ تَكُونَا مِنَ الْخَالِدِينَ ۖ وَقَاسَمَهُمَا إِنِّي 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 ذَرَأْنَا لِجَهَنَّمَ كَثِيرًا مِنَ الْجِنَّ وَالْإِنْسِ لَهُمْ قُلُوبٌ لَا يَفْقَهُونَ بِهَا وَلَهُمْ أَعْيُنٌ لَا يُبْصِرُونَ بِهَا وَلَهُمْ آدَانٌ لَا يَسْمَعُونَ بِهَا ۗ أُولَٰئِكَ كَالْأَنْعَامِ بَلَّ هُمْ أَصْلًا ۗ أُولَٰئِكَ هُمُ الْعَاقِلُونَ

7:179 We have made many of the *jinn*s 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 فَتَكُون لَهُمْ قُلُوبٌ يَعْقِلُونَ بِهَا أَوْ آدَانٌ يَسْمَعُونَ بِهَا ۗ فَإِنَّهَا لَا تَعْمَى الْأَبْصَارُ وَلَكِنْ تَعْمَى 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 يَتَذَكَّرُونَ ۗ أَلَمْ يَكُن لَّهُمْ قُلُوبٌ أَفْقَالُهَا

47:24 Do they not then earnestly seek to understand the Quran or are there locks on (their) minds?

أَمْ حَسِبَ الَّذِينَ فِي قُلُوبِهِمْ مَرَضٌ أَنْ لَنْ يُخْرِجَ اللَّهُ أَضْغَانَهُمْ

47:29 Or do those with disease in their minds think that Allah will not bring to light all their rancour?

لَا يُقَاتِلُونَكُمْ جَمِيعًا إِلَّا فِي قُرَىٰ مُحَصَّنَةٍ أَوْ مِنْ وَرَاءِ جُدُرٍ ۚ بَأْسُهُمْ بَيْنَهُمْ شَدِيدٌ ۚ تَحْسَبُهُمْ جَمِيعًا وَقُلُوبُهُمْ شَتَّىٰ ۚ ذَٰلِكَ 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.

قُلْ كُلٌّ يَعْمَلُ عَلَىٰ شَاكْرَتِهِ فَرَبُّكُمْ أَعْلَمُ بِمَنْ هُوَ أَهْدَىٰ سَبِيلًا

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 كَفُورًا

76:3 We (Allah) showed him the (right) way; either he can be grateful or ungrateful.

إِنَّ فِي ذَٰلِكَ لَذِكْرًا لِمَنْ كَانَ لَهُ قَلْبٌ أَوْ أَلْفَى السَّمْعَ وَهُوَ 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 رَبِّ أَرِنِي كَيْفَ تُحْيِي الْمَوْتَىٰ ۖ قَالَ أُولَٰئِمُتَىٰ نُوْمِنٌ ۗ قَالَ بَلَىٰ ۗ وَ لَكِن لِّيَطْمَئِنَّ قَلْبِي ۖ قَالَ فَخُذْ أَرْبَعَةً مِّنَ الطَّيْرِ فَصُرْهُنَّ إِنَّكَ تَمَّ اجْعَلْ عَلَىٰ كُلِّ جَبَلٍ مِّنْهُنَّ جُزْءًا ثُمَّ ادْعُهُنَّ يَأْتِينَكَ سَعْيًا ۗ 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 جَعَلَهُ اللَّهُ إِلَّا بُشْرَىٰ ۖ وَلِتَطْمَئِنَّ 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 جَعَلَهُ اللَّهُ إِلَّا بُشْرَىٰ لَكُمْ وَلِتَطْمَئِنَّ 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 فَارِعًا ۚ إِنَّ كَادَتْ لَتُبْدِي بِهِ لَوْلَا أَنْ رَبَطْنَا 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 لَسْتُنَّ كَأَحَدٍ مِنَ النِّسَاءِ ۚ إِنَّ اتَّقِيْنَ فَلَآ تَخْضَعْنَ بِالْقَوْلِ فَيَطْمَعَ الَّذِي فِي قَلْبِهِ مَرَضٌ 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 بِقَلْبٍ سَلِيمٍ

37:84 Behold! (Prophet Abraham) approached his Lord with a sound mind.

وَأَعْتَصِمُوا بِحَبْلِ اللَّهِ جَمِيعًا وَلَا تَفَرُّوا ۗ وَادْكُرُوا اللَّهَ عَالِمِ الْغُيُوبِ ۗ إِذْ كُنْتُمْ أَعْدَاءً فَأَلَّفَ بَيْنَ قُلُوبِكُمْ فَأَصْبَحْتُمْ بِنِعْمَتِهِ إِخْوَانًا وَكُنْتُمْ عَلَىٰ شَفَا حُفْرَةٍ مِنَ النَّارِ فَأَنْقَذَكُمْ مِنْهَا ۗ كَذَلِكَ يُبَيِّنُ اللَّهُ لَكُمْ آيَاتِهِ لَعَلَّكُمْ تَهْتَدُونَ

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 لِإِخْوَانِهِمْ إِذَا ضَرَبُوا فِي الْأَرْضِ أَوْ كَانُوا غُزًى لَوْ كَانُوا عِنْدَنَا مَا مَاتُوا وَمَا قُتِلُوا لِيَجْعَلَ اللَّهُ ذَلِكَ حَسْرَةً فِي قُلُوبِهِمْ ۗ وَاللَّهُ يُحْيِي وَيُمِيتُ ۗ وَاللَّهُ بِمَا تَعْمَلُونَ بَصِيرٌ

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 وَنَطْمَئِنَّ قُلُوبُنَا وَنَعْلَمَ أَنْ قَدْ صَدَّقْتَنَا 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)."

قَاتِلُوهُمْ يُعَذِّبُهُمُ اللَّهُ بِأَيْدِيكُمْ وَيُخْزِهِمْ وَيَنْصُرْكُمْ عَلَيْهِمْ وَيَشْفِ صُدُورَ قَوْمٍ مُؤْمِنِينَ وَيُذْهِبْ غَيْظَ 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 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 تَنْفَعُ الشَّفَاعَةُ عِنْدَهُ إِلَّا لِمَنْ أَذِنَ لَهُ ۗ حَتَّىٰ إِذَا فُزِعَ عَنِ قُلُوبِهِمْ قَالُوا مَاذَا قَالَ رَبُّكُمْ ۖ قَالُوا الْحَقُّ ۖ وَهُوَ 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 اشْمَأَزَّتْ قُلُوبُ الَّذِينَ لَا يُؤْمِنُونَ بِالْآخِرَةِ ۖ وَإِذَا ذُكِرَ الَّذِينَ مِنْ دُونِهِ إِذَا هُمْ يَسْتَبْشِرُونَ

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 لِيَزْدَادُوا إِيمَانًا مَعَ إِيْمَانِهِمْ ۗ وَلِلَّهِ 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 الْحَمِيَّةَ الْحَمِيَّةَ الْجَاهِلِيَّةَ فَأَنْزَلَ اللَّهُ سَكِينَتَهُ عَلَى رَسُولِهِ وَعَلَى الْمُؤْمِنِينَ وَأَلْزَمَهُمْ كَلِمَةَ التَّقْوَى وَكَانُوا أَحَقَّ 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 قَفَّيْنَا عَلَى آثَارِهِمْ بِرُسُلِنَا وَقَفَّيْنَا بِعِيسَى ابْنِ مَرْيَمَ وَآتَيْنَاهُ الْإِنْجِيلَ وَجَعَلْنَا فِي قُلُوبِ الَّذِينَ اتَّبَعُوهُ رَأْفَةً وَرَحْمَةً وَرَهَابَنِيَّةً ابْتَدَعُوهَا مَا كَتَبْنَاهَا عَلَيْهِمْ إِلَّا ابْتِغَاءَ 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 لِأَوَّلِ الْحَشْرِ ۗ مَا ظَنَنْتُمْ أَنْ يَخْرُجُوا وَظَنُّوا أَنَّهُمْ مَانِعَتُهُمْ حُصُونُهُمْ مِنَ اللَّهِ فَأَتَاهُمُ اللَّهُ مِنْ حَيْثُ لَمْ يَحْتَسِبُوا ۖ وَقَذَفَ فِي قُلُوبِهِمُ الرُّعْبَ ۗ يُخْرِبُونَ بُيُوتَهُمْ بِأَيْدِيهِمْ وَأَيْدِي الْمُؤْمِنِينَ فَاعْتَبِرُوا يَا أُولِي 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 وَلِإِخْوَانِنَا الَّذِينَ سَبَقُونَا بِالْإِيمَانِ وَلَا تَجْعَلْ فِي قُلُوبِنَا غِلًّا لِلَّذِينَ آمَنُوا رَبَّنَا إِنَّكَ رَءُوفٌ رَحِيمٌ

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 وَاجِفَةٌ

79:8 That Day, some minds will tremble with fear.

نَارُ اللَّهِ الَّتِي تَطَّلِعُ عَلَى الْفُؤَادِ

104:6-7 (It is) the Fire (i.e., the wrath) of Allah kindled, which reaches up to (the faculty of) feeling.

مُهْطِعِينَ مُقْنِعِي رُءُوسِهِمْ لَا يَرْتَدُّ إِلَيْهِمْ طَرْفُهُمْ 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 إِنِّي أَسْكَنْتُ مِنْ ذُرِّيَّتِي بِوَادٍ غَيْرِ ذِي زَرْعٍ عِنْدَ بَيْتِكَ الْمُحَرَّمِ رَبَّنَا لِيُقِيمُوا الصَّلَاةَ فَاجْعَلْ أَفْئِدَةً مِنَ النَّاسِ تَهْوِي إِلَيْهِمْ وَارْزُقْهُمْ مِنَ الثَّمَرَاتِ 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.

وَلِتَصْغَىٰ إِلَيْهِ أَفْئِدَةُ الَّذِينَ لَا يُؤْمِنُونَ بِالْآخِرَةِ وَلِيَرْضَوْهُ وَلِيَقْتَرِفُوا مَا هُمْ مُقْتَرِفُونَ

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).

وَنُقَلِّبُ أَفْئِدَتَهُمْ وَأَبْصَارَهُمْ كَمَا لَمْ يُؤْمِنُوا بِهِ أَوْلَٰى مَرَّةٍ وَنَذَرُهُمْ فِي طُغْيَانِهِمْ يَعْمَهُونَ

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 كَذَّبَ الْفُؤَادُ مَا رَأَىٰ

53:11 (Prophet Muhammad's faculty of) feeling had not falsified what he saw.

وَقَالَ الَّذِينَ كَفَرُوا لَوْلَا نُزِّلَ عَلَيْهِ الْقُرْآنُ جُمْلَةً وَاحِدَةً كَذَلِكَ لِنُثَبِّتَ بِهِ فُؤَادَكَ وَرَتَّلْنَاهُ تَرْتِيلًا

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 unhurriedly (in stages).

وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهِ عِلْمٌ إِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادَ كُلُّ أُولَٰئِكَ كَانَ عَنْهُ مَسْئُولًا

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).

وَكُلًّا نَقُصُّ عَلَيْكَ مِنْ أَنْبَاءِ الرُّسُلِ مَا نُثَبِّتُ بِهِ فُؤَادَكَ وَجَاءَكَ فِي هَذِهِ الْحَقُّ وَمَوْعِظَةٌ وَذِكْرٌ 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” [2], 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 خَائِنَةَ الْأَعْيُنِ وَمَا تُخْفِي الصُّدُورُ

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

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَتَّخِذُوا بَطَانَةً مِنْ دُونِكُمْ لَا يَأْلُونَكُمْ خَبَالًا وَدُّوا مَا عَنِتُّمْ قَدْ بَدَتِ الْبَغْضَاءُ مِنْ أَفْوَاهِهِمْ وَمَا تُخْفِي صُدُورُهُمْ أَكْبَرُ قَدْ بَيَّنَّا 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 غَنِيٌّ عَنْكُمْ وَلَا يَرْضَىٰ لِعِبَادِهِ الْكُفْرَ وَإِنْ تَشْكُرُوا يَرْضَهُ لَكُمْ وَلَا تَزِرُ وَازِرَةٌ وِزْرَ أُخْرَىٰ ثُمَّ إِلَىٰ رَبِّكُمْ مَرْجِعُكُمْ فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ إِنَّهُ 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 عَالِمُ غَيْبِ السَّمَاوَاتِ وَالْأَرْضِ إِنَّهُ 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 يَحْزُنكَ كُفْرُهُ إِلَيْنَا مَرْجِعُهُمْ فَنُنَبِّئُهُمْ بِمَا 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 كَعَذَابِ اللَّهِ وَلَئِنْ جَاءَ نَصْرٌ مِنْ رَبِّكَ لَيَقُولُنَّ إِنَّا كُنَّا مَعَكُمْ أَوْلَىٰ أَلَيْسَ اللَّهُ بِأَعْلَمَ بِمَا 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 خَلَقْنَا مِمَّا يَكْفُرُ فِي صُدُورِكُمْ فَسَيَقُولُونَ مَنْ يُعِيدُنَا قُلِ الَّذِي فَطَرَكُمْ أَوَّلَ مَرَّةٍ فَسَيُنْغِضُونَ إِلَيْكَ رُءُوسَهُمْ وَيَقُولُونَ مَتَىٰ هُوَ قُلْ عَسَىٰ 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)

وَحِصْلَ 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 أَنْزَلْنَا إِلَيْكَ فَلَا يَكُنْ فِي صَدْرِكَ حَرَجٌ مِنْهُ لِتُنذِرَ بِهِ وَذِكْرَى 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 أُوتُوا 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 *jinn*s 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 نَعْلَمُ أَنَّكَ يَضِيقُ صَدْرُكَ بِمَا يَقُولُونَ

15:97 We certainly know how distressed your memory is because of what they say.

إِلَّا الَّذِينَ يَصِلُونَ إِلَى قَوْمٍ بَيْنَكُمْ وَبَيْنَهُمْ مِيثَاقٌ أَوْ جَاءُوكُمْ حَصِرَتْ صُدُورُهُمْ أَنْ يُقَاتِلُوكُمْ أَوْ يُقَاتِلُوا قَوْمَهُمْ وَلَوْ شَاءَ اللَّهُ لَسَلَّطَهُمْ عَلَيْكُمْ فَلَقَاتَلُوكُمْ فَإِنِ اعْتَرَفُوكُمْ فَلَمْ يُقَاتِلُوكُمْ وَأَلْفَوْا إِلَيْكُمْ السَّلَمَ فَمَا جَعَلَ اللَّهُ لَكُمْ عَلَيْهِمْ سَبِيلًا

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.

لَأَنْتُمْ أَشَدُّ 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 نَبَّؤُوا الدَّارَ وَالْإِيمَانَ مِنْ قَبْلِهِمْ يُحِبُّونَ مَنْ هَاجَرَ إِلَيْهِمْ وَلَا يَجِدُونَ فِي صُدُورِهِمْ حَاجَةً مِمَّا أُوتُوا وَيُؤْثِرُونَ عَلَىٰ أَنفُسِهِمْ وَلَوْ كَانَ بِهِمْ خَصَاصَةٌ وَمَنْ يُوقِ شُحَّ نَفْسِهِ فَأُولَٰئِكَ هُمُ الْمُفْلِحُونَ

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.

وَأَلْكُمْ فِيهَا مَنَافِعَ وَلِتَبْتَغُوا عَلَيْهَا حَاجَةً فِي صُدُورِكُمْ وَعَلَيْهَا وَعَلَى الْفُلْكِ تُحْمَلُونَ

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 بِغَيْرِ سُلْطَانٍ أَتَاهُمْ إِنْ فِي صُدُورِهِمْ إِلَّا كِبْرٌ مَا هُمْ بِبَالِغِيهِ فَاسْتَعِذْ 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 غِلٍّ إِخْوَانًا عَلَىٰ سُرُرٍ مُتَقَابِلِينَ

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 غِلٍّ تَجْرِي مِنْ تَحْتِهِمُ الْأَنْهَارُ وَقَالُوا الْحَمْدُ لِلَّهِ الَّذِي هَدَانَا لِهَذَا وَمَا كُنَّا لِنَهْتَدِيَ لَوْلَا أَنْ هَدَانَا اللَّهُ لَقَدْ جَاءَتْ رَسُولٌ رَبِّنَا بِالْحَقِّ وَتُودُوا أَنْ تُلَكُمُ الْجَنَّةَ أَوْ رَتَّبْتُمُوهَا بِمَا 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 وَشِفَاءٌ لِمَا فِي الصُّدُورِ وَهُدًى وَرَحْمَةٌ لِلْمُؤْمِنِينَ

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.

فَاتْلُوهُمْ يُعَذِّبُهُمُ اللَّهُ بِأَيْدِيكُمْ وَيُخْزِرِهِمْ وَيَنْصُرْكُمْ عَلَيْهِمْ وَيَشْفِ صُدُورَ قَوْمٍ مُؤْمِنِينَ وَيُذْهِبْ غَيْظَ 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 *sadr* (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.

أَلَمْ تَشْرَحْ لَكَ صَدْرَكَ

94:1 Have We not expanded your memory for you (Prophet Muhammad)?

أَفَمَنْ شَرَحَ اللَّهُ صَدْرَهُ لِلْإِسْلَامِ فَهُوَ عَلَىٰ نُورٍ مِنْ رَبِّهِ فَوَيْلٌ لِلْقَاسِيَةِ قُلُوبُهُمْ مِنْ ذِكْرِ اللَّهِ أُولَٰئِكَ فِي ضَلَالٍ مُبِينٍ

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 رَبِّ اشْرَحْ لِي صَدْرِي

20:25 (Prophet Moses) said: O my Lord! Expand my memory for me.

فَمَنْ يُرِدِ اللَّهُ أَنْ يَهْدِيَهُ يَشْرَحْ صَدْرَهُ لِلْإِسْلَامِ وَمَنْ يُرِدْ أَنْ يُضِلَّهُ يَجْعَلْ صَدْرَهُ ضَيِّقًا حَرَجًا كَأَنَّما يَصْعَدُ فِي السَّمَاءِ كَذَٰلِكَ يَجْعَلُ اللَّهُ الرِّجْسَ 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.

فَلَعَلَّكَ تَارِكٌ بَعْضَ مَا يُوحَىٰ إِلَيْكَ وَضَائِقٌ بِهِ صَدْرُكَ أَنْ يَقُولُوا لَوْلَا أُنزِلَ عَلَيْهِ كُتُبٌ 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 Muhammad) 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.

وَيَضِيقُ صَدْرِي وَلَا يَنْطَلِقُ 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 وَقَلْبُهُ مُطْمَئِنٌّ بِالْإِيمَانِ وَلَكِنْ مَنْ شَرَحَ بِالْكُفْرِ صَدْرًا فَعَلَيْهِمْ غَضَبٌ مِنَ اللَّهِ وَلَهُمْ 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.

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.

أُولَٰئِكَ الَّذِينَ يَعْلَمُ اللَّهُ مَا فِي قُلُوبِهِمْ فَأَعْرِضْ عَنْهُمْ وَعِظْهُمْ وَقُلْ لَهُمْ فِي أَنفُسِهِمْ قَوْلًا بَلِيغًا

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 تُخْفُوا مَا فِي صُدُورِكُمْ أَوْ تُبْدُوهُ يُعْلَمَهُ اللَّهُ ۗ وَيَعْلَمُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ ۗ وَاللَّهُ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

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.

ثُمَّ أَنْزَلَ عَلَيْكُم مِّن بَعْدِ الْغَمِّ أَمَنَةً نُّعَاسًا يَغْشَىٰ طَائِفَةٌ مِّنكُمْ ۖ وَطَائِفَةٌ قَدْ أَهَمَّتْهُمْ أَنفُسُهُمْ يَظُنُّونَ بِاللَّهِ غَيْرَ الْحَقِّ ظَنَّ الْجَاهِلِيَّةِ يَقُولُونَ هَل لَّنَا مِنَ الْأَمْرِ مِنْ شَيْءٍ ۗ قُلْ إِنَّ الْأَمْرَ كُلَّهُ لِلَّهِ يُخْفُونَ فِي أَنفُسِهِمْ مَا لَا يُبْدُونَ لَكَ يَقُولُونَ لَوْ كَانَ لَنَا مِنَ الْأَمْرِ شَيْءٌ مَا قُتِلْنَا هَاهُنَا ۗ قُلْ لَوْ كُنْتُمْ فِي بُيُوتِكُمْ لَبَرَزَ الَّذِينَ كُتِبَ عَلَيْهِمُ الْقَتْلُ إِلَىٰ مَضَاجِعِهِمْ ۖ وَلِيَبْتَلِيَ اللَّهُ مَا فِي صُدُورِكُمْ وَلِيُمَحَّصَ مَا فِي قُلُوبِكُمْ ۗ وَاللَّهُ عَلِيمٌ بِذَاتِ 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 مِّنْ أَرَاكُمُ كَثِيرًا لَّفَسَلْتُمْ وَلَتَنَازَعْتُمْ فِي الْأَمْرِ وَلَكِنَّ اللَّهَ سَلَّمَ إِنَّهُ عَلِيمٌ بِذَاتِ 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.

هَآ أَنْتُمْ أَوْ لَآءِ تُحِبُّونَهُمْ وَلَا يُحِبُّونَكُمْ وَتُؤْمِنُونَ بِالْكِتَابِ كُلِّهِ وَإِذَا لُؤُكُمُ قَالُوا آمَنَّا وَإِذَا خَلَوْا عَضُّوا عَلَيْكُمُ الْأَنَامِلَ مِنَ الْغَيْظِ قُلْ مُوتُوا بِغَيْظِكُمْ إِنَّ اللَّهَ عَلِيمٌ بِذَاتِ 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.

وَأذْكُرُوا نِعْمَةَ اللَّهِ عَلَيْكُمْ وَمِيثَاقَهُ الَّذِي وَاثَقَكُم بِهِ إِذْ قُلْتُمْ سَمِعْنَا وَأَطَعْنَا وَأَتَقُوا اللَّهَ إِنَّ اللَّهَ عَلِيمٌ بِذَاتِ 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 يَنْتُونِ صُدُورَهُمْ لِيَسْتَخْفُوا مِنْهُ أَلَا حِينَ يَسْتَعْشُونَ نَبِيَّهُمْ يَعْلَمُ مَا يُسِرُّونَ وَمَا يُعْلِنُونَ 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.

وَأَسِرُّوا قَوْلَكُمْ أَوِ 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 تُسِرُّونَ وَمَا تُعْلِنُونَ 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 وَيُؤَلِّجُ النَّهَارَ فِي اللَّيْلِ 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 افْتَرَىٰ عَلَى اللَّهِ كَذِبًا فَإِنْ يَشَأِ اللَّهُ يَخْتِمْ عَلَىٰ قَلْبِكَ وَيَمْحُ اللَّهُ الْبَاطِلَ وَيُحِقُّ 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.

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 يَتَلَقَّى الْمُتَلَقِّيَانِ عَنِ الْيَمِينِ وَعَنِ الشَّمَالِ قَعِيدٌ مَّا يَلْفِظُ مَن 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 كِرَامًا كَاتِبِينَ يَعْلَمُونَ مَا تَفْعَلُونَ

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 لَكَنُودٌ وَإِنَّهُ عَلَىٰ ذَٰلِكَ لَشَهِيدٌ وَإِنَّهُ لِحُبِّ الْخَيْرِ لَشَدِيدٌ أَفَلَا يَعْلَمُ إِذَا بُعْثِرَ مَا فِي الْقُبُورِ وَحُصِّلَ مَا فِي الصُّدُورِ إِنَّ رَبَّهُمْ بِهِمْ يَوْمَئِذٍ لَّخَبِيرٌ

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 أَلْزَمْنَاهُ طَائِرَهُ فِي عُنُقِهِ وَنُخْرِجُ لَهُ يَوْمَ الْقِيَامَةِ كِتَابًا يَلْقَاهُ مَنشُورًا أَفْرَأَ كِتَابِكَ كَفَىٰ 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 تَخْفَىٰ مِنْكُمْ خَافِيَةٌ

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 نَخْتِمُ عَلَىٰ أَفْوَاهِهِمْ وَتُكَلِّمُنَا أَيْدِيهِمْ وَتَشْهَدُ أَرْجُلُهُمْ بِمَا 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 شَهِدَ عَلَيْهِمْ سَمْعُهُمْ وَأَبْصَارُهُمْ وَجُلُودُهُمْ بِمَا كَانُوا يَعْمَلُونَ وَقَالُوا لَوْلَا دُعِينَا لَهُم لِمْ شَهِدْتُمْ عَلَيْنَا قَالُوا أَنْطَقَنَا اللَّهُ الَّذِي أَنْطَقَ كُلَّ شَيْءٍ وَهُوَ خَلَقَكُمْ أَوَّلَ مَرَّةٍ وَإِلَيْهِ تُرْجَعُونَ وَمَا كُنْتُمْ تَسْتَكْبِرُونَ أَنْ يَشْهَدَ عَلَيْكُمْ سَمْعُكُمْ وَلَا أَبْصَارُكُمْ وَلَا جُلُودُكُمْ وَلَكِنْ ظَنَنْتُمْ أَنَّ اللَّهَ لَا يَعْلَمُ كَثِيرًا مِمَّا تَعْمَلُونَ وَذَلِكُمْ ظَنُّكُمُ الَّذِي ظَنَنْتُمْ بِرَبِّكُمْ أَرْدَاكُمْ 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 فَتَعْلَمُونَ لَهُمْ قُلُوبٌ يَعْقِلُونَ بِهَا أَوْ آدَانٌ يَسْمَعُونَ بِهَا لَئِنَّمَا أَفْئِدَتُهُمْ لَا تَعْمَى الْأَبْصَارُ وَلَكِنْ تَعْمَى 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*.

وَكُلِّ إِنْسَانٍ أَلْزَمْنَاهُ طَائِرَهُ فِي عُنُقِهِ ۖ وَنُخْرِجُ 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. 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.

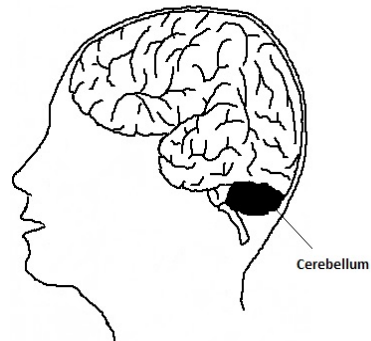


Fig. 1. Cerebellum – probable location of mind (*qalb*) and memory (*sadr*)

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. The cerebellum receives about 200 million input fibers; in contrast, the optic nerve is composed of a mere one million fibers [3]. It coordinates voluntary movements (e.g. walking, posture and speech) and is important for learning motor (skilled) behaviours [4]. 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 [5]. 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.

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.

قُلْ هُوَ الَّذِي أَنْشَأَكُمْ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ قَلِيلًا مَّا 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 أَمْشَاجٍ نَبْتَلِيهِ 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.

وَلَقَدْ مَكَّنَّاهُمْ فِيمَا إِنْ مَكَّنَّاكُمْ فِيهِ وَجَعَلْنَا لَهُمْ سَمْعًا وَأَبْصَارًا وَأَفْئِدَةً فَمَا أَغْنَىٰ عَنْهُمْ سَمْعُهُمْ وَلَا أَبْصَارُهُمْ وَلَا أَفْئِدَتُهُمْ مِنْ شَيْءٍ إِذْ كَانُوا يَجْحَدُونَ بِآيَاتِ اللَّهِ وَحَاقَ بِهِمْ مَا كَانُوا بِهِ يَسْتَهْزِئُونَ

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 اتَّخَذَ إِلَهَهُ هَوَاهُ وَأَصْلَلَهُ اللَّهُ عَلَىٰ عِلْمٍ وَخَتَمَ عَلَىٰ سَمْعِهِ وَقَلْبِهِ وَجَعَلَ عَلَىٰ بَصَرِهِ غِشَاوَةً فَمَنْ يَهْدِيهِ مِنْ بَعْدِ
اللَّهِ أَفَلَا تَذَكَّرُونَ

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 وَنَفَخَ فِيهِ مِنْ رُوحِهِ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ ۗ قَلِيلًا مَّا 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 وَالْأَفْئِدَةَ ۗ قَلِيلًا مَّا 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 أُولَٰئِكَ كَانَ عَنْهُ مَسْئُولًا

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 بِمَا 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 تَسْتَتِرُونَ أَنْ يَشْهَدَ عَلَيْكُمْ سَمْعُكُمْ وَلَا أَبْصَارُكُمْ وَلَا جُلُودُكُمْ وَلَكِنْ ظَنَنْتُمْ أَنَّ اللَّهَ لَا يَعْلَمُ كَثِيرًا مِمَّا 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 وَالْأَفْئِدَةَ ۗ 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).

قُلْ مَنْ يَرْزُقُكُمْ مِنَ السَّمَاءِ وَالْأَرْضِ أَمْ مَنْ يَمْلِكُ السَّمْعَ وَالْأَبْصَارَ وَمَنْ يُخْرِجُ الْحَيَّ مِنَ الْمَيِّتِ وَيُخْرِجُ الْمَيِّتَ مِنَ الْحَيِّ
وَمَنْ يُدَبِّرُ الْأُمْرَ ۗ فَسَيَقُولُونَ اللَّهُ ۗ قُلْ 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)?

قُلْ أَرَأَيْتُمْ إِنْ أَخَذَ اللَّهُ سَمْعَكُمْ وَأَبْصَارَكُمْ وَخَتَمَ عَلَىٰ قُلُوبِكُمْ مَنْ إِلَهٌ غَيْرُ اللَّهِ يَأْتِيكُمْ بِهِ ۗ انظُرْ كَيْفَ نُصَرِّفُ الْآيَاتِ ثُمَّ هُمْ
يَصْدِفُونَ

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 يَخْطَفُ أَبْصَارَهُمْ كُلَّمَا أَضَاءَ لَهُمْ مَشَوْا فِيهِ 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.

حَتَّمَ اللَّهُ عَلَى قُلُوبِهِمْ وَعَلَى سَمْعِهِمْ وَعَلَى أَبْصَارِهِمْ غِشَاوَةً 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.

عَلَّمَهُ الْبَيَانَ

55:4 He taught him to speak.

The Quran also informs that Allah taught man how to write (Q. 96:3-5).

اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ بِالْقَلَمِ عَلَّمَ 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 خَلْقَ السَّمَاوَاتِ وَالْأَرْضِ وَالاختلافُ ألسنتيكم وألوانيكم ة إن في ذلك لآياتٍ للعالمين

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.

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 biosystem. 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. When a language is invented (developed), it provides information about its alphabets, words, meaning, grammar, 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.

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