

THE CONCEPT OF MATERIAL TRANSFER FROM ONE PLACE TO OTHER AT THE SPEED OF LIGHT AND REDUCING CAUSES OF EARTHQUAKE: DEVELOPED BASED ON THE HINTS OF QURANIC VERSES[©]

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ABSTRACT

Present technology transfers audio and video signals from one place to other in the globe as well as in the space at a speed such that people can communicate with each other instantaneously. Modern civilization will move one step ahead if it can transfer material at the same speed. On the other hand, often modern civilization faces a tremendous loss caused by the earthquake. With a view to provide researchers the ways of getting benefits from the scientific research hints of the Quranic verses, this paper proposes some initial ideas of transferring materials from one place to other at a speed at which the telecommunication channels are transferring data. It also proposes initial ideas of reducing causes of the earthquake. The ideas are developed based on the hints of the verses of the Quran. The paper utilizes the technique of critical analysis of the relevant verses of the Quran and then correlating with the scientific theories and related technologies. The paper also presents a discussion on the degree of matching of the technologies of some devices and some theories with the hints of the verses of the Quran. It is expected that the proposed ideas will encourage researchers to move further.

Keywords: *Hints for Aero Plane Development, Surface Tension, Big Bang Theory, Multiverse Hypothesis, and Material Transfer Through Telecommunication Channels.*

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1. INTRODUCTION

The Quran provides the guidance for the better life of a man in this world and also for the life after death. This betterment is not only for the 'Muttaqin' (Allah fearer) or 'Mumenun' (believer) but also for the whole mankind. The scientific and technological development has the major contribution to the development of modern civilization. The degree of modernization increases with the increase of scientific and technological development. The Quran has distinct scientific research hints in it.

A group of researchers contributed to explore the correlation between the science and the Quran. Nidhal Guessoum observes that the Quran has an unparalleled influence on the Muslim mind. However, they have the misunderstanding about the nature due to their multiplicity of readings of the Quran. The author recommends that the scientific method and its philosophy must be fully comprehended before anyone puts forward any interpretation of religious texts that appear to have some relation with science.

M.A. Kasmoo et. al. present a survey report on the acceptability of the title statement. The survey results show that the majority of the respondents accept that the Quran and the science are compatible. It also reveals that the response of a respondent has an impact of his/her religion.

Mira Bajrova presents that the instructions of Quran and Hadith regarding the hygiene of a human body have significant advantages according to the medical science. She recommends that if anyone follows these instructions he/she will be protected from the diseases.

M. Mukri et. Al. state that without science, the Quran is merely texts that cannot explain natural phenomena in detail and contain universal teachings that still leave question mark. The existence of science could make the Quran to be more alive and meaningful because science has been able to prove the truth of the Quran. Science and technology became a symbol of progress in the era of industrial revolution. However, this progress has both positive and negative impacts. The authors recommend choosing the right technology through clear understanding of the Quran.

M. Mahjoob et. al. reports a study to determine the effect of the Quran without musical tone on the mental health. The results suggest that Quran listening could be recommended by psychologists for improving the mental health and achieving calm.

This paper investigates some of the verses that have hints of scientific ideas. These ideas are analyzed based on the principle of current technical devices and or systems and theories with a view to extract the appropriate guidance of these verses.

The analysis clearly reveals that if the research hints of some of the verses of the holy Quran were followed to do the research appropriately the device like aero plane and theories like ‘big bang’ and ‘multiverse’ could be developed earlier. It also reveals that there are many verses in the Holy Quran, the research hints of which can be conceived with the present technological development. With these hints the appropriate research may lead to develop techniques that will be beneficial for the human being, like the techniques of the transfer of material from one place to other at the speed at which present technology transmits voice or data. This paper develops the concept of material transfer based on the research hints of the Quran and the telecommunication technology. The hints provided in the Quran through the description of the structure and the functions of a mountain are based to also develop technique to reduce the causes of the earthquake.

The paper is organized through the presentation of abstract and introduction of the paper in the beginning. The relevant features of the Quran and the classification of its research hints are presented in Sections 2 and 3, respectively. Few examples of already materialized research hints are given in Section 4. The basic concept of material transfer along with a couple of examples and the concept of reducing the causes of the earthquake are presented in Section 5. The paper completes its presentation through conclusions at the end.

2. RELEVANT FEATURES OF THE QURAN

In verse 27 of surah 38, the Quran states that Allah has not created the sky, the earth and things in between these two unnecessary. That is, the creation of everything in the universe has certain objectives. In verse (2:29), Allah has said that He has created everything for the benefit of human being. The translation of the verse is, “It is He Who has created for you all things that are on earth; moreover His design comprehended the heavens, for He gave order and perfection to the seven firmaments; and of all things He has perfect knowledge”.

As research guidance the most important feature of the Quran is that it does not contain any verse which is wrong or it has any doubt in it. The following verse supports this feature of the Quran.

ذٰلِكَ الْكِتٰبُ لَا رَيْبَ فِيْهِ هُدًى لِّلْمُتَّقِيْنَ. (2:2)

“This is the Book about which there is no doubt, guidance for those conscious of Allah” (2:2).

Moreover, by no means any false or wrong statement can enter into this book. The verse (41:42) justifies that by presenting “Falsehood cannot approach it from before it or from behind it; [it is] a revelation from a [Lord who is] Wise and Praiseworthy”.

It does not have any contradictory verse. In the verse (4:82) it is mentioned that if the book were from any entity other than Allah one would find in the book lots of contradictions. The translation of the verse (4:82) is, “Then do they not reflect upon the Qur'an? If it had been from [any] other than Allah, they would have found within it much contradiction”. That is, as Quran is revealed from Allah (SWT) one will not find any contradictions among the verses when he studies this book deeply.

In many places of the Quran, it is mentioned that the book has been made easy to understand. It is important to note that a verse with this feature is repeated four times in Sura Qamar. The translation of the verse is, “And We have indeed made the Qur'an easy to understand and remember: then is there any that will receive admonition?” (54:17, 22, 32, 40). The verse reveals that the Quran is easy to understand and memorize as well as to get advice.

The book is also free from any crookedness. This feature of the Quran is presented in (18:1), the translation of which is “Praise be to Allah, Who hath sent to His Servant the Book, and hath allowed therein no Crookedness”.

The above analysis clearly shows that the Quran holds all the properties of a research guide book as,

- (i) all the statements are perfect and the correctness of those are beyond any doubt
- (ii) all the information of the book are for the benefit of human being and
- (iii) the verses are easy to understand

3. CLASIFICATION OF RESEARCH HINTS OF THE QURAN

If one compares the theories and the concept of some devices, which have already been developed, with the guidance or the hints of relevant verses he or she would surprisingly notice that the people could develop those theories and devices earlier if he/she followed the guidance or the hints of the Quran.

For example, in sura Ar-Rahman (55:19-20) Allah (SWT) revealed more than fourteen hundred years ago that

مَرَجَ الْبَحْرَيْنِ يَلْتَقِيَانِ . بَيْنَهُمَا بَرْزَخٌ لَا يَبْغِيَانِ . (55:19-20)

“He has let loose the two seas (the salt and the fresh water) meeting together. Between them is a barrier, which none of them can transgress?”(55:19-20). The verse (25:53) also reveals the similar concept.

The reason of two water bodies of two different seas/oceans meeting each other without mixing immediately is the ‘Surface Tension’. The surface tension within liquid is that molecules attract each other in all directions. At the surface, however, there is no force attracting them outward. So the molecules are pulled towards the interior of the liquid. Fig.1 illustrates this.

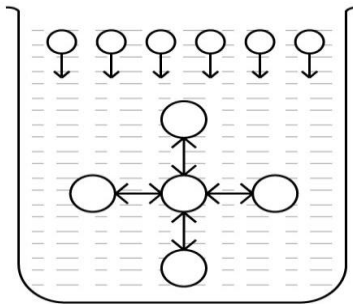


Fig. 1: Surface tension in liquid



Fig. 2 Two oceans meeting in Alaskan gulf without mixing¹⁵

In case of water bodies of seas/oceans of different salinity and densities, a surface tension is developed between them that acts like a thin wall and does not allow them to mix. Fig. 2 depicts water bodies of two different oceans meeting in the middle of Alaskan gulf are not mixing at the merging junction.

Note that the concept of surface tension is developed only in eighteenth century.

However, there are some verses, the concept of which may appear to the people, with the present scientific knowledge, absurd or impossible to implement in real life. For example, the verse (21:69) presents that Allah (SWT) ordered the fire to become cool and comfortable for Ibrahim (PUH). The verse is

قُلْنَا يَا نَارُ كُونِي بَرْدًا وَسَلَامًا عَلَىٰ إِبْرَاهِيمَ (21:69).

"Allah said, "O fire, be coolness and safety upon Abraham" (21:69). The concept of 'fire' becoming cool and comfortable is difficult to conceive with the present technological development. It is expected that the guidance or hints of the verse will be clear with the further development of science.

Again there are some verses, the concept of which is realizable with the present technological development, but the implementation into the real life may be difficult. For example, the verse (2:259) presents that the food and drink remain unchanged, do not become musty, for a long duration of 100 years. With the present technological knowledge the food or drink can be preserved for few months and in some cases may be few years. But for a longer duration, the retention of the original quality becomes a question. Definitely, the preservation of the food or the drink for 100 years maintaining the original quality requires further technological development.

From the above analysis, the verses with the scientific ideas of the Quran may be classified as

1. Verses, the guidance of which could be used to develop devices or theories earlier which have already been invented.
2. Verses, the guidance of which can be conceived with the present scientific and technological development.
3. Verses, the guidance of which will be conceivable with the further scientific and technological development. In the following sections/subsections few more examples of each class are presented.

4. DEVICE AND THEORIES THAT COULD BE DEVELOPED EARLIER

In Section 2.0, it is presented that everything in the universe is created with certain objective and one should read the verses of the Quran deeply? If one does it, he can contribute significantly towards the benefit of human being as well as

towards the development of science and technology. In what follows few examples are presented.

4.1 Development of aero planes

The invention of the aero plane is a milestone of the modern civilization. Although in 1903 Wright brothers were able to fly first with a sustained and controlled heavier than air powered aero plane, however, it was a success after a number of failures starting from seventeenth century. Modern aero planes use jet engines with a cruising speed of 700 to 900 km/hour.

Fig.3 depicts a bird and an aero plane. They look similar in shape. The shape of the wings of the aero plane is designed like the bird's wings, called airfoil. This type of shape of the wing helps create lift. The wing deflects air as the aircraft moves forward, generating lift force to support it in flight.



Fig. 3: (a) A typical Bird, (b) A typical Aero Plane

The similar concept of aero planes has been available in the Quran from its revelation fourteen hundred years back. The translation of therelevant portion of the verse (5:110) is, "..... [remember] when I taught you writing and wisdom and the Torah and the Gospel; and when you designed from clay [what was] like the form of a bird with My permission, then you breathed into it, and it became a bird with My permission; and you healed the blind and the leper with My permission;"

The above verse presents that Allah (SWT) taught Isa (AS) three books and wisdom 'Hikmah'. Among the three, the names of two books, Tawrat and Enjil, are mentioned without mentioning the third one. The verse also mentioned that Isa (AS) then manufactured the aero plane. That is, after becoming knowledgeable about the three books he was able to manufacture the

plane with the intelligence and technique. Although the name of third book or the type of book is not mentioned in the verse, one may easily guess that the book was the book of science or engineering or both as it is relevant to the manufacturing process of the aero plane. The verse also described that the shape of the designed plane was similar to the shape of a bird.

According to the verse, after the construction Isa (AS) flew the plane with the permission of Allah. Now, the question may arise, what type of this permission is and how it can be obtained from Allah (SWT). Isa (AS) was the prophet of Allah (SWT). It was easy for him to approach to Allah (SWT) through an angel. But, it is not for the common people.

The verse has clear guidance of the development of the aero plane. The development of an aero plane requires the following,

1. Knowledge of appropriate science and engineering and also the revealed book
2. Wisdom to construct a structure similar to the shape of a bird
3. Air force to operate the plane and
4. Permission of Allah.

The last one may not be achievable by the common people. But the verse is for the benefit of all the people. Therefore, 'the permission' must have some indirect meaning. That meaning is when the construction is complete, with the intelligence (wisdom) it should be verified whether the structure complies with the standard specification given in the book or not. If the constructed one does not comply with the standard specification it is not allowed (permitted) to fly.

Now if someone compares between the aero plane of Isa (AS) with the modern one he/she will find the following similarities:

1. The structure of a modern plane is designed such that its shape is similar to the shape of a bird. Isa (AS) also constructed the plane, the shape of which is similar to the shape of a bird.
2. The modern plane use mainly jet engines and in some cases propeller for its operation. Both jet engines and propeller make thrust on the air to move forward as well as to lift the plane. Isa (AS) also breathed to operate his plane.

The comparison clearly shows that both the modern planes and that of Isa (AS) are similar in shape and the operating principle is also same. That is, if the research on the plane were started fourteen hundred years ago, when the

Quran was revealed, the aero plane, with the research hints given in the Quran, could be invented earlier.

4.2 Big Bang Theory

The 'Big Bang' theory explains what happened at the very beginning of the creation of our universe. It has a beginning. Prior to that moment there was nothing. The universe came into existence around 13.8 billion years ago. After its initial appearance in a Planck time, approximately 10^{-43} seconds or less than that, it inflated (the big bang), expanded and cooled, going from very small, hot and dense to the size and temperature of the current universe. The current diameter of the continuously expanding universe is around 92 billion light years. The expanding universe in time line is depicted in Fig 4.

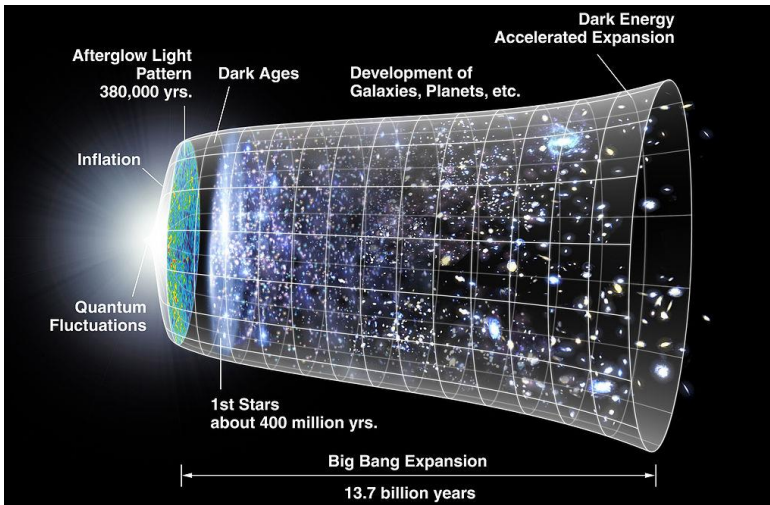


Fig: 4: Expanding universe in time domain

The total mass-energy of the universe contains 4.9% ordinary matter, 26.8% dark matter and 68.3% dark energy. Thus dark matter constitutes 84.5% of the total mass, while dark matter plus dark energy constitutes 95.1% of the total mass-energy content. Note that dark matter is an unidentified invisible type matter. Although it is not directly observed, however, its existence is inferred from its gravitational effects.

What does the holy Quran say regarding the creation of the universe? In verse 30 of 'SuraAmbia' the Quran presents;

أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا وَجَعَلْنَا مِنَ
الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ. (21:30)

“Have those who disbelieved not considered that the heavens and the earth were a joined entity, and We separated them and made from water every living thing? Then will they not believe?” [21:30]

In the above verse (21:30), the word (رَتْقًا) means anything close/solid/impervious/united together in one solid mass. The impervious property of solid increases as its density increases. The word (فَتَقَ) of the same verse means to split/to cleave asunder⁴. The verse indicates that the heavens and the earth were a single solid dense mass and they were separated into pieces (individual entities). That is, the basic concept of 'Big Bang theory' of the creation of the universes from a single dense mass is similar to what the verse (21:30) revealed more than fourteen hundred years back.

4.3 Multiverse hypothesis

The multiverse is a hypothetical concept that proposes the existence of more universes in addition to the universe where we live in; these universes comprise everything that exists; the entirety of space, time, matter, energy and the physical law and constants that describe them. The concepts originated by Erwin Schrodinger in 1952 through a set of noble equations that describe several different histories, all happened simultaneously.



Fig. 5: Bubble universe

The structure of the multiverse, the nature of each universe within it, and the relationships among these universes differ from one multiverse hypothesis to other. Many renowned scientists including Nobel laureate who are the proponent and skeptics of multiverse hypothesis. Max Tegmark and Brian Greene have devised classification schemes for the various theoretical types of universe that a multiverse might comprise. Max Tegmark classifies the universes into four levels such that one level encompasses and expands upon previous levels.

Fig. 5 depicts the bubble universes. Every disk of the figure represents a universe. Five of them have different physical constants than our universe has. The cosmic inflation theory describes that the multiverse or space as a whole is stretching and will continue doing as forever, but some regions of space stop stretching and form distinct bubbles.

Since it has not yet been possible to verify the multiverse hypothesis experimentally or there is no evidence of any gravitational pull of other universes on ours, some physicists disagree whether the multiverse exists. Some have the opinion that the multiverse is a philosophical rather than a scientific hypothesis because it cannot be falsified.

Is there any indication or guidance in the Quran relevant to the multiverse hypothesis? In what follows three verses are presented, each of which has explicit indication of 'Multiverse'.

(i) In the second verse of first surah, Al-Fatihah, the Quran reveals,

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ (1:2)

“All the praises and thanks be to Allah, the lord of the ‘Alamin’ (mankind, jinn and all that exists)”(1:2). In the above verse, the word **عَالَمِينَ** is the plural of **عَالَمٌ**.

Usually, the word **عَالَمِينَ** is spoken to mean the three rational creatures, man, jinn, and the angels⁴. However, besides, these three species there are thousands of living species. The lord of all those creatures is also Allah. Moreover, there are numerous non-living things, like the ocean, sea, river, mountain etc. in the earth (**أَرْضٍ**). If one looks outside the earth he notices the planets and the stars and these are the constituents of a galaxy. There are billions of galaxies. All these galaxies form the universe, **عَالَمٌ**, where we live in. In the verse (1:2), a word **أَل** is

added in the beginning of **عَالَمِينَ** . **ال** is a definite article equivalent to 'The'. 'The' is used to mean a particular thing or a class, and the class constitutes all types in that class. For example, 'the cow' means a particular cow. But it also means all types of cows. Similarly, **حَمْدٌ** means praise. **أَحْمَدٌ** Means all (types) praises. That is **العَالَمِينَ** means the 'universes', not our universe only but also all other universes. It may also mean all types of universes. There may be many types of universes, and each type may consist of many. Therefore, Allah is the lord of all types of universes.

(ii) In verse (21:30), two classes of constituents of a single solid mass are mentioned. These two constituents are the world (**الأَرْضُ**) and the universes (**السَّمَاوَاتِ**). The verse is,

**أَوَمْ يَرِ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا بَ وَجَعَلْنَا مِنَ الْمَاءِ
 كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ (21:30)**

“Do not the unbelievers see that the heavens and the earth were joined together (as one unit of creation), before we clove them asunder? We made from water every living thing. Will they not then believe?”(21:30). In this verse, the 'world' is used in the singular but the 'universe' is used in the plural form. As the verse addresses the human being, therefore, **الأَرْضُ** refers, here, to our world (planet).

سَمَاوَاتٍ is the plural of **سَمَاءٌ** means skies/heavens⁴. **سَمَاوَاتٍ** of verse (21:30) means all those are under the skies. We see only one sky. Under this sky infinite number of planets and stars exist including the planet where we live in. All these stars and planets form our universe. Under each other sky one or more than one universes may exist. This verse reveals that all these universes were in the form of a single solid mass and Allah has made them separated.

(iii) The verse (67:3) also has relevance to the 'multiverse hypothesis'. The verse is

الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَاقًا ۗ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَنِ مِن تَفَوتٍ ۗ فَارْجِعِ الْبَصَرَ
هَلْ تَرَىٰ مِن فُطُورٍ (67:3) .

“[And] who created seven heavens in layers. You do not see in the creation of the Most Merciful any inconsistency. So return [your] vision [to the sky]; do you see any breaks?” (67:3). This verse clearly presents that Allah has created seven skies one above other in order. In the discussion of the verse (21:30) it is considered that the planets and the stars under a sky form an universe. That is, there are only seven universes. However, there may be more than one universe under one sky.

All the above verses clearly reveal that the Quran has explicitly presented that Allah has created many universes, at least seven and they may be disjointed.

4.4 Ultimate Fate of the Universe

The cosmologist foresees two different scenarios regarding the eventuality of the universe. The first one presents that if the density of the universe were greater than the critical density then the universe would reach to a maximum size and it would begin to collapse. The process of destruction would be such that the density and the temperature would be increasingly higher and higher ending with a state similar to that in which it started. This is popularly known as 'Big Crunch'.

The second scenario foresees that when the density of the universe will be equal to or just below the critical density, the expansion will then slow down but never stop. The star formation would cease with the consumption of interstellar gas in each galaxy and the stars would burn out leaving white dwarfs, neutron stars and black holes. The temperature of the universe would then asymptotically approach to absolute zero, known as 'Big Freeze'.

Regarding the ultimate fate of the existing universes the relevant two verses are presented in what follows along with their translations.

يَوْمَ نَطْوِي السَّمَاءَ كَطَيِّ السِّجِلِّ لِلْكُتُبِ ۗ كَمَا بَدَأْنَا أَوَّلَ خَلْقٍ نُعِيدُهُ وَعَدًّا عَلَيْنَا
إِنَّا كُنَّا فَاعِلِينَ (21:104).

“And (Remember) the day when we shall roll up the heaven like a scroll rolled up for books. As we began the first creation, We shall repeat it, [That is] a promise binding upon Us. Indeed, We will do it.” (21:104)

وَمَا قَدَرُوا اللَّهَ حَقَّ قَدْرِهِ وَالْأَرْضُ جَمِيعًا قَبْضَتُهُ يَوْمَ الْقِيَامَةِ وَالسَّمَاوَاتُ مَطْوِيَّاتٌ
بِئَمِينَةٍ سُبْحَانَهُ وَتَعَالَى عَمَّا يُشْرِكُونَ (39:67).

"They made not a just estimate of Allah such as is due to him. And on the day of Resurrection the whole of the earth will be grasped by his hand. Exalted is He and high above what they associate with Him." (39:67)

The verses (21:104) and (39:67) clearly describe that in a day, perhaps in the day of the end of the universes or in the day of Resurrection, the sky, all types of skies, will be rolled up. The state of the sky before it is rolled up is compared with the written book which has been filled up with the writing. It indicates that the sky will be rolled up when the purpose of its creation is complete. In that day, the sky will be in the right hand of Allah in the rolled state and the planet (earth) group/class will be in his hand and the state of this class is not mentioned.

The verse (21:104) further reveals that the creation of the universes will be repeated in the similar process as these have been created first. It indicates that the rolled up skies and the planet will be joined to form a single solid mass. Then the creation will be started by separating the planet and the sky as it is revealed in verse (21:30). It seems that the process of the creation of universes and bringing back to their original state, a single solid mass, is a repeating cycle and Allah is the doer of this process.

Regarding the ultimate fate of the universes the forecasts of the cosmologist are similar to the revelation of the Quran. The cosmologist predicts different alternative processes of the destruction of the universes and going back to their original state. The Quran clearly reveals that the sky will be rolled up when the objective of its creation is complete. The universes will be created again following the process of their first creation.

5. GUIDANCE OF THE QURAN: CONCEIVABLE AT THE PRESENT TECHNOLOGICAL DEVELOPMENT

In this Section, an example of the guidance of the Quran that can be visualized at the present state of the scientific and technological development is presented.

5.1 Material Transfer

Present technology of voice, data and picture communication has made the globe into a village or closer to that. A man in one part of the globe can communicate

with another person in the other part at the speed of light. Persons sitting far apart can see each other while they are talking. Similar is the speed for delivering emails. That is, the present technology is capable of transferring voice, picture or data at the speed of light. Is it possible to transfer material from one place to other at the same speed? Is there any guidance in the Quran regarding this?

5.1.1 Guidance in the Quran for Material Transfer

One of the cabinet members of the king and prophet Sulaiman (PUH) brought the throne of the queen of Saba within a twinkling of an eye. The background is presented below in the summarized form.

In the regular meetings of king Sulaiman (PUH) man, the jinn and the bird used to participate. In one of the meetings, the king did not see the bird 'Hudhud' while he was inspecting the bird members. However, after a short while Hudhud came. To explain the reason of its delay Hudhud described about the lady ruler of Saba.

Saba is 50 miles away from Yemen. The ruler of Saba had everything that a ruler is supposed to have. She also had a beautiful big throne. The ruler and her nation used to worship the sun instead of Allah. The prophet Sulaiman sent a letter to the lady ruler through Hudhud and asked the bird to observe the reaction of the ruler keeping certain distance from her. The lady ruler informed the cabinet about the letter of king Sulaiman (PUH) and she said that the noble letter had come from King Sulaiman starting with

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

She solicited advice from the cabinet members. The members opinioned that they were strong enough to fight back. However, the ruler sent ambassadors to King Sulaiman (PUH) with gifts. The king reacted and told the ambassadors that I would send an army to drive you out from there in disgrace.

The event of bringing the throne of the ruler from Saba to Jerusalem within the twinkling of an eye is described in the verses (27: 38-40). The translations of the verses are,

“[Solomon] said, "O assembly [of jinn], which of you will bring me her throne before they come to me in submission?" A powerful one from among the jinn said, "I will bring it to you before you rise from your place, and indeed, I am for this [task] strong and trustworthy." Said one who had knowledge from the Scripture, "I will bring it to you before your glance returns to you." And when [Solomon] saw it placed before him, he said, "This is from the favor of my Lord to test me whether I will be grateful or ungrateful. And whoever is grateful - his

gratitude is only for [the benefit of] himself. And whoever is ungrateful - then indeed, my Lord is free of need and Generous." [27:38-40]

From the above verses, it is observed that in response to king's proposal of bringing the throne of the ruler of Saba two cabinet members, one strong jinn and another one with the knowledge of the book, responded. The second one is most likely a man. Because, the first one is mentioned as jinn and unidentified second one should be a man as if he were a jinn he would also be mentioned like the first one. Moreover, the Quran is mainly a guide book for the human being. Therefore, the activities of the jinn may not be a lesson for a man as a man may not be able to do what the jinn can.

The type or the name of the book is not also mentioned in the verses. Most likely, the book is of engineering subject. Because, the action of the man is technical and the engineering knowledge is relevant to it. It is also observed that only the throne is brought instantaneously. However, the queen came later.

Therefore, the guidance of the Quran is that the material can be transferred from one place to another instantaneously, but not the living creature. Now, the question is how the guidance can be implemented in real life environment.

5.1.2 *Basic Communication Technology*

In the communication system, the first step of transferring voice or picture or data is to generate electrical signal from the element, voice or picture or data that requires to be transferred, using an appropriate transducer. The signal may remain analog or may be digitized. In the next step, this signal is modulated with the carrier signal. This modulated signal is then transmitted as electromagnetic radio waves. The receiving devices, either radios or televisions or smart phones or computers, receive the signal through its antenna. The received signal is demodulated to filter out the original signal and it is then fed to an appropriate component of the receiver, transducer, which reproduces voice or picture or data or all as the transducer is designed for.

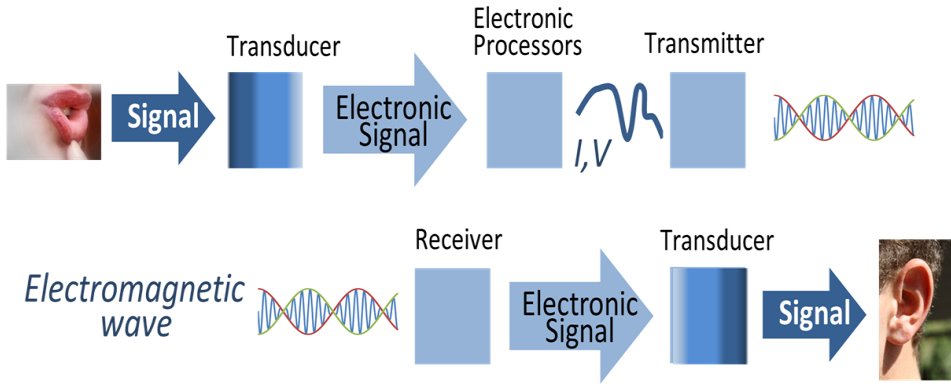


Fig. 6: Schematic of the Operation of a mobile phone work

In Fig. 6, a schematic of voice transmitting system from a mobile phone to another mobile is depicted. In this case, voice signal is generated by the mouth and the transducer located inside the sending mobile covers the voice signals to an electronic signal. The micro phone located inside the mobile works as the transducer. The electronic signal is then modulated with the carrier signal and the electromagnetic signal is generated by the electronic processors. The transmitted electromagnetic signal is received by the receiving mobile through its antenna and its electronic processors filter out the original electronic signal. From this electronic signal the transducer, speaker, reproduces audible voice signal. Note that both the micro phone and the speaker are the component parts of a mobile set.

5.1.3 *Examples of Material Transfer*

(A) Transfer of Liquid Material

Fig.7 depicts the transfer of a cup of tea/coffee from one place to other. The process of transfer of the liquid will be similar to that of voice/data/picture. The essential components in the process are the appropriate transducers and electronic processors at the sending and receiving ends.

The function of the transducers is to generate appropriate electronic signal converting volume, temperature, density and constituents of the liquid. The electronic processor in the receiving end demodulates the electromagnetic signal to separate the electric signal from the carrier. The output is controlled by the electric signal. That is, the volume, temperature and the constituents and

their amount of the output are controlled according to the received signal by the receiver.

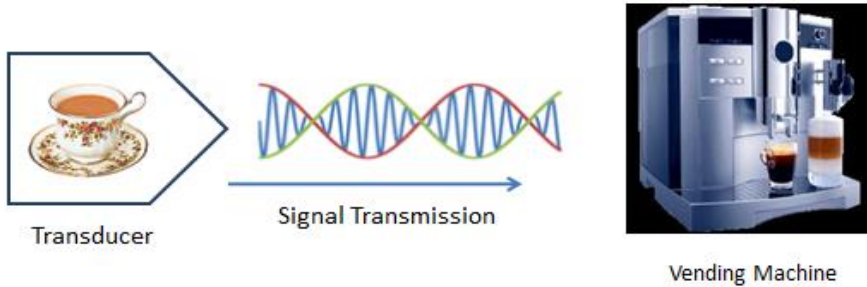


Fig 7: Transfer of tea/coffee/liquid from one place to other

The thermocouple is generally used as a sensor of temperature variation. That is, the temperature status can be translated into signal by the thermocouple. The transducer developed with capacitor may be used to translate volume, constituents and the magnitudes of the constituents of the liquid into signal more accurately since the variation of the capacitance is controllable in the range of pico farad (10^{-12}). The capacitance is a function of the area of the conducting parallel plates by which the capacitor is fabricated, distance between the plates and the permittivity of the media between the plates. The capacitance may be expressed as,

$$C = \epsilon_0 \epsilon_r (A/d)$$

Where

C = Capacitance (Farad,F)

A = Area of the plates (m^2)

d = Distance between the plates (m)

ϵ_r = Relative permittivity

ϵ_0 = Permittivity of vacuum (8.85×10^{-12} F/m)

The addition of sugar or coffee mate increases the density of the liquid which changes the permittivity, thus the capacitance is changed. Similarly, the capacitance is changed when the volume of the liquid is increased or decreased since the ratio of empty space and the filled up is changed.

(B) Transfer of solid material

Fig.8 shows the chair/ throne of a palace. This can be transferred to a place, hundreds of miles away within a twinkling of an eye following the voice/data/picture communication technology. In this process, the difficult part is to make available the appropriate size and type of building blocks and their integration.

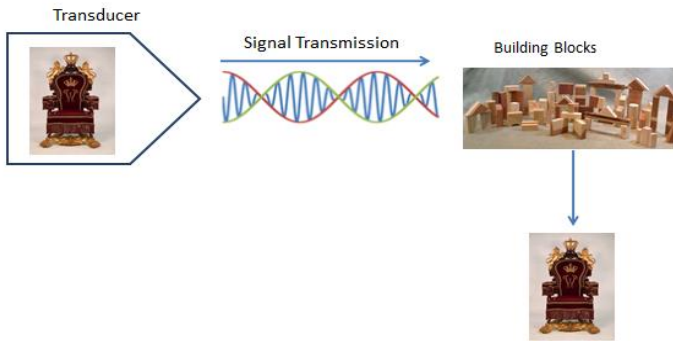


Fig. 8: Transfer of throne from one place to other using communication technology

The transducer at the sending end should be able to translate the dimensions, color and the constituent material of the solid item into electric signal. The demodulated signal derived from the received signal at the receiving end is the main control parameter to reproduce the item required to be transferred. The building blocks of appropriate size, color and material should be selected properly according to the control signal. In this selection process the robot may be involved. The integration of building blocks should also be controlled by the control signal so that the dimensions and color of reproduced item matches with the original item.

It appears that building blocks of different sizes, colors, material are required to be readily available at the receiving end. The size of stock increases with the variations in size, color and material of the transferred items. If the different components of the transferable item are made of different combination

of alloys in that case with the present technological development the instantaneous transfer is not possible as it may require the integration at the molecular level.

5.2 Earthquake

Earthquake is a common event and it occurs at anywhere at any time on the earth. It may be violent enough to toss people around and it may even destroy a whole city. An earthquake of magnitude 8.6 releases energy equivalent to 10,000 atomic bombs of capacities similar to those used in World War II.

When two blocks or two tectonic plates are rubbing against each other, they stick a little. They continue pushing against each other and the pressure builds up. Eventually, the energy is released suddenly through the breaking of rocks. This causes the seismic waves that make the ground shake and the earthquake occurs. The underground spot where the rock breaks is called the focus and the place on the ground, right above the focus, is called the epicenter of the earthquake. Only ten percent or less than that of the total energy is radiated in the form of seismic energy. The remaining energy generates heat or is used to ground fracture.

If sufficient strain energy grows along a fault plane tectonic earthquakes occur. Inter plate earthquake may cause dip-slip or strike-slip. In case of dip-slip the fault is in the direction of dip and it involves the movement of vertical component. In case of strike-slip two sides of the fault slip horizontally past each other. Many earthquakes cause the movement on faults that have both dip-slip and strike-slip components.

What indications or guidance the Quran has to mitigate the loss due to earthquake through the reduction of the causes? The verses (78:6-7) present that the Creator has created the earth as bed and the mountains on the earth as pegs into it. The verses are,

(78:6-7) أَلَمْ نُجْعَلِ الْأَرْضَ مِهَادًا. وَالْجِبَالَ أَوْتَادًا.

“Have We not made the earth a resting place And the mountains as stakes?” (78:6-7)

The verses (78: 6-7) present that the function of the mountain is to firmly establish the earth such that the earth serves the purpose of a bed. The function of a bed is to provide a place where a person can take rest or sleep. That is, it should not shake. Similarly, the mountain does not allow the earth to shake. The structure of a mountain like a peg, the diameter of it at the top is the highest and it decreases with the depth. Fig.9 shows the structure of a mountain from the top to the bottom. Its height above the ground and the depth below the ground are almost same. The verse (78: 7) appropriately describes the structure of the mountain by comparing it with a peg. It seems that the mountain joins together the parallel tectonic plates like the way the nails joins the wooden plates.

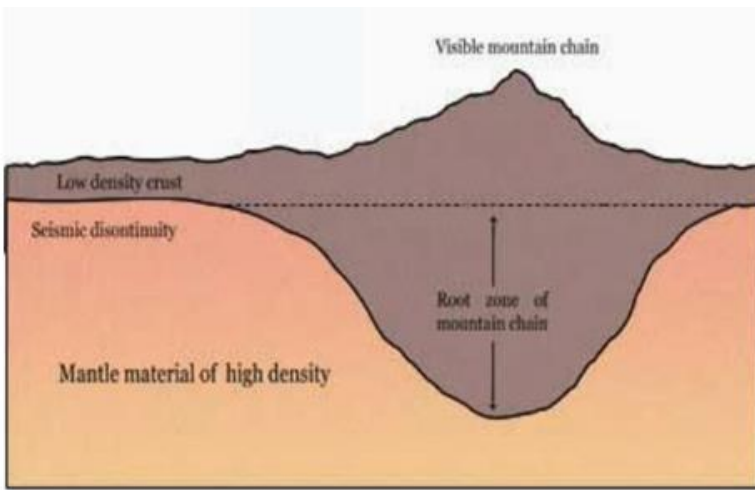


Fig. 9: A typical mountain showing the shape below the ground

The similar concept is also revealed in verses (16:15), (21:31) and (31:10). One of these three verses is given below along with the translation.

(16:15) وَأَلْقَى فِي الْأَرْضِ رَوَاسِيَ أَنْ تَمِيدَ بِكُمْ وَأَنْهَاراً وَسُبُلًا لَعَلَّكُمْ تَهْتَدُونَ.

“And He has cast into the earth firmly set mountains, lest it shift with you, and [made] rivers and roads, that you may be guided” (16:15). The verse clearly reveals that Allah has created the mountain and placed it in such a way that it does not allow the earth to shake whatever may be the reason of shake is.

The verses (18:96, 97) may also be the guidance for the elimination or the reduction of earthquakes. The verse (18: 96) describes the construction of a barrier between ‘Yajuj and Majuj’ and the people of the nation who requested Dhul-Qarnain to save from the mischief of the ‘Yajuj and Majuj’. Dhul-Qarnain constructed the barrier by filling up the gap between two mountains with the alloy of iron and copper. The verse (18:97) says that the wall erected by Dhul-Qarnain was high and strong enough such that the ‘Yajuj and Majuj’ neither could cross over nor could create a path to go other side of the wall by breaking it or making any hole through it.

The above two verses recommend that the movement of two tectonic earth plates or two groups of plates moving in the opposite direction, may cause an earthquake, can be controlled by joining them to form a single group. Fig. 10 shows two groups of tectonic plates, A and B, are pushing each other across the fault line with forces F_1 and F_2 , respectively. The directions of the forces F_1 and F_2 are opposite to each other. The magnitude of each force depends on the product of the mass and the velocity of the plates. Usually, the plates move in a low speed.

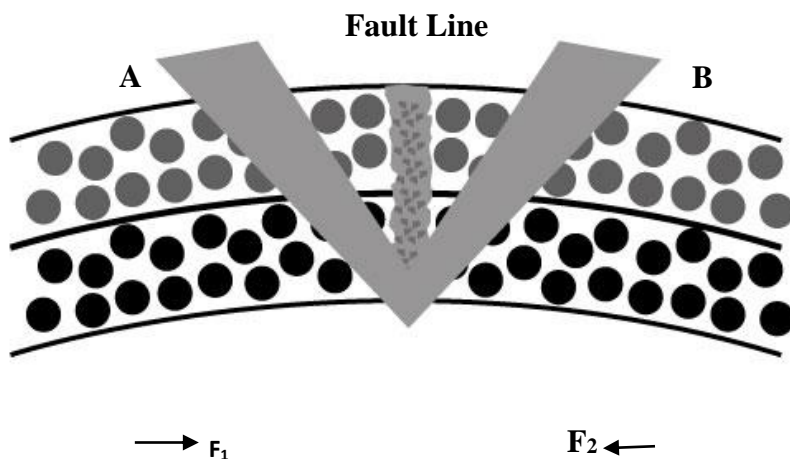


Fig. 10: Two tectonic plates/groups moving in the opposite direction

A ‘V’ shaped structure can join the two groups to form a single one. In that case, the earthquake may be avoided and the joined group will move in one direction depending on the direction of the resultant force, R . R is the difference of F_1 and

F_2 . That is, $R = F_1 - F_2$. Note that if F_1 and F_2 are equal, the joined group will not move and in that case, there is no need of joining the two groups as there is no possibility of earthquake.

The verses also provide hints for another approach. In this approach, a metallic barrier of very strong alloy may be constructed and it may be placed along the fault line with a heavy pressure. The placement of the barrier between two tectonic or two groups of tectonic plates is shown in Fig. 11. The barrier should be like the metallic shield of a nuclear reactor and its strength should be proportional to the resultant force. There should be also some cooling arrangement to release the heat that would be generated from the pressure on the barrier by the plates. The proper arrangement of cooling may be a source of energy through the extraction of heat.

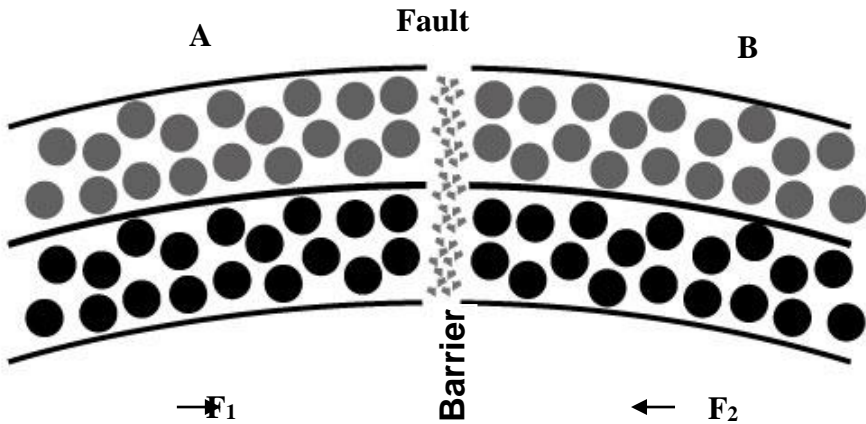


Fig. 11: Metallic barrier along the fault line

The arrest of the movement of the plates of such a huge mass is a very difficult task. However, considering the magnitude of loss of the human civilization due to earthquakes in almost every year the concentrated research is a necessity.

6. CONCLUSION

This paper presents an analysis, based on the principle of current technical devices and or systems and theories, of some of the verses of the Quran which has scientific research hints. The analysis clearly derives that there are many verses in the Quran with the scientific research hints. Some of the scientific research hints are realizable with the present technical knowledge, but some are not. With the further development of science and technology the research hints of these verses would be possible for the human being to realize. The analysis also

finds that many devices/systems could be developed earlier if the hints of the Quran were followed.

During the study, the verses related to (i) the development of an aero plane, (ii) Big Bang theory and (iii) multiverse theory are considered for analysis. The analysis clearly reveals that the Quran has distinct hints for the development of an aero plane. The hints include the requirement of theoretical knowledge, the material for construction, the shape and the operating principle of an aero plane. The verse relevant to 'Big Bang theory' reveals that Allah (SWT) has created the skies and the planets from a single solid dense mass. This concept matches with the Big Bang theory. Eventually, all the universes will be brought back to its original state and then the universes will be created again. From this creation and destruction process one may conclude that the creation and destruction of universes is a repeating cycle.

A large group of scientists supports the hypothesis of the existence of multiverse. The hypothesis has not yet been able to prove scientifically any impact of other universes on our universe. This creates the non-acceptance of the hypothesis by another group of scientists. However, there are a number of verses which explicitly reveals the concept of multiverse. It presents that our universe is located under the sky that we see. Besides this sky, there are six other skies, each of which exists in different layers.

The Quran has a clear indication that the material can be sent from one place to a distant one within a twinkling of an eye, but not the living creature. An initial idea of sending material at a speed similar to that of voice or picture is being sent today is presented in this paper. The concept is based on the current signal communication technology. Two examples of material transfer, liquid and solid, are presented. The concept of liquid transfer is easily implementable. The concept can also be applied for producing medicine, food or material of different mix at different factories located at different places of the world and the ratio of different mix can be controlled centrally. This will help maintain the secrecy of the product.

The Quran presents the hints for the mitigation of the loss due to earthquake by revealing the function and structure of a mountain. This paper presents two different ideas, one based on the function as well as the structure of a mountain and the other based on the barrier construction process of Zulkarnain. The implementation of these ideas may seem to be expensive and technically difficult. However, the magnitude of losses due to the earthquake deserves further research on these ideas.

The analysis shows that there are some verses, the concept of which is realizable but the implementation into the real life is not possible with the current

technology. It also shows that the hints of some verses are not realizable. However, the verses are incorporated in the revealed book only as these are beneficial for the human being. Keeping this in mind, one should start doing research on these verses also.

REFERENCES:

- AshrafulHaque, Sheikh JawadIlham and Q. Ahsan, 'Matching of Artificial Limb with Residual Human Limb by Capacitance Measurement Technique', 8th International Conference on Electrical and Computer Engineering 20-22 December, 2014, Dhaka, Bangladesh
- David Deutsche, 'The beginning of Infinity'.
- Ellis, Jerorge, Silk, Joe (December 16, 2014), 'Scientific Method Defend the integrity of Physics', *Nature* 516. 321-323
- First second of the Big Bang' How the universe works 3 2014 Discovery Science
- Griswold, Bri H (2012), 'What is the ultimate fate of the universe?' – Universe 101, Big Bang Theory, NASA
- http://en.wikipedia.org/wiki/Maximum_life_span.
- <http://en.wikipedia.org/wiki/Universe>.
- <http://www.quran-errors.com/mountains-as-pegstakes-do-mountains-have-roots-that-resemble-pegstakes.html>
- [http://www.TheLancet.com/journals/lancet/article/PIIS0140-6736\(14\)61682-2/abstract](http://www.TheLancet.com/journals/lancet/article/PIIS0140-6736(14)61682-2/abstract)
- John Penrice, 'A Dictionary and Glossary of the Koran with copious Grammatical References and Explanation of the next', Biblo and Tanner, New York, 1969.
- Kolb and Tanner (1988), Chapter 3
- M. A. Kasmu, A.H. Usman, H. Haron, A.S. Yusuf, F. Idris, N. Yunos and H. A. Khafidz., 'The Compatibility between the Quran and Modern Science: A Comparative Study among Malaysian', *Asian Social Science*, Vol. 11, No. 10; 2015
- M. Mahjoob J. Nejati, A. Hosseini and N.M. Bakhshani, 'The Effect of Holy Quran Voice on Mental Health', *J Relig Health* (2016) 55: 38-42.
- Mira Bajrova, 'Hygiene and Health in Quran and Science', *EC Gynecology SPI*, 1(2017), P44-P55.
- Moh. Mukri, Faisal, Syaiful Anwar and Asriani, 'Quran-integrated Science in the Era of Industrial Revolution 4.0', *IOP Conf. Series: Journal of Physics: Conf. Series* 1155 (2019) 012001

- Nidhal Guessoum, 'The Quran, Science, and the (Related) Contemporary Muslim Discourse', *Zygon*, Vol.43, No. 2 (June 2008)
- Plank captures portrait of the young universe, revealing earliest light', University of Cambridge, 21 March 2013
- S. Habib and Q. Ahsan, 'Effect of Insulating Oil Degradation on Power Transformer Capacitance', 7th International Conference on Electrical and Computer Engineering, ICECE 2012, 20-22 December 2012, Dhaka, Bangladesh
- Tegmark, Max (23 January 2003) Parallel universes.
- World Population To 2300', Department of Economic and Social Affairs, Population Division, United Nations, New York, 2004.
- www.youtube.com/watch?V=vfBH90BV-p4.