

Scientific Research; Instructions from the Holy Quran

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Abstract: *Science is the branch of knowledge that deals with the material world. In scientific research it is necessary to know "How does our knowledge of physical world expand?" and "What are the principles of scientific research?" In fact scientific research is a combination of experimental works and intellectual activity. The Almighty Allah has given specific fundamental properties to every materials of the universe. The Scientist can only discover very few of those properties and apply them in integrated form when and where necessary. Continuation of scientific research and advancement of the technology is possible only because of the unchangeable fundamental properties of all materials of the universe formulated by the Almighty Allah. As per Quranic instructions no scientific research is accepted without proven reason and the scientific theories contradictory to the Holy Quran must be rejected.*

Index Terms: *Science, Research, Quran.*

I. Introduction

The Almighty Allah is the creator of the whole universe. He maintains it from the very beginning in a systematic way. He creates human beings and gives them specific guidelines to lead their life. He will give them reward or punishment in the hereafter depending on their deeds. He never makes himself diverted from His own administrative or ruling policy, His ideology, methodology or strategy. Like His administrative policy He also gives specific fundamental properties or characters to every creation of the universe and no changes or alterations are found in of those properties or characters [1]. These

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unchangeable phenomena are very strong tools for scientific research for the human beings with having very limited knowledge. The advancement of scientific research so far in finding the properties given by Allah in this universe may not be treated even like a single drop of water in the sea in comparison with Allah's true position of knowledge. Besides this is the kindness of Allah to make a door for mankind into the sea of Allah's knowledge and that door is nothing but the unchangeable fundamental properties of all creations. On the other hand if the Almighty Allah does not maintain these unchangeable fundamental behaviours, no scientific research was possible. But Allah does not do that and due to that He inspires the mankind in the Quran several times for scientific research [2]. Interestingly we find many direct scientific indications in the Quran [3]. Actually day by day the more we enter into the depth of knowledge more scientific indications are found from the Quran from its old verses revealed 1500 years ago. The Quran is the only pure revealed source of knowledge in the present world [4], so any law, theory, hypothesis of scientific research contradictory to the Quran must be rejected. Instructions for scientific research will be described below as per Quranic References.

II. Instructions from The Holy Quran for Scientific Research

We find instructions from the Holy Quran regarding (A) Possibility of scientific research (B) Possibility of progress in scientific research (C) Acceptability of scientific research with proven reason and (D) Possibility of wrong justification in scientific research.

A. Possibility of scientific research

Science is the branch of knowledge that deals with the material world [5]. The scientists find scope for scientific research in the nature only because of unchangeable fundamental properties of all creations of the universe. When similar causes are observed repeatedly from similar incidences, researchers try to give some explanations and these explanations are nothing but the unchangeable properties set by the almighty Allah. Truly the integrated forms of these types of explanations are treated as the scientific research. The Holy Quran gives us proper guidelines for scientific research. We find several verses from the Holy Quran related to these matters.

The Almighty Allah says in the Holy Quran; 35:43

(فَهَلْ يَنْظُرُونَ إِلَّا سُنَّتَ الْأَوَّلِينَ فَلَنْ تَجِدَ لِسُنَّتِ اللَّهِ تَبْدِيلًا وَلَنْ تَجِدَ لِسُنَّتِ اللَّهِ تَحْوِيلًا)

"Then should they wait for aught except the way of former people? For you shall not find any alteration in the Course of Allah."

Also described in the Holy Quran; 2:117

(يَدْبِعُ السَّمَوَاتِ وَالْأَرْضَ وَإِذَا قَضَىٰ أَمْرًا فَإِنَّمَا يَقُولُ لَهُ كُن فَيَكُونُ)

"The Originator of the heavens and the earth! When He wants a thing, He says unto it only: Be! and it is."

Also described in the Holy Quran; 7:54

(إِنَّ رَبَّكُمُ اللَّهُ الَّذِي خَلَقَ السَّمَوَاتِ وَالْأَرْضَ فِي سِتَّةِ أَيَّامٍ ثُمَّ اسْتَوَىٰ عَلَى الْعَرْشِ يُغْشِي اللَّيْلَ اللَّيْلَ يُطَبِّئُهُ حَبِيبًا وَالشَّمْسَ وَالْقَمَرَ وَالنُّجُومَ مُسَخَّرَاتٍ بِأَمْرِهِ ۗ إِنَّ لَهُ الْخَلْقَ وَالْأَمْرَ ۗ تَبَارَكَ اللَّهُ رَبُّ الْعَالَمِينَ ٥٤)

"Look! Your Lord is Allah Who created the heavens and the earth in six Days, and then mounted He the Throne. He covers the night with the day, which is in haste to follow it, and has made the sun and the moon and the stars subservient by His command. His verily is all creation and commandment blessed be Allah, the Lord of the Worlds!"

From the above verses the following matters are understood.

- Allah is the creator of all creations of the universe.
- The whole universe is obeying the rules and regulations of Allah continuously.
- We find no changes or alterations in these rules and regulations.

Examples;

(i) Air is a good electrically insulated material

Air is a good insulator. Almost no current passes through it. It possesses very high resistance [6]. In electric power generation and distribution system very high voltage sources are created in domestic areas keeping them open in the air. If from now on the air behaves like a good conductor, what will happen? All the living beings in the air on the surface of the earth will die within a few minutes. From the very beginning the air is an insulator and will continue behaving like insulator by the will of the almighty Allah.

(ii) Fundamental properties of electro-magnetic induction

According to Faraday's laws of electro-magnetic induction [7], if magnetic flux cuts the conductors of a coiled inductor with having N numbers of turns in the coil and the flux (Φ) changes with time (t) a voltage (E) will be induced in the coil and is given by the formula $[E = -N(d\Phi/dt)]$. The fundamental properties of electro-magnetic induction have been created by the almighty Allah from the very beginning of the creation of the universe; and discovered by the scientists⁷ at the beginning of the nineteen centuries. No alteration in the fundamental properties of electro-magnetic induction is observed and we hope that unchangeable properties will continue till the eternity of the universe as per will and strategy of the almighty Allah. Using the fundamental electro-magnetic properties transformers, electric motors, generators and lot of similar drives, equipments and accessories are designed. If frequent changes in fundamental electro-magnetic properties are observed, the total electrical engineering system will collapse. Allah is capable to do that. So it is a great mercy of Allah to his creations to maintain this constancy, give the scope of scientific research.

B. Possibility of progress in scientific research

Day by day we find lot of progresses in the research of science and technology. This is not a short-time work, and credit does not go to a single person for all of these advancements in the research of science and technology. We find linkage between the previous and present research works. A new research is established on the foundation of previous research, and normally the latest is treated as advancement in the same goal. This progress in scientific research will not be possible if frequent changes are observed in the rules, characters or fundamental properties of the materials or systems of the universe.

The Almighty Allah says in the Holy Quran; 30:30

(فَطَرَتِ اللَّهُ النَّاسَ عَلَىٰ مَا لَا تَبْدِيلَ لِخَلْقِ اللَّهِ)

"The nature made by Allah in which He has made men; there is no alteration of Allah's creation."

So the almighty Allah's will of making the fundamental behaviours of all creations of the universe unchangeable is a gate way for the researchers for having scopes in scientific research as well as progress in scientific research.

Example;

Invention of computer and progress in computer technology

It is impossible to give all credit to a single person for the invention of computer. It is actually step by step progress by thousands of scientists from the very beginning of the human civilization to the modern age and still research is in progress. Initially it was a mechanical device [8]. Blaise Pascal first invented the mechanical calculating machine in 1642. Besides lot of scientists from Greek, China, India and other parts of the world have contribution in developing calculation system. In 1937 the first electro mechanical computer (Mark I) was invented by a group of researchers in Harvard University. After the invention of transistor in 1947 at Bell Labs a computer was developed using transistor instead of vacuum tube. Then lot of progress achieved in computer technology in the modern age improving the electronic technology. In this regard Boolean a famous scientist contributed a lot in developing Boolean algebra for binary system in electronic devices. Now generally development in mathematics is a development in computer technology and vice versa. In modern computer technology controlled and efficient use of conductivity/resistivity of semiconductors is one of the main focusing matters. If from now on, the semiconducting materials (the designing material of the modern computer) do not behave properly what will happen? The system of computer technology will collapse.

As the fundamental properties of all creations of the universe are unchangeable, so continuation of research by the new researchers from the ending works of earlier researchers are possible and in this way improvement of technology are achieved. This continuation is the key point for swimming in the sea of knowledge of the almighty Allah. If continuation becomes impossible every individual will have to work from fundamental position and progress in research and technology will be impossible. The reason for possibility of progress of research in science and technology is the same, as discussed earlier, the Allah's strategy of maintaining unchangeability of fundamental properties of all creations of the universe. So invention of computer is one of the finest examples of possibility of progress in scientific research.

C. Acceptability of scientific research with proven reason

Scientific research is a combination of experimental work and intellectual activity [9]. Certain experimental justification is required to establish any theory or hypothesis. We cannot confirm or reject any thing without a reason.

The Almighty Allah says in the Holy Quran; 17:36

(وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهِ عِلْمٌ إِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادَ كُلُّ أُولَئِكَ كَانَ عِنْدَهُ مُسْئِلًا)

"(O man), follow not that whereof you have no knowledge. Look! The hearing and the sight and the heart of each of these it will be asked."

One of the main sources of errors in justification of research is due to the replacement of knowledge by conjecture.

The Almighty Allah says in the Holy Quran; 53:28

(وَمَا لَهُمْ بِهِ مِنْ عِلْمٍ إِنْ يَتَّبِعُونَ إِلَّا الظَّنَّ وَإِنَّ الظَّنَّ لَا يُغْنِي مِنَ الْحَقِّ شَيْئًا) ٢٨

"And they have no knowledge thereof. They follow but a guess, and a guess can never take the place of the truth."

So as per Quranic instruction no research is accepted without proven reason.

D. Possibility of wrong justification in scientific research

The human knowledge is limited. No research is final. Frequently we find changes in theorem, hypothesis, and laws of scientific research.

The Almighty Allah says in the Holy Quran; 17:85

(وَمَا أوتيتُمْ مِّنَ الْعِلْمِ إِلَّا قَلِيلًا)

"And of knowledge you have been vouchsafed but little."

The only pure knowledge is the revealed knowledge, and at present no doubt that is the Holy Quran.

The Almighty Allah says in the Holy Quran; 2:2

(ذَٰلِكَ الْكِتَابُ لَا رَيْبَ فِيهِ)

"This is the Scripture where of there is no doubt."

So the only way of staying in the right path in scientific research is to believe and obey the Holy Quran as a complete guide line for our worldly life and the life hereafter, and to follow its instruction for scientific research. Any scientific theory contradictory to the Holy Quran textually or philosophically must be rejected.

Example;

Regarding movement of the sun

Several times the scientists give several contradictory theories regarding movement of the sun [10]. As per Ptolemy's theory (200 BC) "the earth is at the centre and all the other creations of the universe including the sun are moving around the earth. As per Nicholas Copernicus's theory (1512 AD) "the sun is at the centre at rest position and all the other creations of the universe including the earth are moving around the sun. As per Yohannus Keppler's theory (1609 AD) "the sun is at the centre, all the other creations of the universe including the earth are moving around the sun and at the same time around their own orbital paths. Now at the modern age it is established that, both earth and sun and other planets are moving, in our nearest sky, an orbital system is there around the sun, all planets including the earth is moving around the sun and around their own centres, the sun is also moving around its own centre and in the similar way there are unlimited numbers of solar systems as well as unlimited numbers of milky ways in the universe.

Now what Quran says about the movement of all objects of the universe around fifteen hundred years ago!

The Almighty Allah says in the Holy Quran; 21:33

(وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ كُلٌّ فِي فَلَكٍ يَسْبَحُونَ ۝۳۳)

"And He it is who created the night and the day, and the sun and the moon. They float, each in an orbit."

So it is observed that the scientific theories cannot be treated as absolute truth. There are the possibilities of wrong justifications in scientific research. The Quran is the only absolute truth.

III. Conclusion

As Muslims we should think about every creation of the almighty Allah, how it sustains, with what systematic way "Governed by Allah" it is running and what material properties it possesses. The Holy Quran inspires us to this.

The Almighty Allah says in the Holy Quran; 3:190

(إِنَّ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لَآيَاتٍ لِّأُولِي الْأَلْبَابِ)

"Look! In the creation of the heavens and the earth and (in) the difference of night and day are tokens (of His sovereignty) for men of understanding."

In scientific research priority should not be to get benefit from materials rather to take smells of the greatness of the Almighty Allah and to be submissive to Him.

The Almighty Allah says in the Holy Quran; 3:191

(الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَىٰ جُنُوبِهِمْ وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بَطْلًا سُبْحَانَكَ قِنَا عَذَابَ النَّارِ)

"Such as remember Allah, standing, sitting, and reclining, and consider the creation of the heavens and the earth, (and say): Our Lord! You created not this in vain. Glory be to You! Preserve us from the doom of Fire"

Though The Quran is not a book of science, we get a lot of direct scientific indications from it along with general instructions and inspirations for scientific research. We should believe and follow the Holy Quran as the guidelines for our worldly life and the life hereafter and to follow the Quranic instructions to stay in the right path for scientific research.

References

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