The Qur'an and Modern Science: Observations on Methodology

Imaduddin Khalil

Introduction

Anyone who reads the Qur'an carefully and endeavors to attain a proper understanding of its attitude towards science will face a great number of $\bar{a}y\bar{a}t$ which cover science in all its aspects. These fall into four categories: 1) matters related to the reality, horizons, and aims of science or, to put it more precisely, the "philosophy of science and theory of knowledge," 2) the methodology of discovering scientific facts, 3) the laws that apply in the various fields of science—particularly natural sciences—called the pure sciences, and 4) those laws discovered through experimental methodology and meant to be applied by a person in his/her capacity as vicegerent of Allah (SWT) on earth, who has been entrusted with the task of creating a higher and better life and a finer world. This field is known as the applied sciences.

There is undoubtedly a very close relationship between each of these categories. Philosophy analyzes the aims of science while methodology provides a *modus operandi* for discovering facts; that is, it explains the laws and systems which control the cosmos, the world and life, and which protect their movements in time. In turn, these laws and systems furnish humanity with the formulae which enable individuals to explore the wondrous structure of creation. Consequently, these laws and systems become the means by which humanity can achieve the progress and development of human civilization. Such knowledge can free humanity from the drudgery of day-to-day earthly existence, raise its eyes to the heavens and satisfy those spiritual needs which distinguish it from all other creatures. An individual can thus perform more of the duties required of him/her in his/her capacity as vicegerent, and fulfill his/her role of bringing civilization and development to the world.

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It is a fact that the Qur'an was not revealed as a science book or any other kind of textbook of knowledge. It is also true that some modern thinkers insist on ascribing to its $\bar{a}y\bar{a}t$ certain scientific meanings and interpretations despite the ensuing ambiguity as to whether these were really what their divine author intended or not. In reaction, other thinkers have gone to the other extreme and insist that the Qur'an has no connection whatsoever with any scientific fact. What is undeniable, however, is that when the Qur'an concerns itself with the scientific message, it applies all of the four categories mentioned earlier in a manner that leaves no scope for discussion.

It is self-evident that Qur'anic and scientific data should coincide and correspond (in the general sense and outside the realm of relativities and variables), and it is obvious that there should be no contradictions or barriers between them. After all, they come from the same source–Allah (SWT), the Originator of the laws and systems, the Revealer of the Qur'an, the Creator of the universe, and the Maker of humanity. Moreover, humanity is an "involved party" in the law-creating and Qur'an-revealing process; that is, individuals are Allah's vicegerents on earth, the possessors of the hands endeavoring to build civilization for the sake of Allah (SWT). The Qur'an affirms the essential nature of this link between the Qur'anic message and Allah's cosmic laws, for how can humanity perform its role on earth within the framework of the teachings of the Qur'an unless its members begin by trying to understand the world and find out about its laws and systems?

Here we should point out that modern science does not reject or cast doubt on religious truth—as was the case in past centuries. Rather, it recognizes that it does not have the last word on a subject which is far greater than it. Having done so, it also affirms, with its limited capabilities, that human life has no justification for existing if we strip it of that major dimension which extends beyond the bounds of matter and motion. Science has now returned to the situation in which it functions in harmony with religion. This is the great revolution which has taken place in the philosophy of science as a result of recent discoveries in scientific research—particularly in the natural and nuclear sciences, and in scientists' understanding of the way the human brain operates.

There is also another issue that is no less important. Recent scientific discoveries, while exploring the core of the atom, have broken the "material barrier" and revealed the spiritual quality underlying the structure and composition of the physical world. Here science and religion meet-anew-in numerous instances.¹

¹I have discussed these instances in my book *Al 'Ilm fī Muwājahat al Māddīyah* (Beirut: Mu'assasat al Risālah, 1986). I believe that it is sufficient here to refer the reader to this book.

Now, let us take a necessarily brief look at the relationship between the four aspects of science and the data contained in the Qur'an.²

I. The Philosophy and Aims of Science, and Basic Islamic Principles

The philosophy of science is concerned with examining and analyzing the objectives science strives to achieve and their relationship, firstly, with humanity's civilizational activities and, secondly, with its vision of the cosmos, life, and the world in which it lives.

It would appear that scientific research and the experimental methodology it adopts are necessities of Islamic life, not luxuries or secondary factors. This is because they are intimately linked to the activities of the Muslim community, to the nature of its mission on earth, and to its overall beliefs about the cosmos, life, the world, and humanity.

Here, it would perhaps be useful to mention some basic principles of Islamic life and the Islamic worldview which dictate the use of scientific methodologies, of the laws and systems uncovered by established scientific truths, and of the ways in which they are applied. Such an approach plays an important role in strengthening these principles, asserting the fundamental elements of the global Islamic worldview, linking them more practically to the real world, and enabling them to make an active contribution to civilization. These principles are as follows:

A. The Principle of Istikhlāf or Khilāfah (Vicegerency)

The principle of *khilāfah* (humanity's carrying of the divine *amānah*—trust) put forward in the Qur'an and the Sunnah is one of those principles which science upholds and brings about its realization on earth. The Muslim has been appointed Allah's vicegerent on earth so that he/she can develop it, bring civilization to it, overcome the obstacles it presents, respond to its challenges, and create the conditions for a more secure life, one free from want and more conducive to higher things—to aspiring towards the Creator. In such a situation, the weight of gravity and other earthly factors will not cause Muslims to lower their heads or bow their backs.

Muslims cannot carry out their functions as vicegerents, or obtain sufficient guarantees and assistance to enable them to achieve their objectives

²For further details, please refer to my book *Madkhal ilā Mawqif al Qur'ān al Karīm min al 'Ilm* (Beirut: Mu'assasat al Risālah, 1983). Here, the reader will also find full Qur'anic textual evidence arranged by subject. Lack of space prevents me from quoting it here.

of perpetual progress unless they use scientific research methods and methodologies to discover the laws of the world, nature, and the cosmic system. Only then can they "plug in" to their reserves of energy and achieve a greater harmony between themselves and their environment. Without this, the principle of *khilāfah* is no more than a theory or a dogma in a vacuum.

B. The Principle of Tawazun (Balance)

Balance between one's spiritual and material needs is one of the basic principles of Islamic life and thought. It is an issue deeply ingrained in the Qur'an and the Sunnah, where it takes on a number of aspects and forms.

If we ignore one of the most obviously self-evident factors in this area – that Allah (SWT) has made the earth subject to us in a manner compatible with our role in it—we shall find ourselves embroiled in a contradiction that is totally rejected by Islam. To put it simply, this contradiction is the claim made by some that humanity was made by Allah (SWT) in a particular form, and the earth was then made subject to humanity in order to satisfy the requirements of its make-up. However, other revealed religions gradually appeared, which separated the spiritual from the material and deviated towards the former, with the result that barriers were soon erected between the demands of humanity's nature and make-up and the fruits and benefits of the earth that have been subjected to it.

Strictly speaking, there can be no Islamic life as such without this proper balance between the two sides of a Muslim's make-up. However, Islam's objective is to operate in a context of reality and create a balanced individual who is capable of action, change, and motion, an individual free from tension, deviation, or repression. However, this uniquely Islamic vision of balance, which is also one of its most fundamental beliefs, cannot be achieved without use of the scientific method, fact, and subsequent application.

C. The Principle of Taskhīr (Being Made Subservient to Humanity)

This is another basic characteristic of the Islamic vision of the cosmos and life, for without science, Islam's vision cannot be achieved, nor can its noble potential be realized. According to the Islamic view, the world and nature have been subjected to humanity. Allah (SWT) has laid down their dimensions, laws, systems, and capacities in a manner befitting the basic function of the descendants of Ādam as vicegerents on earth and in accordance with their ability to interact positively and effectively with nature.

In connection with this interaction, Islam's aim is to propose a "middle way" or a "methodology." It therefore informs humanity of the principle that nature is subject to the service of human ends. At the same time, however, it lays down the parameters of interaction between the two sides through the establishment of values, principles, and conventions designed to produce the greatest possible degree of innovation, and to instill such civilizational qualities as are most compatible with human ambitions, ethics, and status in the cosmos. If it fails to make use of science's methodologies, facts, and applications of science, no Islamic society can ever implement the principle of *taskhīr* and transform it into a genuine, historical reality.

D. The Principle of the Necessary Link between Creation and the Creator

Finally, science must be used to establish one of the most important principles of the Islamic worldview as well as of the religion in general. This is the necessary link between the wondrous system of creation and the existence of the Creator. Science is the tool which reveals, illuminates, and clarifies this link. Many have written about the miracle of creation, and many scientists and scholars have spent their lives seeking to arrive at one of the main incontestable truths in the history of science: that is, that creation must have a Creator. This issue has been decisively resolved, and there is no scope left for questioning. Since the cosmos functions at the level of organization, control, precision, harmony, pre-ordained motion, intentionality and constructive interlinkage that it does, it must originate from a supernatural, all-powerful, and directing Will. This issue has been resolved by mathematical calculations and scientific formulae, by numerous proofs, and by the results of countless scientific experiments.

Scientific research, therefore, is a necessity of Islamic life as long as it continues to perform the critical function of exploring the secrets of the cosmos, life, and the world. Moreover, it leads to the Maker of the universe in the most convincing manner and, as it turns to the Creator, it coincides with the act of worship itself.

II. The Methodology

In this context, the Qur'an expounds upon a "methodology of discovery" of the universe's laws. It is a flexible, comprehensive methodology not subject to the fluctuations of time and place, since it is strictly a method or a tool for research and exploration. It thus transcends relative changes and remains valid in every age and every environment. The Qur'an tells people to acquire an insight into the reality of their existence and of their place in the cosmos. To do this, they are invited to observe their surroundings from the ground on which they stand to the horizons of the psyche and the cosmos. What better attitude is capable of leading people to the higher spheres of iman? The Qur'an also assigns to the senses a basic responsibility for every step taken by the Muslim in the fields of research, contemplation, knowledge, and experience. The Qur'an then goes a step further by telling these same people to make use of their senses to receive unlimited data which their perceptive powers could then register, discriminate, accept or reject with a view to reaching the Truth underlying the unity of the cosmic laws.

The intellect and the senses are jointly responsible for exploration, examination, inductive reasoning, and decision-making, and individuals will be put to the test on the basis of this responsibility, because they are essentially different from other living creatures. There are numerous $\bar{a}y\bar{a}t$ which continually stress that it is the senses of hearing and sight, as well as feelings in the heart, that together give human life its value and its uniqueness. If these powers and energies are activated, if these amazing capabilities are used to their fullest extent, an individual will reach the peak of his/her scientific and religious superiority. And, it is this superiority which will make him/her master of creation and the vicegerent of Allah (SWT) on earth. On the other hand, if these powers are not used, if their potential is not realized and activated, the person will have chosen the meanest status for any human being, an inferior status which Allah (SWT) did not desire after endowing him/her with hearing, sight, and feelings in the heart.

There are also many other $\bar{a}y\bar{a}t$ which directly urge humanity to activate its intellect. The intellect is the key that Allah (SWT) has given an individual for opening the doors and entering the realm of faith in Him. Further $\bar{a}y\bar{a}t$ invite deep, perceptive, and responsible pondering upon all of the world's surrounding phenomena.

Whatever is said about meditation also applies to acquiring knowledge. Knowledge is an intellectual step beyond meditation, for its outcome is a greater awareness on the part of individuals of their surroundings, as well as a deeper perception of the dimensions of their being and relationship with the cosmos. Moreover, it opens up their perceptions at all times and ensures that they are ready to tackle, in a responsible manner, every issue, phenomenon, or problem which presents itself.

The Qur'an stresses the methods to be followed – proof, argument, good debate – in order to arrive at valid results based on induction, comparison, balance, and examination, on the basis of agreed external data, and on the strength of the intellectual and logical powers of those who have superior abilities in this field.

It is highly significant that the Qur'an uses the word 'ilm (knowledge/science) to indicate: (a) the $d\bar{n}$ that Allah (SWT) taught to His prophets, (b) the *sunan* with which Allah (SWT) enables the universe to function, and (c) the great truths which are contained in its $\bar{a}y\bar{a}t$. 'Ilm also

occurs as an indication of the religious values revealed from heaven. Thus, ilm and $d\bar{n}n$ acquire identical connotations in Qur'anic language. The words of Allah (SWT) teach us this fact and enable us to perceive the broad, interlinked senses which He wishes ilm and $d\bar{n}n$ to convey, rather than those meanings derived from the uninformed opinions and prejudices of the positivists. The various declensions and conjugations of the word ilm occur in more than 750 $\bar{a}y\bar{a}t$.

The Qur'an also stresses the idea that a completely "scientific" attitude must be adopted in studying physical and metaphysical phenomena, in addition to declaring its categorical rejection of everything having a negative effect on this attitude: prejudices, uninformed opinions, magic, and superstition. These "unscientific" practices are all forms of straying from the true way (i.e., the "straight path" of Islam) which the *din* requires humanity to follow in order to reach its goals. As we all know, the straight path is the shortest distance between two points; thus any deviation from it will increase the distance and hardship and could deflect travellers to the extent that they may never reach their goals. The Qur'an repeatedly asserts a clear and obvious fact: nothing can come of prejudice but worthlessness and blindness, and the only alternative to truth is error.

III. Facts

The third dimension offered by the Qur'an consists of a mass of facts, laws, and systems in the various fields of science: astronomy, geography, botany, biology, human physiology. These are contained in a large number of *suwar* and $\bar{a}y\bar{a}t$. Here, many modern thinkers or interpreters adopt one of two conflicting positions. The first position relies entirely on the use of modern scientific data to interpret the $\bar{a}y\bar{a}t$, with the resulting methodological errors whereby partial data is applied to produce a general ruling, variable data is used to produce an invariable ruling, and relative data is used to produce an absolute ruling. The weakness of this approach is that if these partial and relative scientific data should change – and this, as the scientists themselves will confirm, is their natural propensity – then the proponent of this position will suffer a form of mental anguish and dilemma when faced with those $\bar{a}y\bar{a}t$ which have been interpreted on the basis of non-permanent scientific categories. While attempting to avoid a fate like the above, the second position also falls into the trap of erroneous thinking by totally rejecting scientific data.

The nearest thing to a sound methodology is the middle position which the Qur'an teaches us to adopt in every area of life. We should not allow ourselves to become totally committed to science with its variable data; yet at the same time, we should not totally reject every interpretation in which science plays a part. A capable contemporary interpreter must use his/her intellect and potential in his/her field of specialization in order to understand the nature of the relationship between the two sides of the equation: the Qur'anic $\bar{a}yah$ and the scientific thesis. In addition, such people must make use of certain modern trends in Qur'anic interpretation which use Qur'anic terminology and imagery to understand a specific $\bar{a}yah$'s meaning and content – an approach known as al tafsīr al bayānī li al Qur'ān. This method contains objective guarantees which protect the interpreter from exaggeration or error in his/her attempts to obtain the intended meanings of words and phrases. This balance between scientific specialization and al tafsīr al bayānī enables the interpreter to take steps to reveal the intended meanings of the scientific $\bar{a}yat$ in the Qur'an.

There are some scientific facts that have become definitive laws or indisputable, self-evident truths. For example, the role of the winds in producing rain, the role of gravity in the movements of the solar system, the anatomical stages of the fetus, or changes in the ratios of gaseous substances as their distance from the earth's surface increases or decreases. Apart from these, there are many other facts with which the Arabs at the time of Revelation were not familiar, especially in terms of their scientific nature. Interpretation of the Qur'anic ayat which deal with and confirm these facts has relied, at least in recent centuries, on self-evident scientific facts and, in so doing, has revealed one of the Qur'an's many miraculous aspects.

There are scientific facts that convey more than one aspect of reality. However, all these aspects exist within a single, flexible framework, and it is sometimes useful to cross-reference them to other Qur'anic $\bar{a}y\bar{a}t$ in order to better understand their relational significance. One example of this is the relational aspects of certain $\bar{a}y\bar{a}t$ which confirm that the miraculous structure of the heavens is held together and protected from disintegration by a "system." However, theories which are still at the "discussion" and "evaluation" stages and, unlike the "proven" laws and self-evident truths have not yet been established, should be treated with caution and only applied where they enable the interpreter to throw light on a given aspect of the $\bar{a}yah$'s content.

Where constantly changing scientific data is concerned, it is essential to proceed with care so as to avoid the possible errors of (a) complete commitment to, and (b) complete rejection of, the scientific interpretation. A complete commitment to the scientific interpretation will prevent and obstruct proper understanding, awareness, and further investigation at all levels. On the other hand, a complete rejection will undermine the ability to understand and will eventually result in the erection of barriers between individuals and an aspect of the information contained in the Qur'an.

Facts devised as proofs to lead one to belief in Allah, the One, the all-Powerful, the all-Knowing, are to be found in abundance throughout the Qur'an. Here, it must be said that not everything propounded by the Qur'an on a scientific topic is intended to be a "miracle" for coming generations, nor was it necessarily unknown at the time of Revelation. In every field, we find two types of $\bar{a}y\bar{a}t$. One type conveys information and directs attention to Allah's creation and the excellence of His actions in the cosmos, the world, and the psyche. This type presents facts and phenomena that were as well-known at the time of Revelation as they have been in every other age. The other type consists of pointers to scientific facts, systems, and *sunan* not known at the time of Revelation, but which increases in scientific knowledge have gradually revealed over the ages. This is the type that is usually called the "scientific," miraculous, and wondrous nature of the Qur'an.

We should also note that the Qur'an does not reveal all scientific facts. As stated before, the Qur'an is not a science textbook; it does, however, reveal some facts and provide pointers to others. At the same time, humanity has been left the freedom to discover a far greater mass of facts. The methodology put forward by the Qur'an, as we have seen, stresses that individuals can only follow these discoveries through religious faith and commitment.

IV. Application

When we consider the fourth aspect, we observe that the Qur'an frequently urges men and women to make use of scientific facts and discoveries in order to improve their lives and to raise the technological quality of human civilization at every level. This is a broad, flexible, and constant position which calls upon all individuals to benefit from the scientific facts available in every age and to apply them in a practical manner to their own civilization. If this happens, and if there are changes in the known scientific facts and the state of civilization, then the Qur'an can be seen to appeal effectively to every generation by inspiring it to bring about further changes on the basis of new facts and new situations.

Thus, however we look at this fourth dimension of the relationship between the Qur'an and science, we find that the Qur'an constantly and unconditionally calls upon the community of believers to put more and more scientific facts, discoveries, and formulae to good use. Does not the Qur'an call upon Muslims to make themselves ready for their enemies by developing the "strength" with which they will be able to strike terror into their enemies, so that Muslims can defend their lives and protect their role on earth? And does this call not reflect a broad, flexible attitude that can be applied in every time and place, combining immediacy with universality, and the temporal with the permanent?

Against them make ready your strength to the utmost of your power,

including steeds of war, to strike terror into [the hearts of] the enemies, of Allah and your enemies. (8:60)

Reference is made in this $\bar{a}yah$ to absolute strength and steeds of war as being the best weaponry at that time.

Sūrah Ḥadīd (Iron) also stresses the need to make use of this mineral which is so crucial to both peace and war, without specifying, however, how it should be used or processed:

We sent aforetime Our messengers with clear signs and sent down with them the book and the balance [of right and wrong], that men may stand forth in justice. And We sent down iron, in which is [material for] mighty war, as well as many benefits for mankind, that Allah may test who it is that will help, unseen, Him and His messengers. For Allah is full of Strength, Exalted in Might. (57:25)

Could there be any greater proof of the Muslim's link with the earth than the naming of a whole sūrah after one of its most important and crucial minerals? What could be a more convincing indication of the divine approval for applying science and technology, and for developing the creative and civilizing tendencies viewed by Islam as being essential components of the "manners and morality of faith" which a scientist must possess in his heart than the above *ayat*? Furthermore, these *ayat* present iron as a great blessing bestowed by Allah (SWT) upon His servants; yet at the same time, they show the two possible applications of iron: "material for mighty war" (when iron is used for making arms and military preparations) and "benefits" (which can be derived from this mineral in every area of humanity's peaceful, constructive activities). What further need can there be to stress the growing importance of iron over the ages, in matters of both peace and war? In our own age, it has become one of the most important instruments-for welfare or destructive purposes - at the service of individuals. A modern state which possesses iron can "strike terror into its enemies" because of the heavy weaponry potential that iron gives it. At the same time, it can join the ranks of the major industrialized countries for whom iron is the backbone of industry and wealth.

While we are on the subject of iron-and as we have just come across a whole $s\bar{u}rah$ named after it-we should remember the $\bar{a}y\bar{a}t$ from $S\bar{u}rah$ $Sab\bar{a}$, which mention Allah's blessing upon the prophet Dāwūd when He taught him how to soften iron. This was in the context of building, construction, and industry. Let us also remember Dhū al Qarnayn, who addressed the oppressed and sought to protect them from a forthcoming invasion:

10

He said: "[The power] in which my Lord had established me is better [than tribute]: help me therefore with strength [and labour]: I will erect a stronger barrier between you and them: Bring me blocks of iron." At length, when he had filled up the space between the two steep mountain-sides, he said: "Blow [with your bellows]." Then, when he had made it [red] as fire, he said: "Bring me, that I may pour over it, molten lead." Thus were they made powerless to scale it or to dig through it. (18:95-97)

The Qur'an draws a unique picture of the harmony between humanity, nature, and the supernatural; it portrays the balance between the $taskh\bar{t}r$ (and molding) of material forces to the service of humanity and the worship of Allah (SWT); it shows the extraordinary contrast between the aesthetic and the practical, as well as the clear counterpoise between an individual's strength and practical potential on the one hand, and his/her position in relation to the rest of existence, his/her weakness and perpetual need for Allah (SWT) on the other. There is a constant reminder of the need to protect one's capability from the tendency to stray from fulfilling his/her material and natural needs:

We bestowed Grace aforetime on David (Dāwūd) from Ourselves: "O ye mountains! Sing ye back the praises of Allah with him! and ve birds [also]!" And We made the iron soft for him-[commanding], "Make thou coats of mail, balancing well the rings of chain armour, and work ye righteousness; for be sure I see [clearly] all that ye do." And to Solomon (Sulayman) [We made] the wind [obedient]: Its early morning [stride] was a month's [journey], and its evening [stride] was a month's [journey]; and We made a font of molten brass to flow for him; and there were jinns that worked in front of him, by the leave of his Lord, and if any of them turned aside from Our command, We made him taste of the penalty of the blazing fire. They worked for him as he desired, [making] arches, images, basins as large as reservoirs, and [cooking] cauldrons fixed [in their places]: "Work you, Sons of David (Dāwūd), with thanks! But few of My servants are grateful!" Then, when We decreed [Sulayman's] death, nothing showed them his death except a little worm of the earth, which kept [slowly] gnawing away at his staff: so when he fell down, the jinns saw plainly that if they had known the unseen, they would not have tarried in the humiliating penalty [of their task]. (34:10-14)

In another sūrah we read:

He said: "O my Lord! Forgive me, and grant me a kingdom which, [it may be], suits not another after me: for Thou are the Grantor of Bounties [without measure]." Then We subjected the wind to his power, to flow gently to his order, whithersoever he willed as also the evil ones, [including] every kind of builder and diver—as also others bound together in fetters. "Such are Our bounties: Whether thou bestow them [on others] or withhold them, no account will be asked." (38:35-39)

And we also read in the Qur'an:

... [T]o each We gave judgment and knowledge; it was Our power that made the hills and the birds celebrate Our praises with David (Dāwūd). It was We who did [all these things]. It was We who taught him the making of coats of mail for your benefit, to guard you from each other's violence. Will you then be grateful? [It was Our power that made] the violent [unruly] wind flow [tamely] for (Sulaymān), to his order, to the land which We had blessed: for We do know all things. And of the evil ones, were some who dived for him, and did other work besides; and it was We who guarded them. (21:79-82)

These $\bar{a}y\bar{a}t$ are a few of the many examples which demonstrate to us the supreme civilizational integration between man, nature, and the unseen powers as they "interact creatively" with Allah (SWT). The cosmic energies function in ordained harmony for the service of Allah's vicegerents who turn to Him in all of their actions, whether great or small, in praise, gratitude, and worship to the Giver who has bestowed upon them all of these bounties so that they can choose the status for the sake of which life on earth was brought into existence:

I have only created jinns and men, that they may serve Me. No sustenance do I require of them, nor do I require that they should feed Me. (51:56-57)

Here we meet two of the chosen servants of Allah (SWT) – the prophets Dāwūd and Sulaymān. The vast powers of nature were made subservient to them, as were the energies of the Unseen which no time-wall or placebarrier can confine, and before which science ultimately bows its head in impotence. All these powers – iron, wind, molten brass, the jinn – were made subservient so that they could function at the command of responsible, believing people and fulfill the civilizational achievements in building as well as in developing industry and the arts. We can see in these Qur'anic stories clear references concerning iron and brass which are manifestly applicable to us today, and which remain vital for modern civilization, or indeed for any civilization wishing to build, industrialize, and excel. We can also see that Allah (SWT) did not merely give the prophet Dāwūd iron; He also taught him how to soften it so that it could be used productively. Moreover, we should not forget the reference to wind, which geographical research has shown to be a crucial factor in developing and destroying life on earth.

These *āyāt*, among many others, provide us with a decisive answer to those who say that the only function of the divine religions is to lead their followers into a state of isolation and passivity, to persude them that the world is an archway to be merely passed through rather than developed. For such people, religion is "the antithesis of civilization," and faith is "an obstacle to creativity, invention and innovation"; thus for them, the relationship between an individual and Allah (SWT) becomes a static one, leaving only the positivist schools in possession of the dynamic role in developing and improving life. This concept is totally unacceptable.

To conclude, we have given but a few of the hundreds of examples which prove that the Qur'an totally rejects defeatism and passivity – positions which endeavor to make religion and progress implacable enemies. Indeed, to be religious does not mean to withdraw from the usual processes of life, nor does it mean to perform deeds which are utterly devoid of utilitarian value. The whole matter of religion is a quality of the very practices of living. On this account, Islam remains imbedded in the very processes of life and history.

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