READ! AND YOUR LORD IS MOST BOUNTIFUL

Reading: The Basis of Science and Peace

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FOREWORD BY THE TRANSLATOR

The idea of bringing out Jawdat Said's every word in English has been borne a long time in my head. I find Jawdat Said as a voice that must be heard all over the world, that it holds a hope for a better humankind. I mean in this more than a reformer within Islam, for Jawdat Said is a thinker for the world. He merits to be counted as heralding a new world; and he brings to bear upon his philosophy a wide range of disciplines and writings. To say that he might be the most original thinker I have come across is not enough, for what we have here is the blue print for the well-guided humankind. Though many Muslim thinker have aspired to bring the two voices of Divine inspiration and human experience to work together for enlightening the human mind, those who have attained this objective in the highest degree can perhaps be counted on the fingers of one hand – and you are bound to count among them Iqbal, Malek Bennabi, and Jawdat Sa'id.

Dr. Abdullatif Alkhaiat,

PREFACE

In the Name of Allah

Praise be to Allah. May peace descend on the chosen persons among Allah's servants.

The idea of this book has been on my mind, somehow or another, for quite some time. I have been turning it over in my mind and revisiting it multiple times, and I have done so for many years. Having grown up in an Islamic atmosphere, I had absorbed from the culture, quite naturally, a steady respect for knowledge and science. It has always seemed to me that knowledge, scientific or otherwise, must be handled in the most earnest spirit, so that we may clearly elucidate its features. Another thing which I always noticed is that our respect for knowledge and science is rather ideological and intuitive; that we do have a settled veneration for them, because of what the Qur'an says of them, but that this veneration was not based on comprehension and careful analysis. One may say that knowledge and science occupy at present a mythical, rather than a practical and active role, drawn from facts. When we think of knowledge and science as words, they seem to resonate deeply with us, but when we come to the real function of science, it is confused in our minds with superstitions and it gets confounded with the great mass of human culture — a gross heterogeneous mixture.

From all this it became clear that it would be right for me to take up for discussion the topic of knowledge and science, notwithstanding the limitedness of my scope: I felt the urge to seriously delve into this topic, so that others may feel stimulated to direct their minds to the essence of knowledge and science and to really clarify their particulars.

When I took up the pen to write, I had the above reflections in my mind, but after having taken some steps forward in this matter, something else was taking shape in my mind: that the laws which control the progress of knowledge and science were inseparably related to 'reading'. If you trace the first steps of scientific research, you will soon realize that it did not develop in any significant degree before the discovery of writing. Before that there were ingenious experiments of course, but not much of their results remained after the death of the persons behind them. The persons around the ingenious experimenter would remember something of their findings, but memory has never been too reliable in retaining all the particulars. It was only with the invention of writing that scientific knowledge acquired a new memory, an indelible memory that did not vanish with the death of the particular individual. This was an important addition to the flourishing of scientific knowledge: what one person discovered soon passed to the rest of human kind, through the medium of the written word, and thus became the property of the entire species. Both the recording of science and its circulation occupy a major place in its development – and hence the vitality of writing. People no longer needed to reinvent the wheel. We may safely say that what one individual or some individuals discover will not be commonly known and preserved except through writing. From this it follows that scientific inquiry, and the ability to record and publicize it, must all work together for knowledge and science to grow and develop. Scientific inquiry generates knowledge and science, but the making of records and

publicization ensure their preservation and development – and in this way scientific knowledge can really serve its function. It is true that scientific knowledge was there before the ability to record and distribute, but it did not flourish until the development of these two faculties. Indeed, this relationship is reciprocal: for a researcher to delve into knowledge and science, they will have to study, and study means reading what has been written; and then for the new addition of scientific work to be recorded and publicized, more writing is necessary.

It was for all such considerations that I decided to have 'Read and Your Lord is Most Bountiful' (From the Qur'an, Sura 96, verse 3) as the title to this book.

Let me emphasize that the real purpose of writing this book is to discuss scientific knowledge, but it turns out that knowledge and science cannot proceed without reading: reading essentially proves to be the womb from which science comes into being and then develops and flourishes. And once scientific knowledge is recorded and publicized, it is possible for it to generate more science and knowledge – the more we act to see knowledge and science recorded and publicized, the more we help new knowledge to be generated: and that is what writing can do. No wonder then that the first word revealed in Heaven's last message to humankind was 'Read' (the first word revealed to Muhammad) – it was this rather than any word related to faith or worship. And soon after, it was stated that to acquire knowledge and convey it you need writing "Who taught by the pen" (96:4).

We may go on to say that, though writing was discovered five millennia back, its value was very limited until paper was discovered – and that happened fifteen hundred years ago. And then another giant step, printing, took place only five centuries back. This was really a huge event on the social and cultural level, a volcano which is still erupting. And before it had cooled down there appeared another giant step: the computer, which appeared no more than a few decades ago. But, in spite of all these inventions, knowledge and science still need a lot of effort to produce their effect; they need a lot of processing and simplification to make them accessible to all human beings – it is then that they do their part; it is then that man can realize his mission and fully attain his humanity: by eradicating corruption, by halting the spread of death and destruction. And that is a most sacred ideal that the species' effort must be dedicated to realize.

By making use of such scientific knowledge as has actually been realized, life will proceed smoothly and in a balanced way, not limping as we see its progress now. One may connect this to a traditional Islamic aphorism: "When you act on what you know, God will assist you in knowing what you did not know." This brings up the problem of illiteracy: which is extremely prevalent in our communities. This is well-known and it must be a disgrace to all of us. However, this may be termed as 'simple illiteracy', for there is a more serious type of illiteracy, 'complex illiteracy': when we fail to find in our midst a leading group of enlightened and creative men and women: a group that seeks out any important knowledge that must be acquired by the community. That we lack such a group is more of a problem than that simple illiteracy. There is in the Qur'an intimation to this other type of illiteracy: people who can read and write but are still virtually illiterate: "And there are among them illiterates, who do not know the Book, but see therein their own desires," (2:78); they are those who do recite the Scripture, but as at least two eminent scholars, Ibn Taymiyah and Qatadah, pointed out, these people do not

go beyond this recitation, do not understand the meaning of the verses. They do read and memorize, but without comprehension: the word 'amanyy' here means 'recitation' (see Ibn Taymiyah's *Al-Fatawa*, Vol. 17, p. 434).

The idea here is that our basic problem is that of our relationship with reading – reading in the widest and unrestricted sense, and reading as a directed process that is constantly updating itself. This is reading in its noblest sense: a self-correcting process that improves itself as it proceeds, and generates more tools for finer production. What happens so far is that, though humankind invented reading and writing five millennia back, too much of the reading material one comes across is not worthy of the time it consumes. Reading is such a vital activity that it is no exaggeration to assert that the future of humanity emanates from the tip of the pen (Did not the Muslim folks believe at one time that the whole of knowledge is condensed in the dot under the statement: 'Bismi-Allah-alRahmani-r-Rahim'?)

In writing this book, I have two purposes:

One is: setting the reader on the path towards scientific knowledge. This comes about through implanting scientific knowledge in the minds of people and distributing it as widely as possible. I do believe that this is a most sacred duty, a duty that merits all the endeavor and efforts of those capable of this task, the task of bringing knowledge and science within the comprehension of the average person. These endeavors must go on indefinitely, for we must aspire to see people breathe the atmosphere of knowledge and science, to really enjoy the peace and contentment, the balance and mental tranquility that flourish with more scientific knowledge.

The other purpose is enhancing peace, for peace is the direct fruit of knowledge. It is through scientific knowledge that people can perceive the potential for putting right the life of the human being: the possibility of correcting their progress without having to resort to harmful or injurious means. We can easily notice that it is a person who has no knowledge, who cannot perceive the way out of a crisis, that resorts to destruction: they may even decide, Samson-like, to destroy both themselves and their enemies. This solution is often chosen by those who fail to see the right way: you may contrast this with the way of knowledge and science which will make of the enemy 'an intimate friend' as the Qur'an puts it (41:34). Let us notice how, even before human beings were placed on the Earth, the angels suspected them of doing mischief and of spilling blood, though Allah was placing them, the humans, on earth, to be its custodians or viceroys. The angels are here vividly expressing the problem of realizing peace on earth, both at the level of individuals and at the level of communities.

I did mention earlier on that we Muslims have an intuitive veneration for knowledge and science. But one may go on here to say that a keen observer will notice that those who lack the faculty of seeking knowledge and science, will not hold on long to them in any conflict or debate. Soon, emotion will take over, and soon it will overshadow the intellect. Soon those who have not developed the habit of relying on scientific knowledge resort to their instincts, and to what is commonly said, before sound thinking and scientific reasoning take hold. It is a prevalent phenomenon to see a person reject scientific knowledge on the grounds of some unfounded

generalization, in which case right and wrong are not distinguished, nor are knowledge and ignorance. When this happens, the consequences are quite dire: for the straight path will get blurred. By denying the significance of scientific knowledge, those who fall in this are often not aware, or they forget, how highly the Qur'an places knowledge and science: that it never speaks disparagingly of knowledge and science. On the contrary, those who turn their back on knowledge and science are described as 'la y'lamun: i.e. do not know' 'la yafqahun: do not comprehend' 'la ya 'qilun: are without sense'. Therefore, it is a serious mistake to treat scientific knowledge as untrustworthy; those who reject knowledge do that just induced by illusions, guesswork, and the like. So no, scientific knowledge should never be the butt of attack and refutation – what may be attacked and refuted are ignorance, unfounded conjecture, and the like. We should have given knowledge and science more confidence, by raising them and respecting them: this comes about when we know how to draw the line between what is scientific and between ignorance and error.

The truth is that there is no way out for us without scientific knowledge. We should acquire the skill to realize the difference between what is known, and that must be accepted; and what is ignorance, and that must be rejected. When we fail to make such distinctions, we reject the truth and what is scientific – assuming that we thereby do service to our faith and ensure a better future for our generation and the coming generations. But it is not so: when we accept or reject without fathoming things we are placing before the rising generations all kinds of hurdles towards balanced progress.

We still see in Islamic writings a lot of implicit or explicit condemnation of science – that it is not so vital for solving our problems. Indeed, when we treat scientific knowledge as suspect, we are contradicting the high place accorded to knowledge by the Qur'an. Is it not in the Qur'an that we read: "And those to whom knowledge has come see that the Revelation sent down to you from your Lord – that is the Truth," (34:6), and we read: "And do not pursue (do not utter) that of which you have no knowledge," (17: 36)

I do not claim here that I can put forth a coherent and succinct definition of scientific knowledge in a way that the reader will have a kind of compass that enables them to distinguish between scientific knowledge on the one hand and conjecture on the other; between what is reasoning on one hand and *alhawa* 'vain/whimsical desires' on the other. All I aspire to realize here is to direct some light on scientific knowledge in a way that the discerning reader will have the means to widen their horizon and acquire a better realization of such issues.

Let me start with declaring my dissatisfaction with the concept of scientific knowledge as it is commonly adopted, not only among Muslims, but among the Westerners, at least those of them who are quoted and translated in our part of the world.

To elaborate, what Muslims, especially the modern ones, seem to imagine about scientific knowledge is not what I find in the Qur'an: for **in the Qur'an scientific knowledge is described as the process of revealing the truth**. Most Muslims seem to imagine that there is another way of revealing the truth, and of distinguishing what is true. They often talk and write of scientific knowledge as incapable of revealing the truth. So, while they start with assertions of

praising science, and though they list verses from the Qur'an and Traditions of the Prophet in extolling knowledge and according it a high place, they will often contradict that, when they express their doubts concerning scientific knowledge.

As for the Westerners, they seem to confine scientific knowledge to the natural phenomena, or some of them. When they come to considering religion and values or human affairs, they take these issues to be beyond scientific analysis. Scientific knowledge is in the West taken to cover certain issues of human life and not all. Such limitations debase scientific knowledge, and confine its comprehensiveness and effectiveness. What the Qur'an teaches me is that both the first and second conceptions fall short. Muslims need to have full confidence in science – that it conduces to truth all the way, not part of the way. Westerners, on the other hand, need to realize that the part science can play in the sectors of religion, values, morality and human affairs is quite equal to its part in connection with research about nature.

An example will help us here: There was a time when the world had no idea about the sources of epidemic diseases which invaded the world. It was not right then to say that an epidemic disease was not amenable to scientific study – for a person who knows what science is about would say: "An epidemic and its causes are not beyond scientific investigation and solution, though it has not yet come within our scope, and it is still beyond our control." They should feel that with more effort people would be able to realize such discovery and control (which is what was later accomplished.) This is the correct scientific stance. And when we come to morality, values, and religion it is not the correct scientific attitude to say they cannot come under scientific investigation and discovery. The right approach is to say: "Though we do not at the moment know the laws that govern morality, religion and values, science is the instrument by which we can dispel any dimness or opacity that conceals these domains; the time will come when we know the truth about morality, values, and religion.

There was a time when Muslims thought better; they did realize at the zenith of their civilization that religion and scientific knowledge are essentially the same. You may see this in aphoristic statements by the illustrious writer al-Jaheth, when he says, for instance: "One rule that the ancestors have left us is: Intellect is nourished by knowledge, and knowledge is nourished by effective discourse." I learned much about civilization from this statement of al-Jaheth's. One finds in 'Intellect is nourished by knowledge' a profound delving into the essence of civilization. And one may find in this statement more illumination: that knowledge nourishes morality, values are nourished by knowledge, and wisdom and religion are nourished by knowledge. It is through scientific knowledge that good morality is established, that values flourish, and the true religion takes root. Once ethics, religion, and values ripen to be scientific, they will take root in hearts, and they will take a tangible shape in actual life.

The insight one may draw from al-Jaheth's statement is very unlike what one finds in both the Western civilization and the Islamic thought under Western influence.

Let us refer to the following statement by Bertrand Russel, the renowned philosopher, who said in his book *The Scientific Outlook* (near the end of the Preface): "This fresh power of science will prove to be constructive, provided there is a commensurate degree of wisdom which

is invested in the human being; it is vitally essential then to increase wisdom, and wisdom is a right conception of the aim of life – but that is something that science cannot provide, and hence an increase of science is not helpful there."

It is concise enough what Russel says here, and it is clear: but it is at the same time confused and confusing. It confines scientific research to the natural phenomena (*ayat al-afaq* is the Qur'anic term), while it denies scientific investigation to the issues connected with human guidance and ethics (*ayat al-anfus* in the Qur'an) – and in this way it deprives science of a most vital domain of study. Al-Jaheth's principle, on the other hand, is accurate, and it is clear at the same time when it asserts that wisdom develops and thrives through knowledge and science.

It is unfortunate that Muslims have been deflected from the Qur'anic conception, as a result of their contact with the West over the last few centuries: for the Qur'an takes the most genuine science to be that connected with the human mind and behavior, observation of the outcome of historical events, and the wisdom that may be drawn from them. It was a mistake to move away from al-Jaheth's approach, when he linked wisdom and the human intellect with knowledge, and linked knowledge to effective discourse – they should not have abandoned this to Russel's approach.

We find more in the spirit of Russel's view in *Kitab al-Arabi*, Issue 4 (a series issued by *al-Arabi* Magazine of Kuwait), the issue entitled: *A Survey of Arabism, Islam, and Europe*, p. 154. The author, Mahmoud al-Samura refers to *Revival of Arabic Thought*, by Zaki Najib Mahmoud, and says: "As one starts to read the book, one is anxious when they feel that the author believes in science, and nothing but science – but not for long, for he dispels our worry when he turns to the values which make a human a human," (October, 1984).

Which is no more than a reproduction of Russel's idea. The author is virtually saying that science causes a disturbance in our minds, and for removing that disturbance, we need to turn to something other than science in order to see the right way. Let it be added that both the one who writes the comment and the other author who is being commented upon are modernist writers, not traditional religious scholars. This means that it is on such 'superior' thought that the Arabic and Islamic culture is supposed to be fed. Many a reader, especially those who revere individuals and are intimidated by glamorous names, will feel induced by such writing to withdraw any confidence in science; they will have it settled in their mind that scientific knowledge is not the means by which our own problems and those of the world can be solved.

The truth is that once science is not given its due worth, and once people feel that it needs something else to support it, then it will lose its real function.

There was a time when germs contaminated people's food, and afflicted them with various physical disease; but the intellectual diseases are even more harmful, and far more serious: they infect the intellects of the Ummah – they cause painful situations in people's

¹ I must apologize for the many quotations which I have had to retranslate into English, though they had been originally translated from English into Arabic. The simple reason is that I have had no access to the English original except in one or two locations. (Translator)

relations. We still pay for our failure to study the various ailments which afflict our minds transmitted from the media, the books produced by our thinkers, and the statements made by our celebrities. Our part of the world does not practice the required inspection of the discourse and other signals that keep bombarding our eyes and ears – not a strange phenomenon in backward nations. What happens on the intellectual level is not unlike what used to happen in the domain of cleanliness and sterilization before germs were discovered.

Lacking knowledge of the essential parts of human history, about the emergence of science and the evolution of thought, about humankind's relationship with power; the laws of nature and the harnessing of nature through human effort; the internal and external signs of existence — all kinds of ignorance cause such domains to be confused and blurred with superstitions and illusions. These superstitions and illusions are, indeed, given more prominent places than facts, and are allowed to impact more greatly on how we live our lives. Most of us would not be content unless those myths and illusions are treated with extreme deference — and so they keep infecting our intellectual atmosphere.

Roger Garaudy has some insight here concerning the separation of wisdom from science. He quotes in his book *The Promises of Islam* the following (p. 144) Hussein Nasr's description of the relations between the modern sciences and the Islamic sciences – particularly the reversal in relations between the sciences of 'means' and the sciences of 'ends, or wisdom':

"Had the Muslim scholars of the middle ages been resurrected at our time, their surprise would not have been aroused by the advance in thought – for such advance was launched by the Muslims' own effort. Their surprise would be aroused by the reversal of the value system, the utter overturning of that system: they would notice how the center of their vision which existed among them has been pushed to the margins, and the peripheral part has moved inward to occupy the center; that the sciences which used to be classified as secondary at the time of Islamic golden age have been given a place of prominence by the West; while the science of wisdom, the eternal knowledge, has diminished until it is all but non-existent."

Before I conclude this preface, let me assert that when the above may seem a generalized condemnation of both the Muslim and Western worlds, it does not mean that one does not come across alternative voices on both sides, though still not coherent enough, campaigning for the spread of scientific knowledge. What I do mean is that the prevalent trends are as I have represented so far.

Jawdat Sa'id

INTRODUCTION: READ AND YOUR LORD IS MOST BOUNTIFUL

READERS ACROSS TIME AND SPACE OCCUPY THE MOST HONORED PLACE

It may be noted that the first word revealed to open the last Message from Heaven is 'Read' (the first word revealed to the Prophet Muhammad): not a word pertaining to ethics or worship, as may traditionally be expected. This word must remind one of the starting words of the Gospel of John: "In the beginning was the word," which stresses that to transmit experiences, we need discourse, that knowledge requires language to convey it, and the same when one needs to learn about science – again it is language and discourse that one needs.

It is true that the Qur'anic text: "Read and your Lord is Most Bountiful" (96:1) is received with sanctification on the part of Muslims, for these are the words of the Almighty; but our endeavor here is focused on helping the Muslim see in the above text an indication, a sign from Allah that points out the wonders of the world around us and the world of the human mind and behavior – that if they do adopt this practical approach, the sanctification will be deeper and more solid – and the words of the Almighty will be translated into practical use.

It may be noticed in the Qur'anic verse quoted above: "Read and your Lord is Most Bountiful", that there is the imperative verb 'read', immediately followed by the statement that the Lord is Most Bountiful: there must be a significance in this imperative immediately followed by glorifying the Lord for being 'Most Bountiful': that the two constituents are combined means that they go together. And, indeed, by turning our attention to what actually happens in the world, we find a reflection of this combination: that those who are actually granted the Lord's bounty are those who read the most. Some examples are in order:

First Example: the Greeks at the zenith of their civilization were the best readers and writers. The world seems not to tire of referring to the production of the Greek philosophers, poets and other writers: there is evidence enough that they were closer to the written word than any other people, and that reflected their gazing most intently at their world. The point here is that this is paralleled by bounty from the Lord, and also great honor among men for their prolific reading. Their empire extended far into the east and west: Alexander who had under his rule the lands from India to Egypt was a student of Aristotle, and the latter acquired the designation: the First Master.

Second Example: the Muslims. The swiftness of the Muslim conquest has always been a source of great amazement, the vastness of lands they conquered, and the empires they subdued. Again, that correlated with surpassing nations in their reading at the time they were achieving their conquests. The word 'Read' in the verse: 'Read, and your Lord is Most Bountiful', seems to have worked wonders among Muslims for some centuries: Muslims read more than any other people; they searched everywhere for books, and they had an unquenchable thirst to expand their knowledge. No source of knowledge was deemed unacceptable by them, as long as it expanded their horizons. On the other hand, the Muslims at the peak of their glory enjoyed the Lord's bounty and plentiful riches. And He also conferred on them great glory and ascendancy. But I need not expatiate about the glorious past of Muslims, since this has been repeated to the Muslim ears on every occasion. What the Muslim is not reminded of is the correlation between the glorious past and tawhid 'i.e. belief in the One God', the correlation between this *tawhid* and knowledge, and then the correlation between knowledge and reading. When the Muslims were foremost in riches and glory, their reading surpassed what other nations read, and they had more institutes of learning at the highest level than anywhere else in the world.

Third Example: Our age. By turning our attention to the world around us, we find the same rule operative enough. The nations which enjoy more of the world's riches, and those who also claim more ascendancy and glory are the more devoted to reading: those who hold reading dearly, and all that pertains to reading thrives among them. One can ascertain this fact easily by referring to statistics about the number of writers, books, papers, periodicals, and libraries; and also of the average share of the individual of printed material. It is for such consideration that the historian Toynbee admitted: "It is right to assert that a higher rate of reading of the printed word is the right criterion of civilization against which nations of the world are to be divided into backward, developing, and developed."

Fourth Example: Japan – this modest sized island state, which is nevertheless an intellectual and economic giant: Illiteracy was eliminated there in the nineteenth century. "The rate of female students in Japan who finish secondary (high) school is 95%. The book plays a critical part in the Japanese individual's life: publishers issue approximately 35,000 titles per year, double the relative number published in the United States per individual. This correlates with Japan's being the second industrial power in the world." (See al-Arabi book of the month, June, 1985.)

It is interesting to observe how when someone comes in the presence of another who is a better reader, the former feels dwarfed before the latter. This must remind us of a verse of the Qur'an: "Are those equal, those who know and those who do not know," (39:9). This veneration for the readers has been transferred to those who take higher and higher academic degrees — to a point that it takes sometimes mythical dimensions.

But the law stands firm: by reading more, one wins more; nothing in this world is to be won by mere wishes, as we see in the Qur'an: "Not your desires, nor those of the People of the Book can prevail: whoever does evil will be requited accordingly," (4:123). Allah does not grant people according to their statements, looks, or designations: there is His *sunnah* 'the Qur'anic

term for law', and anyone who applies the law, will have the outcome without fail. Again we have support for this from the Qur'an: "Of the bounties of your Lord We bestow freely on all – these (people) as well as those (people): the bounties of your Lord are not closed to anyone," (17:20)

Some would be inclined to ascribe to intelligence a greater weight than to reading. Some have really gone further: when certain specialists discovered the possibility of influencing the inheritance of genetic qualities, it occurred to some that this would enable scientists to produce clones of some geniuses, or transferring their genetic qualities to others. But such wishers forget that what makes a human being what they are is not what they acquire as embryos – there is a whole world of influences after they have left the embryonic stage to the world of childhood, when education and environment become the primary factor in determining their potentials. One may notice how the children at the time of Noah, for instance, had the same IQ as the children of the modern ages: intelligence, the genetic endowment, has remained the same across history. But what determine what a human being is are the circumstances they grow in, and their environment.

What distinguishes our scholars, of all disciplines of science, from previous ones, is not a difference in the degree of intelligence: it is rather their benefitting from the accumulating experience, preserved in existent writings, and obtained by later generations through reading. Human intelligence is of no real worth in realistic terms without digesting the huge and ever increasing experiences of humankind, and acquired through reading. The most advanced of nations will remain those who extend their effort to benefit from the entirety of human heritage, organized and brought within the capacity of the reader.

From the above it should be clear that reading comes before intelligence, and before genius. It is also why it is right to say, as some have already said, that a late-comer, the descendant, is like a dwarf who sits on the giant's shoulders – seeing all the giant can see, and further. It is reading that raises posterity above the head of the giant and above preceding generations: they acquire all that their ancestors had left, with no more effort than that of reading. This reading will open for them new vistas, to the extent they prove themselves to be avid readers.

It will benefit one to review, if even briefly, the history of renowned scholars in the world. By doing this the reviewer will discover that what characterized them is an insatiable eagerness to read more: they devoured books, they did all they could to get a certain book, and they frequented libraries more than anybody else. Is not that what serious scholars do? By just looking at *Kalilah wa Dimnah* (Arabic translation of the *Panchatantra*) one finds in its preface how fatiguing it was to obtain the book. Like other books, that book was in ancient times considered as a state secret, or a professional secret – and even today some international pieces of knowledge are classified as secret, and may not be published or made available to people except after a long or short number of years, according to its owner's estimation. We must consider this as the residue of the ancient attitude to the written word.

Knowledge and science, however, have started to spread and become commonly available – they are no longer kept under lock and key by some custodians. With the invention of paper and then printing, more efforts were directed to overcoming illiteracy. But not everywhere: some societies are still incapable of eliminating illiteracy, and even more sadly, incapable of purveying knowledge in a way that ensures the rise and progress of new generations, or of having the dwarf sit on the giant's shoulder.

I will now turn to the rising youth, for it is they that the Ummah awaits to effect changes, and to bring its hopes to fruition. Let me urge our young men and women to seek sources of knowledge other than those we read for acquiring knowledge: for the sources we had relied on provided only such knowledge as is reflected in our existence – and they themselves still suffer the consequences of our lame learning. I may refer in this connection to Muhammad al-Talibi, who expressed this in a different way: "When we witness the current failure of politics in dealing with today's affairs, we had better realize that it is the failure of the university, first and foremost." (Alam al-Fikr Magazine. Vol V, Issue 1, 1974.) What al-Talibi is referring to is the failure of the educational establishment: one would expect such an establishment to teach the rising youth, how to sit on the shoulders of the giants before them. It must undertake the responsibility of establishing our proper relation with accumulating human experiences. Nothing is akin to reading in helping one to overcome, in correcting mistakes, and directing towards the next stages. With insatiable reading, one would have a better sense of what to read and what to leave out. When one tries to write about some issue and discovers that they do not know what has already been written about it, they will feel great shame. So, let us be honest with the rising generations and not have them bear the same intellectual shackles that we bear – we may do this by being frank with them, and trustworthy by letting them know the truth. In this way, we enable them to fend for themselves and break free from the cocoon in which we are confined.

By reviewing the lives of celebrated scholars, we find that they were avid readers. We must learn something in this connection from the Name of the Muslim's revealed book, for the word Qur'an is derived from the word *qira'ah* 'i.e. reading'; and those who are genuine reciters of the Qur'an are those who apply it in their lives. The idea of collating the sheets of al-Qur'an to bring out the corpus that we now have took place after many of those who knew the Qur'an by heart were killed in the clashes that happened during Abu Bakr's reign as caliph.

Some examples would be in order here. One is al-Jaheth (159-255 A.H., 776-868 C.E.). This supremely cultured writer is still cited as the foremost master of the pen. One interesting fact about this writer is that his death was the result of heaps of books falling over him: so he was a kind of martyr of books and reading. He was a humanistic and universally cultured reader — and one finds this reflected in his books: they are as universal as his reading was universal. When he handles something for discussion, he proves to be closer to objectivity and further from bigotry than most people. This is so because al-Jaheth appreciated not only the facts of the revealed Scripture, but the facts of *al-afaq* 'i.e. the world' and the facts of *al-anfus* 'i.e. human life and mind'. It is no wonder then that Ibnul-Amid says of al-Jaheth's books: "Al-Jaheth's books teach you sound reasoning before they teach you good literature." Let us add that besides his being a luminary of literature, he was a luminary in the science of Islamic faith.

Another example is that of Imam al-Ghazali. After having been professor in the best institute of his time, he abandoned all that distinction to devote the rest of his life to reflection and imbibing the sciences of his age. He said for instance that he had studied philosophy until it was easier for him than drinking a glass of water. When he wrote about philosophy, he expounded and elucidated the topics of philosophy better than its veterans were able to do.

A third example is that of Imam al-Bukhari. He often rose from his bed more than fourteen times in one night to check the correctness of a certain Tradition of the Prophet's.

One can go on and on in mentioning examples. Not long ago Damascus had a celebrated scholar, Badru-d-Din: this man confined himself to a library for nine years. Indeed, you will not find a single person renowned for their knowledge but must have had this incredible avidity for reading – which is true of Muslim as well as non-Muslims scholars.

I wish to elaborate on and examine this concept: how reading and gaining prominence in science and other spheres of knowledge are linked, and the causes and results behind this, which may help people proceed to study and to read. It may be observed in this way how a human may win both the Lord's bounty and distinction through reading.

READING AND SCIENTIFIC KNOWLEDGE

The advance of scientific knowledge started concurrently with the invention of writing and reading. They have been together, progressing together, and will remain so. Is it not a remarkable sign for us that the illiterate Prophet 'i.e. Muhammad, peace be upon him' received the word 'Read' as the first word of the final Message from Heaven? It is a kind of paradox that the illiterate is receiving an order to put an end to illiteracy! He is ushering in the era of 'Read' and (in other locations of the Qur'an) 'He Who taught the use of the pen,' (96:4), 'Nun. By the pen and by the record which men write' (68:1) and 'In a scroll unfolded,' (52:3): All this links reading to knowledge and science.

Scientific principles are proved through results, and outcomes; and both science and its outcome are preserved, and developed, through the pen. The Qur'an is succinct about it: 'He Who taught the use of the pen,' (96:4). Scientific knowledge cannot go on and be preserved without having the means of preserving and perpetuating human experiments and experiences. Once you have the experiences preserved, you have the material you need to review and ponder – and hence science may keep progressing. Indeed, should every thing produced by people, excluding books, get lost, , then all else might be regained. But should books be also lost, then humankind would need to go through all the stages of their development, perhaps spending the same time for things to develop to the present point. It may also be observed that the word 'Read' being the first word of Muhammad's message ushers a new stage in revelation, a new meaning to receiving the *ayat* 'i.e. signs of Allah'. The *ayat* of Allah as spread by the Lord in alafaq 'the world around us' and *al-anfus* 'i.e. the world of the human mind and behavior', are indicated as revealers of truth (as in the verse: "Soon will We show them Our signs in the earth and in their own souls, until it becomes manifest to them that this is the truth. Is it not enough

that your Lord witnesses all things," (41:53)); and again that is recorded in writing. Reading condenses for the reader all the masses of knowledge accumulated over the centuries and millennia. It may be said that reading is a ladder to enable the human to rise to the highest levels. One would recall in this respect a tradition of the Prophet's, in which he says: "Read and rise," from which one understands that the more one reads the higher they rise and the more superior a position they will occupy. I know that most people would confine the 'rise' in the above tradition to the Last Day, and would confine the 'reading' to a recitation of the Qur'an – but as we learn from the science of the fundamentals of *fiqh* 'i.e. Islamic jurisprudence', there is no indication in the above Tradition itself to confine its meaning as conventional interpretations have. Reading the Qur'an, as well as reading other material, helps us widen our horizons and get better knowledge: Is it not the Qur'an itself which commands us to go forth in the world that we may understand (see 29:20). In this way, we take from the Qur'an an exhortation to learn more and read more. In the same way, the 'rising' mentioned in the above Tradition is not confined to rising in the Hereafter: we may draw from our observation of the world without and world within that by reading more, we rise and rise.

By the way, we often deactivate the social significance of many a verse of the Qur'an's when we impose on them unwarranted limitations and restrictions: in this way we cut the Qur'an off from real life. Malek bin Nabi, the prominent Algerian writer, did not make this mistake. When he discussed the Qur'anic verse: "Allah will change the condition of a people until they change what is in themselves" (13:11), he commented: "Older movements of reform in the Muslim world celebrated this verse, only as a motto; but it seems that they would not go beyond the blessing a Muslim attaches to the Qur'anic words. They found in the verse a symbol that supplied them with optimism – not really believing in their having a chance to effect any change. To say it in different words, they saw in the above verse the unseen, the metaphysical significance, not the functional one ... in a word: the social function of the verse was deactivated." (in his Foreword to my book: *Until They Change What Is in Themselves.*)

It is reading, in the widest sense: profound reading that does not exclude any portion of human heritage, which one may glean from a verse of the Qur'an like: "Bring me a Book revealed before this, or any remnant of knowledge you may have," (46: 4) – it is such reading that takes the reader's hand to be universal, humanistic, to go beyond race, language, and doctrine. The really avid readers are tolerant towards researchers and writers, no matter how different they seem from the reader. It is the readers with a fully open mind that observe the positive side and take it up for further development and elaboration: passing by at the same time the useless or undesirable. Constant reading endows the reader with a tolerant heart and an expansive mind. A really well-read person has a merciful heart: they tolerate and forgive, although they stand firm for the truth. To forgive is to show generosity. Those who are poor have nothing to give away. And those who read all they can access of human heritage, and in the most comprehensive spirit, win reverence, liberality and affability. One may notice how reading will lead one to have patience and tolerance, mercy and the wish to help: the most avid readers are like one who has seen much of life and the various parts of the earth, and has looked into the life of nations, past and present, which is all recorded in various writings. How can one be openminded and tolerant if one has not seen the behavior of tolerant people around the world? Let us

learn a lesson from this verse, addressed by the Lord to His Prophet: "All that We relate to you of the stories of the Messengers – with it We make firm your heart," (11:120)

READING AND IJTIHAD

In the last few generations there has appeared in the Muslim world a call for striving to revive *ijtihad* 'i.e. working on Islamic texts to come up with new solutions to unprecedented issues.' There have been, at the same time, many who said it was a risk to attempt such enterprise, that the great scholars of the past had done all the effort that was necessary: the latter team announced 'the closure of the door to *ijtihad*'.

But *ijtihad*, as I see it, does not take place upon somebody's decision, or people's deploring that it has ceased to be, or others' exhortation that it is resumed. It does happen, however, as a result of lots of reading, knowing more and seeing more: this will bring the reader into awareness of the circumstances and objectives for a certain ruling to be enacted, and what context determined its application. Actually, for a person who knows what their predecessors had said about a certain issue, whether they be religious scholars or otherwise, you cannot tell that person to stop trying to put forth new perspectives, and that is the essence of *ijtihad*. And, conversely, for a person with a little provision of reading, they will fail to come up with viable *ijtihad*, even if they try hard. How can they? When they do not know enough about the mysteries of life and circumstances, about the risks and potentials! It is people who compare and contrast, not only here but in literature, history, legislation – it is such people who say compelling things that are bound to be respected and dealt with in a serious manner. No knowledge may grow without that breadth of horizon and much labor.

Each one of us has their place that they merit: and that depends on one's knowledge, maturity, and personality. Each person is the result of the sum of their experience, as derived from this world in which they live: and what are experiences except what humankind has kept producing and learning from an endless process of trial and error?

Once one has absorbed enough ideas, they rise above the need to cling to particular persons. They can cast a look at the title, the contents, and here and there in a book, and perhaps read a chapter, and then make an informed guess at the level of the book, and at the amount of reading the writer had digested before writing that particular book. An example is what Ibnul-Nadim mentioned, in his book *al-Fahrest*, about a certain poet, al-Attabi: "If one were to return his verses, each to the poet from whom al-Attabi derived that verse, nothing will be left for this poet to claim as his." Indeed, try as one would, they cannot rise above their real capacity – the amount of knowledge they had digested and possessed. There will always be some penetrating mind to place us and to determine where exactly we stand, where our limits are: some experienced person will even specify our sources, and what circles, chronologically and geographically, we move in.

A verse of the Qur'an's must have taught Muslims to be first among nations in their familiarity with the sciences and intellectual efforts of peoples, near and far. The verse I am

referring to is: "and you be witnesses for mankind!" (22:78) It is supposed that the Muslim Ummah can tell others where they did well and where they stumbled, and that cannot happen without taking stock of the events of history and the intellectual activity in the world. Is it not deplorable that we, the Ummah of 'Read, and your Lord is Most Bountiful" have neglected this duty – that we wait for the others to give their verdict concerning us and concerning other nations? It is an honored place for a group to be referred to for their evaluation of individuals and communities (as the above verse should teach us). But it is a position that may not be assumend without one having earned the right to occupy it through knowing all that should be known.

But what exactly should one aspire to know, in order to merit being 'a witness' in the world, and to be, in some degree, one of those who can tell the world how it fares? One main element here is to trace how things came into being, the beginning of history, or in Qur'anic terms: "how Allah originated creation" (29:20), the beginning and the end; how haumans acquired control, how they came to have the upper hand; the meaning of truth, and the laws of life and the world. It requires a real maturity about all the stages that brought things to their present state – and further ahead, the ends and means. Making such endeavors, to tell the truth, is not true of the Muslim elite. We, in our part of the world, are preoccupied with other matters: we opt for the urgent rather than the important. We move within the circles of tribal ties and rarely view the human being as a human being. We really need to acquire the vocabulary, which we have not so far acquired, to talk in terms of one humankind, to view the laws that apply to all humans. Instead, what still prevails among us is to extol our great masters and mentors, to eulogize the miracles of visionaries and walis 'allies and friends of Allah', the graves of our superiors, stressing the wisdom of surrendering to our superiors, without having any will of our own. I do realize that many or most people of the new generation would think that this is something of the past – but no! only the names keep changing, and even after what we think to be a new revival, we still have not the least degree of freedom and democracy; we still find some master to give up to the them all the will that we have.

If one would review the intellectual production of our Islamic world, the things that keep circulating and are accorded a place of distinction, one would not hesitate to conclude that we have not taken any meaningful steps over the last two centuries. It is really the other way around: that ends and means have receded, backwardness and disunity have taken root even more deeply. The result for those who have little familiarity with the progress of history, and with the beginnings and development of things, will be a lot of bewilderment and despair: they are sure to keep wondering why the sacred and the base get confused, where is light and where is darkness, who is noble and who is corrupt, what is trustworthy and what is treacherous?

READING AND CLINGING TO INDIVIDUALS

Let me start this section by a quotation from Dr. Muhammad Abed al-Jabiri, in his book *The Current Arabic Discourse: A Critical-analytic Study*, where al-Jabiri handles the attitude of the contemporary Arab towards the problem of revival, development, and overcoming backwardness. He really handles this problem in a simple and direct way – by the end of which

he draws the following important conclusion: "Both the ancestor-loyal person and the liberal, and all other allegiances in the Arab World, are the same in not comprehending, perceiving, or practicing *asalah* (loyalty to heritage) and modernity at the same time; we have no way of establishing an edifice that is compatible with our dreams – as long as we are under the control of an inherited model, the heritage: no matter if that model happens to be ancestoral or modern thought, or a mixture of both.

"We do not deny that it is most natural for the human being to think in terms of a model – but there is a definite difference between taking the model as a companion to overcome any feeling of alienation, and taking the model as a criterion to measure your behavior against. When the model turns into a referential authority, a dominant power that overwhelms one and oppresses one, it will rob the individual of their independence and identity ... the beginning is then to know oneself, to free oneself of the grip of the model, the ancestor, so that one may deal with all models in a critical way: by combining, concurrently, *asalah* and modernity ..." (pp.56-57)

What Dr. al-Jabiri calls in his book clinging to the model and to the ancestor is what we call in this study the world of persons, that is to be under the dominance of referential persons versus the world of ideas. To put it differently, it is dealing with the existing world around us versus dealing with our images of it that we bear in our mind. And to express it even differently, it is *ijtihad* versus imitation. All this must remind one of what the Qur'an expresses, in the form of dialogue: "When it is said to them: 'follow what Allah has revealed,' they say: 'Nay! We shall follow the ways of our fathers," (2:170); or elsewhere in the Qur'an: "Nay! They say: 'We found our fathers following a certain faith, and we do guide ourselves by their footsteps," (43:22). By criticizing and admonishing those who follow any models, any persons, without good reason, without evidence, we would be reviving the Qur'anic principle – and the scientific principle of any time or any territory.

But I would like to go a step beyond what Dr. al-Jabiri had stated: he at least did not say it explicitly, although he might have meant it. Nor have I seen other advocates of reform and adversaries of conventional following in the steps of the ancestors go this further step: That to go beyond clinging to revered individuals to the domain of ideas – this cannot take place except by going beyond mental images to existing facts outside the mind: to deal with those facts rather than with dealing with models, images and persons. Have I said enough to rid people of their restrictions? Hardly! It is no more than having expressed the same problem in other words.

The idea I am trying to express is that you cannot get a person to produce new ideas or to do *ijtihad* by commanding them: 'Go ahead and produce new ideas,' nor by praising *ijtihad* and deprecating blind imitation – no matter how eloquent we prove to be, and no matter how graphically we can represent the virtue of this and the folly of that. No matter how passionately we believe in what we say we cannot in this manner produce the effect we like to see happen.

I do not find in Dr. al-Jabiri's statement a solution to this. Yes, he does write well, and he does analyze things well, bringing into focus who is the liberal and who the ancestors-tied, and what they have in common. He did well express the problem that is common to the ancestors-

tied, the liberal and the progressive; he showed, in his bright style how, no matter if we come across the leftist, the rightist, or the moderate: we find them all to have not broken free from imitation. If the religious-minded follows closely in the steps of the ancestors, it turns out that the others, with all their diverse directions have found some persons to follow closely. Let us admit that Dr. al-Jabiri did go a decisive step: he clarified how the sharply dissimilar directions have essentially the same shortcoming. This definitely narrows down the mystery – it pinpoints where the problem lies. Let us then give the credit where it is due – to Dr. al-Jabiri in this case.

But we need the next step: where is the way out? And I claim here that the way of overcoming this unhealthy imitation: of Muslim ancestors, or any other referential individual or individuals – the way is through reading in its profound and unlimited sense. One can simply act here upon the verses "Read and your Lord is Most Bountiful, – He Who taught by the pen, – taught man all that which he did not know," (96:3-5). It is not the terrified, narrow, limited reading: this will not at all rid one of *aba'iyah* 'being a passive imitator of the ancestors'. How can one who is exposed to just one pattern, and maybe a distorted one, be creative and add something new? What *ijtihad*, in its real sense, means, is adding a brick to an already existing structure. On the other hand, that person who studies a lot of patterns and models, and who reflects well on things –that person is quite likely to come up with a model that is a synthesis of the positive aspects of previous models, or a really new model. Such a person can, as Iqbal put it, cull the flowers from inside the tree.

It would be right for me not to feel that I have said much. I did say that it is unlimited and profound reading, that following up of issues in a comprehensive way – that is what rids one of imitation and clinging to models, clinging to the world of persons ... I now say that I have not said much. It is so because to speak of unlimited and profound reading is not enough – it actually must be under glaring lights, under a microscope, that brings out the tiniest details. We say that for it is unlikely, if we place an invalid on this road of many branches to be able to move with vitality to cover the required distance; nor if we have a little boat sail on an ocean with violent waves – it is not easy at all. It is not easy to tell the inexperienced to enter a maze and find their way out of it. Did I not object to Dr. al-Jabiri, wondering: Where is the way out? Well, the reader has the right to ask me: You insist on profound and wide-ranging reading, so what is the way to that? Do we not need a map and a compass? Do we not need some vehicle or means to enter this vast world, the sprawling space which is sure to give us no help in how to navigate through it? Its terrain and contours are sure to baffle us!

I honestly have no such well-designed map or chart, nor a reliable compass. I do say that I am pointing out the next step in defining the problem. We did agree that holding on to a model does not solve the problem, and I added that the solution lies in wide-ranging reading, reading that excludes nothing of human endeavor: its trial and error and its hardship. By moving about in the earth (physically or in the records of others), by reviewing the endeavors of the nations before us, by watching out for errors, so that we do not repeat them, by examining how the Creator adds to His creation (see the Qur'an, 'He adds to Creation as He pleases,' 35:1), by acting in compliance with the Qur'anic verse: "You say: 'This is my way: I do invite to Allah – on evidence clear as seeing with one's own eyes ('ala basirah in Arabic) – I and whoever

follows me. Glory to Allah! And never will I associate partners with Allah." (12:108) 'Ala basirah means a study of all the details that compose and are associated with an issue, having all the views and opinions before one; and then summing up and making conclusions by accepting what is most likely right – and also finding any indications to the future, and signs that point out the way ahead. This is then 'ala bairah. We must have a way to reveal the truth, when people are confused, when they keep disagreeing about what is right. We must reach a point when we act in compliance with the Prophet's, peace be upon him, admonishing that "A believer is not to be stung twice from the same hole." If we reflect on this Tradition and think of applying it on various levels – we may say a believing society, and an enlightened humanity, must learn from the lessons of history: they must really not repeat any mistake twice. For if a community or humankind fall in the same mistake again, it will have to pay in suffering for an error that it was possible to avoid. The above Tradition is telling us that by repeating the same mistakes that our predecessors had committed we would be acting in contradiction with what faith dictates. We would not have fulfilled the injunction of the Tradition in its social dimension. Nor would we have heeded the Our'an's command that we move in the earth and look and reflect to draw lessons.

So have I delivered my message, young man and young woman? Pay attention to this! We do need it very badly. There is a task enjoined on us, which we have not fulfilled – it is the task of inspecting the past and present, the task of night guards who wake while others sleep, who keep a watch to protect society from being stung twice from the same hole: we need to keep wakeful, so that history would not make us pay the same toll that was paid before – if we keep heedless of history's lessons.

Any society which does not have its active pioneers who work most diligently and in earnest to analyze the events of the world will have to suffer. Without these people, such a society will stumble blindly as if without a compass. It will have perhaps heaps of shallow writings, but not more than a few lines in a thousand pages to shed light on vital matters.

CHAPTER ONE

THE LEVELS OF EXISTENCE

The idea of 'levels of existence' was handled by several Muslim scholars, two of whom being Ibn Taymiah and al-Ghazali. They all state that there are four levels of existence:

- 1. Material, or independent, existence.
- 2. Mental existence, i.e. the mental image of the material or independent existence.
- 3. Verbal existence.
- 4. Formal or written existence.

The material or independent existence is the existence of something in the world, its being actually there: such as the existence of thunder, lightning, the seas, the stars – all that is there from the atom to the galaxy.

The mental existence is the image that one bears in one's mind of those things which actually exist, independently of the human's being aware of them.

The verbal existence is the uttered sign a human uses to represent the image which they have acquired and borne in their mind about the thing actually present in the world. It has been a great distinction of the humans when they started to give names and signs to the images they bore in their mind – the Qur'an itself celebrates this distinction of humans: "And he taught Adam the names of all things," (2:30).

As for the fourth level of existence, it is the formal, written existence: It means the inscribing of a visible sign to represent the uttered word of the human. The audible verbal expression is waves that diffuse momentarily and then vanish, dissolving into the atmosphere. The written sign has a merit there: it does correspond to the uttered sign, but it is fixed by being a graphic form: on paper, on stone, or any other material. It is by reading that one acquires this form of expression.

The above details about the four levels of existence were mentioned by al-Ghazali in his book *al-Mustasfa min Ilmil-Usul*. It is, according to him, a prelude necessary for all the sciences, not only for '*ilmil-usul*, i.e. the science of the principles of *fiqh*'. He says that unless one digests the topic of the levels of existence, they may not be trusted with any science. He adds: "Be aware that anyone who seeks the content through knowing the utterances will get lost, and will only get to perdition. It will be as if they are moving away from the west, when their proclaimed

destination is westward. If, on the other hand, one examines the content first and establishes it in their mind, and then seeks verbal utterances to express those contents – that person will have found the right way, will be well-guided. Let us then establish the senses first and say: Anything in the world has four levels of existence:

- 1. Its own reality.
- 2. The establishment of an image of the thing in the mind which is knowing the thing.
- 3. The composing of verbal utterances: the uttered expression which indicates the image which is in the mind.
- 4. The composing of inscriptions, visible signs, to correspond to the uttered form: that is writing.

"From this it transpires," adds al-Imam al-Ghazali, "that writing follows from verbal utterance, and refers to it; that verbal utterance follows from knowing a thing, and refers to it; and that knowing a thing follows from the known thing, and refers to it and corresponds to it. So here we have four levels, corresponding to each other and parallel to each other. However, the first two are actually there, and there is no difference among nations or between the ages concerning these two levels; the latter two, on the other hand are not the same: they vary from nation to nation, and from era to era; that is because they are established by acts of volition."

Al-Ghazali goes further by discussing the Mu'tazilites' definition of knowledge: "Believing something to be what it is in reality." He objects to the word 'believing'. He says about this: "It is impossible for knowledge of something to stay as it is after the known thing has changed, as knowledge is a revealing of the facts, being satisfied with one's having cognizance. Believing is quite different, for it is clinging, or emotional attachment, in the heart, holding some idea and guarding it inside: one is about undoing a knot, and the other is about tying a knot: so how can they be the same? To elucidate: should the believer hear a skeptic trying to unsettle them with some argument, the skeptic's argument can create some echo in the believer's mind. Not so is the knower, who holds on to notions not in imitation to some other party: no doubt will arise in their mind, none at all, even if they hear the arguments of the sceptic. They will be steady, unlike the believer, and have no doubt that the argument put forth by the sceptic is false."

Let us focus on a certain portion of al-Ghazali's statement: "should the believer hear a skeptic trying to unsettle them with some argument, the skeptic's argument can create some echo in the believer's mind. Not so is the knower, who holds on to notions not in imitation to some other party: no doubt will arise in their mind, none at all." It is very powerful reasoning, and a sensible person must feel its truth deep in their mind. People do hold on to certain notions, having accepted them implicitly, without having considered their justification: there is no scientific basis for their accepting these notions. Such notions can be shaken in the mind of the believer, no matter if they speak in a stubborn manner in support of their beliefs. Not so is the enlightened scholar: no amount of throwing doubts and putting forth doubts will shake their belief: they are as solid as a rock – although they might or might not have the suitable arguments to win others over to what they believe.

An example would make this clear. Galileo swore, with his hand on the Bible, that he condemned, cursed, and scorned what was mistakenly claimed, the 'heresy' of the earth's revolving around the sun. This oath of Galileo's must remind one of when the Qur'an encourages a person 'who is forced thereto [to utter the word of disbelief] and whose heart is still content with faith," (16:106). It is so because what Galileo had accepted as true he had known through scientific proof. One would guess that he had great pain in denying what he had known to be true; and he knew that his idea must wait for the opportune time for announcing it. It is correct that true ideas must be coupled with the right arguments to be accepted by others – but this latter issue is for another domain of knowledge to handle: the domain of education, and the optimal way of getting people to accept facts, facts reached through scientific evidence. The specialist in disseminating ideas would find ways of removing the obstacles to allow the facts to get through. About this latter aspect, we have a Tradition from the Preface to *Sahih Muslim*, in which Abdullah bin Mas'ud says: "You can not tell a group a Tradition that is beyond their comprehension without causing turbulence in the hearts of at least some of them."

We see when a person who had discovered certain facts, in a scientific and reliable way they are often challenged violently, and maybe put themselves at risk. This can often be because the fact-finder is eager to announce the truth they have discovered or found out to people who are very far from being able to appreciate the newly discovered facts or scientific findings. The gap between such knowledge as they inherited and the knowledge newly conveyed to them can be so wide; and the concerned person may very likely have failed to bridge the gap. The result would be that the audience will deny the truths and facts, and they charge the scholar with being a liar. Such an unfortunate situation, with sometimes tragic consequences, can be found to happen again and again – although it is true that knowledge will keep growing until it fills the gaps, and people's conception of things will come to develop until they assert what they had denied before. This is what the following Qur'anic verse is referring to: "And you shall certainly know the truth about it after a while," (38:88).

But the tragic fate of many a scholar remains: the onset of the new notion and the shock it produces among the traditional audience is a fact: many a scholar or scientist are carried away with the euphoria of discovery and are keen to have this new thing conveyed to the public — without realizing the circumstances and hurdles that block the acceptance of innovation. They may not be aware of the many people who know little and whose minds are dominated by illusions, or a loyalty to certain values. All these will form a kind of opaque wall blocking the spread of the light of new ideas.

Some may assume that the situation is simple: that once you have discovered or come upon a fact, you just declare it and it is the property of the community at large. This might be simple in theory only: in practical terms, it will be seen that the problem is still very much there – some very erudite and knowledgeable scholars or scientists, who have really brought to light precious and perhaps great facts, are not at all good judges of how and when to bring their findings to the public's notice. They do discover, but perhaps too late, that scientific discovery itself is not enough for people to adopt it and benefit by it. The Qur'an gives a lot of importance to the wisdom and good argument a scholar or a prophet would need to bring people round to the

new perspective. And human beings are still a long way from accepting truth because it is truth: they still need to have the path to truth smoothed and made easy in order to reach this destination.

It should be added that the Qur'an is discussing the process of conveying and spreading truth, it uses the word balagh to describe this process, but it also adds 'mubin, manifest' when it is discussing 'balagh'(in scores of locations, e.g. in two locations of Sura 44): it defines the conditions for getting the required point or issue through to the addressed audience. The person and the method must have the necessary arguments, enough evidence presented in a form that is clearly manifest, in order to find their way to people's consciousness. It is a binding duty on scholars and those keen on delivering the message of truth and justice to fulfil the necessary conditions for smoothing the way to getting their message accepted. It is true that the Qur'an does not every time it mentions 'balagh' qualify it as 'mubin', but those concerned must understand from the pairing of the two words together, at least on some occasions, that to feel that you have really done all that must be done, and to say that it is now people's responsibility to accept the message, you must be quite 'mubin' - and after that, if the addressees insists on denying the truth, they will be denying something that they know deep in their heart to be true: the bearer of the message must make sure that they have not missed any opportunity for clarification – until they reach the level described in the following verse of the Qur'an: "And they rejected those Signs in iniquity and arrogance, though their souls were convinced thereof," (27:14) Unless this degree of clarity is reached the receiver of the message does not feel that they are acting against their conscience by denying the message: we should say in this case they have some justification in denying the truth and resisting it. If the bearer of truth has failed in elucidating it, then they are to blame; the others may still argue, and feel justified in arguing – and this is what another verse of the Qur'an points out: "But most of them do not know the truth, so turn away," (21:24).

Let us remember in this connection al-Jaheth's aphorism, quoted above: that knowledge needs forceful expression to thrive. Indeed, articulation can be the most prominent feature that distinguishes a human being. The idea here is that those who can put things in the best expression save time and condense knowledge and science: they have fulfilled this trait expected of the human, referred to in the Qur'anic verse: "He has created man. He has given him speech and given him intelligence," (55:3-4).

A RETURN TO AL-GHAZALI'S EXCERPT

When al-Imam al-Ghazali says: "A person who seeks to understand content from mere utterances will go astray: they will be like one who intends to go west, but moves in the opposite direction;" I find this statement so powerful that it bears more discussion. We need to relate this to the levels of existence; more particularly the first level – what al-Ghazali describes like this:

'The material or independent existence is the existence of something in the world, its being actually there;' he means apart from anybody's being aware of it or not.

Thunder, for instance, has its independent existence: and we know it is there from its rumbling noise, which comes after the glow of lightning, through the clouds. This is the thunder, with its independent existence. The same reasoning is true of the sun, the moon, the stars, the water, and the plant ... true also of the habits of societies ... All these are things that exist, apart from our realization of them, apart from the mental image that a human has of them: the image that a human has in mind once they have come into contact with the particular object or entity.

Of course, the primitive human did see the thunder and did see the lightning, the same as we hear and see. However, the image held in the mind cannot be the same for all people of all times and places – unless indeed we consider the human mind just like a camera or recorder, immune to any impressions, and free from being influenced by events and facts that bombard it.

If we ask history how the primitive human interpreted the thunder and the lightning, and what caused them; the answer will be very different from ours – indeed, all through the ages, and up to the present day, humans still try to come up with an interpretation closer to reality about the thunder and the lightning: their cause, and their effect, and their functions.

From this, one may say that when al-Imam al-Ghazali says: "... the first two levels [the material level, and the mental level] are actually there, and there is no difference among nations or between one era and another concerning these two levels," – this can only be true had the human mind been a camera or a recorder, but it is not so.

Let us think of an example. Humans have seen the sun rise each morning; but their realization of the truth about the movements behind its apparent rise has changed, in fact what actually happens is now seen as the opposite of what the ancients thought of it. It is important to reflect on this example, for it reveals how a human may absolutely believe the meaning of the image in their mind, but it turns out that it is directly opposite to the facts in the world, the independent facts. Humankind still progress slowly in perceiving the reality of things, their causes, how they happen, the beginning of their creation, as the Qur'an puts it; although they, humans, exert themselves to understand more and more and to come closer to reality.

It must be clear by now that the mental images, the representation of the thunder, the lightning, the sun, the plants and animals, etc. vary vastly among people, vary deeply and widely. And I would go on from this to say that the actual, independent reality of the physical world, as well as society, is an actual, solid reality. But what people imagine about things and society shows great diversity: each will see and imagine things in a way that reflects their intellectual background. This is because people's mind is not a camera nor a recorder: they must keep having different images of things around them. This is the difference between the actual existence, independent of the human, and the images that the human bears in their mind. Whenever we human beings disagree concerning the reality of something, we may refer to the first, objective existence, the independent existence, so that we check what is true: we must be prepared to examine our mental images against the actual existence, and make the necessary correction or

adaptation to our mental image. This is my comment on al-Ghazali's statement concerning the first and second levels of existence.

While the external, actual existence is the solid, independent existence, our mental images of it can vary and do vary to a great degree.

Astronomy, medicine, chemistry, and similar sciences, deal with real, independent facts; but what the researcher learns and finds are images in their mind; and they are bound to vary vastly, at least as science keeps developing over time. Am I repeating myself? I wish these simple facts to be clear beyond any doubt, to be the basis for other topics and other sciences. How much acrimonious discord might be avoided if people understood the above clearly. Much of the tension and dispute happen simply because the self-important scholar would not distinguish the first and second levels of existence. They fail to be true to the principles of research and investigation. It is true that we have done away with this confusion in some sciences, but we are still confused about other disciplines. This happens from not learning the lesson of past examples, which is a point that the Qur'an handled and discussed carefully, as in: "And such are the similitudes We set forth for mankind, but none will grasp their meaning save those who know," (29:43); and "so learn a lesson, O you who have eyes," (59:2). From all the above the takeaway rule is that when there is disagreement concerning what people take to be true – it is disagreement about mental images, and the criterion for judging who is correct is how well their mental image conforms to the existent external reality.

Level Three

The Verbal Existence

This is the level of existence that al-Ghazali defines thus: "The composing of audible utterances: the verbal expression which indicates the image, or the model, which is in the mind." A human comes to a stage when they give verbal designations to the things they have noticed: to physical objects, like the earth, the sky, the atom, the galaxy; and to the social facts they have perceived: like love, hatred, friendship, enmity, doing good to parents, being disloyal to parents, shyness, impudence, truthfulness, lying, faithfulness, and treason.

This third level of existence, the ascribing of names to all things, the linguistic stage, is mentioned in the Qur'an: "And He taught Adam the names [and nature] of all things," (2:31). This level consists in giving audible utterances to designate physical entities, things in the world; and also social and mental phenomena and entities. It is an ability that distinguishes and raises the human above other creatures. It is even the trait which Allah referred to in His debate with the angels concerning this new creature, as we saw in the above verse. But let us go over the whole debate between the Lord and the angels: "Behold, your Lord said to the angels: 'I will create a vicegerent on earth.' They said: 'Will You place therein one who will make mischief therein and shed blood? — while we do celebrate Your praises and glorify Your holy name?' He said: 'I know what you do not know.' And He taught Adam the names [and nature] of all things, then He placed them before the angels, and said: 'Tell me the names [and nature] of these if you

are right.' They said: 'Glory to You: of knowledge we have none save what You have taught us; in truth it is You Who are perfect in knowledge and wisdom.' He said: 'O Adam! Tell them their names,' When he had told them, Allah said: 'Did I not tell you that I know the secrets of heaven and earth, and I know what you reveal and what you conceal,'" (2:30-33).

We notice in the above debate, between the Almighty and the angels, how 'and He taught Adam the names [and nature] of all things]" occupies a central place in distinguishing the human being. It is through teaching Adam the 'names" that Adam and his posterity will realize that which the Lord knew them capable of doing, while the angels did not have this ability. It will also be through teaching Adam'the names" that Adam and his progeny will overcome that which the angels accuse humanity of, the tendency to do mischief and shed blood. It is a serious charge – and it is still true of humans. At the same time, the Qur'anic discourse, the story quoted above, teach us something else: it is through assigning names to things, through knowledge and science, that the human being may overcome that drawback of 'doing mischief and shedding blood.'

One will not designate something with a name until they have perceived it. This is the normal process of naming: people do not give a name to a thing they do not perceive and comprehend. All that is outside people's perception has one name: the unknown. It is after the human has won some perception of a thing in the world or a fact about the human-social life, even an elementary perception, that people agree on some way of referring to it with a vocal designation. Things do not stop there, of course, for people keep discovering more and more about things they perceived to some degree; humans will keep adding more correct details and eliminating errors. This also has been mentioned in the Qur'an: "For the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth," (13:17); the Lord enables humans to possess more of the hidden mysteries of the universe, and the Qur'an refers to this with the following words: "He adds to creation as He pleases," (35:1); a believer is required to increase their knowledge: "but say: 'O my Lord! Advance me in knowledge," (20:114). Once an object enters human consciousness, the need to designate it, to fix it with a name that can be recalled at will is felt: it is like a newborn that we distinguish with a name. Before something has entered the human's perception, it is not yet born: but when the name has been assigned, this indicates that a sign is given to distinguish that object from other objects. And this ability of using names, the human's ability to deal with audible utterances, as names: it is a new ability, this important and distinctive ability, which has entitled the human to be viceroy over the earth. This verbal ability, the ability to know things and distinguish them with names – it is this which makes of this creature a different creature, as mentioned in the Qur'an: "We developed out of it another creature, so blessed by Allah, the best to create" (23:14). The ancients did notice this paramount ability, and they referred to it as the distinguishing and unique trait: they called the human 'a talking animal'. It may be added that logicians consider this 'talking' as synonymous with thinking – but thinking will not be transmitted from one person to another without articulation: so again we come to words and speaking, or through writing, which is a collection of symbols that refer to utterance and speech. So, one is justified to say that utterance and articulation are a human's most distinctive feature; which may be gleaned from these verses of the Qur'an: "Allah, Most Gracious! It is He Who taught the Qur'an. He has created man: He has taught him speech (and given him intelligence)," (55: 1-4)

The faculty of speech added a higher environmental factor to human development beyond genetic heritability: it allowed human experiences to be transferred between individuals through language. Unfortunately, what is known to scientists concerning the initial development of language and the first utterance of humans is very little – although mankind's very humanity started with it. It is the word that elevated human beings above other creatures. Besides, it is with the invention of writing and reading that human history began to be recorded, and history entered a new stage: experiences began to be transmitted from generation to generation; a new light was shed onto the road of human progress. Once Adam, and his progeny after him, learnt the ability to use names and to give names to things, this ability qualified Adam, and his progeny, to be unique: they were now qualified to receive revelation. It is this that qualified the human to be custodian of the earth: by learning the words, humankind's talents were unlocked, and his potentials emerged. Humanity began with names, and that was a necessary and inevitable stage before learning to read: and humanity will subsequently learn to read, as the Our'an puts it: "Read, and your Lord is Most Bountiful. He Who taught with the pen, taught man that which he did not know," (96:3-5) It is this same human being who will fulfil what the angels did not know about him, but the Lord knew to be true, that they will overcome the tendency to do mischief and spill blood. It is this knowledge of language also which made the angels admit that this new creature knew that which they did not know. Language, speech, and al-bayan 'i.e. effective expression' are functions designed to serve the human in fulfilling their task on earth: they are closely related to thinking and power, and to the human's ability to control and dominate. We are dealing with language and articulation here as a tool designed to convey truth and upright talking, not as an instrument of misleading and deception. When names are assigned, but denote other than an actual reality, they are denounced by the Almighty as fakes and lies. Therefore, language and naming must be safeguarded from falsehood and faking – one may remember here this verse from the Qur'an in which the Almighty is referring to 'al-Lat', 'al-Uzza', and 'Manat' (three idols worshipped by pre-Islamic Arabs): "These are nothing but names which you have devised – you and your fathers – for which Allah has sent down no authority," (53:23). This is so because discourse should not just be for discourse's sake, nor should it be to mislead and deceive; it is there to represent facts and actual reality; it is to support truth and justice. We find evidence in the Qur'an to that effect: "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," (57:25). Using speech for other than reality and truth is like forged currency, like a cheque issued from an empty account. That is why the Prophet, peace be upon him says (as in al-Adab al-Mufrad of al-Bukhari): "Let a believer in Allah and the Last Day say something good or keep silent." Good Muslims have left us a ponderous heritage about the sacredness of speech, and keeping wary of employing utterances from anything but stating what is true. This must be in echo of such texts as the following verse from the Qur'an: "O you who believe! Fear Allah and always say a word directed to the Right, that He may make your conduct whole and sound and forgive you your sins: he that obeys Allah and His Messenger has already attained the highest achievement," (33:70-71); and "Grievously odious is it in the sight of Allah that you say that which you do not," (61:3). An utterance can be so glorious that it raises the utterer to the level of saints, or so base that it hurls them down into Hell. The most truthful of humans, Muhammad, peace be upon him, was asked: "Are we accountable for what we utter?" and he

answered: "What are you saying, Mu'ath (the inquirer)? Nothing hurls people on their faces into Hell more than the harvest of their tongues!" (*Musnad Ahamd*, Vol. 5, p. 231). All of this refers to those who use this instrument, which is intended for revealing the truth, for cheating and misleading.

To return to our main discussion, language begins to serve its function once a person has acquired an image of that which independently exists. And language and articulation are of use to the extent that one has well-defined ideas and vivid images about the creation.

The more well-defined one's ideas, the more is their ability to speak well and to use richer language, the more effective their discourse, and the more elegant and firm their words. They can then have cohesive and coherent language. Boileau, the classical critic, was referring to this when he said: "What we have understood well, we can handle well in words."

When, on the other hand, one's ideas lack coherence, the words they use to express them will lack coherence. If someone's ideas are shallow, that will be reflected in their speech: they will be seen to be inarticulate, unable to give good answers. They may choose to send out a volley of words and seem to be eloquent, but their words are like one talking in their sleep, or the hallucinatory words of a person with a high fever: the language is then loose and disconnected. This phenomenon can be quite prevalent when a civilization is at a low point in its history: for much of the discourse then will be rather empty and not based on solid ground. This may be gleaned from the statement quoted above, when Imam al-Ghazali says: "anyone who seeks the content through knowing the utterances will get lost, and will only get to perdition. It will be as if they are moving away from the west, when their destination is westward."

Al-Ghazali is not the only one that handles this problem. Arnold Toynbee discusses also the situation of certain communities which take the word to be the source of deriving meanings, instead of having the words as signs that refer to the meaning.

Cultures which take words to be signs indicating meanings, will not bestow sacredness on words except in so far as they are vivid indication of the independent existence. In contrast, those cultures which bestow sacredness on the words themselves, try to force the actual facts to fit the words, going sometimes a long distance to achieve this. They are not aware of the fact that what they are tiring to do is a reversal of functions.

Such reversal happens at times of backwardness in a certain culture. During that phase, there will be scarcity in learned scholars, and little wisdom is available to members of the culture. What happens is that those who are foremost are not knowledgeable, and cannot well distinguish what is worthy from what is not, and what is right from what is wrong. Illusions occupy a major position in their thinking. Ibn Khaldoun noticed this, and so he determined the life cycle of states as spanning over four generations: the first generation is still tough, and so is able to deal with hardships without succumbing to them; the second generation, which enjoys the fruit of the efforts of its predecessors; a third generation, which has lost the impetus, but can keep moving ahead due to the previously generated momentum, and so can keep up the good name of the state; and then the fourth generation, which has lost all the potential, and so it

collapses like a corpse: it is the generation in which functions, responsibilities and facts are lost – it chases after illusions.

We may notice, in connection with the reversal mentioned above, how some noble families were, and still are, clinging to certain distinctive and glorious memories: achievements of the family by which it rose to an honorable status, in its own and in others' eyes – but which the new generation is no longer capable of achieving. This must remind one of a Tradition of the Prophet which states that for one who has proved to be a low-achiever in real terms, he will not be capable of compensating on account of his distinguished extraction. The Qur'an itself describes this when it talks about what really counts in distinguishing people from each other: "Verily, the most honored of you in the sight of Allah is he who is the most righteous of you," (49:13) and "Then when the Trumpet is blown, there will be no more relationships between them that day, nor will one ask after another!" (23:101).

Similar situations of reversal happen in connection with religion and law. One reads in the New Testament that Jesus denounced the Jews' exaggeration in sanctifying the Sabbath; he laid down for them the rule in this regard: Man is the lord of the Sabbath, (Mat, 12; Luke, 6). The idea here is that the Sabbath is there for the sake of the humans, not the humans for the sake of the Sabbath. Something similar happens concerning any law which had been enacted for the good of society. Some forget this and forced people into difficulties in order to comply with the particular law.

We may go on and on in expounding the use of words and the sense behind words. Those who opposed Copernicus' astronomical theory argued that his discovery could not be right, and to prove their point they referred to the words, the literal words, of the Old Testament, when Joshua commanded the sun to halt and not set down. They said: "If the earth revolved around the sun and not the sun around the earth, Joshua would not have commanded the sun: 'Halt'; he would rather have commanded the earth to halt."

It cannot be of course that Joshua, or any prophet, should say something in conflict with the truth; and each prophet came to corroborate what his predecessors had stated and taught. On the other hand, the prophets were scathing in their attack of the false way followers practiced religion. The true religion, taught by the prophets, was there to elevate humans and rid them of being enslaved by any other human – and yet, those same religions came to be understood in a way that turned them into shackles. The saints and prophets were deified and worshipped as gods - this when a prophet's task was to relieve people "from their heavy burdens and from the yokes that are upon them," (the Qur'an, 7:157). We know how Muhammad kept warning his followers against following in the steps of previous peoples; he once said: "You will follow in the footsteps of the peoples before you: the very foot they move you will move, and the very cubit they move you will move." (Sahih al-Bukhari; part on holding tight to the teachings of Sharia.) What the above Tradition is about is not a binding fate that will take place whether believers accept it or not, not an affirmation of determinism: it is warning people that once they let go of the reins, once they neglect what is within their capacity: having control of the rudder – then there are natural laws which apply to all things, and will apply to them, treating them as the sun, the moon, and the objects of the universe are treated: for a human being is not part of the automatically

controlled world unless they just neglect to have control. They will, in case they neglect to practice the control they are expected to practice, be like the mountains and the sky, which, like all the other creatures, are not equipped to bear the trust of custody (see the Qur'an, 33:72). This, as the quoted verses show, happens when the human being does not acquire the necessary scientific knowledge to enjoy the blessing of *taskhir* 'having control, having things serve them without charge.' They can have the upper hand, the authority over things and people, if they chose, and if they are ready to put in the necessary effort in investigation and study.

What we have been trying to drive home over the last few pages is that to seek to gain content by relying on words will lead us nowhere. It is the other way around, as Imam al-Ghazali teaches us, that by determining the sense first and using words as a sign to indicate that sense: in this way we move forward.

LEVEL FOUR

(THE LEVEL OF TEACHING BY THE PEN)

THE MEANING OF TEACHING BY THE PEN

This level, the level of teaching by the pen, means the encoding of visible signs, intended to be sensed by the eye; signs that indicate the utterance: in a word, it is writing. As you see, writing follows from utterance, in the same way as utterance follows from knowledge, which is the mental image; and, of course, the mental image follows from the independent reality.

We have seen that the first use of language, the ability to use words as signs, is a superior status, the status bestowed on Adam. It is the status which, once proved to the angels, made them realize Adam's superiority, and their knowledge being less than his – indeed, it is this inferior knowledge which caused their misjudging Adam and his progeny, when they saw only one side of humankind's' potential, and concluded that they, the humans, will only be causing mischief and the spilling of blood. They did not appreciate what language can do for Adam and his progeny – how it will enable them to be responsible for the affairs of the earth: all through this amazing talent of transmitting experiences and ideas through words: utterances to begin with. The little they could see of Adam's ability, however, was sufficient to make them realize his higher status. Language is, then, quite ancient – maybe hundreds of thousand of years old, and may be more. The other level, having signs to represent the utterances, is relatively new in the life of humanity – not more than a few thousand years. It is from the appearance of writing that historians date 'the historical era'. The effect of the invention of writing is really incalculable. When a human being reads, they are honored with this most precious ability. It is a point which we alluded to early in this book, the ability which gave man honor in the sight of his Lord, as mentioned in the Qur'an: "Read, and your Lord is Most Bountiful" (96:3). It is the bounty of teaching with the pen; it merited being the object of an oath elsewhere in the Qur'an: "By the pen and by the record which men write," (68:1). It is a symbol and instrument, ever handy for helping the human. It is not just any symbol: it protects a human from being stung from the same hole twice – if the human being knows how to put it to good use. Humans protect themselves from evil by heeding the lessons that are there to learn from: and it is through this symbol, the encoding on paper that humans are enabled to save themselves from suffering, if they are keen to look and peer at the lessons of experience. The more diligent one is in reviewing the past the more it saves them from repeating the mistakes of those before them.

So, read, human, read, in the Name of your Lord Who created the human from a clot of blood, and, behold! They are equipped to learn by the pen – and to win the Lord's bounty.

Reading is the source of bounty, the source of constant promotion and development ... it is also the instrument through which the forces of the world serve the readers. With the pen, the human entered a new era: huge stores of information were opened up to them ... and they acquired a memory that is indelible, and incorruptible... Have confidence, O human, that He Who bestowed the blessing of reading upon you, is opening the door for you to have control and

to have nature itself in your service. How can I express all I feel about this grace, this bounty conferred on the human. But think of this, please think and reflect!

Now when we talk of writing, we are discussing this as being a latent ability to begin with. I am referring here to what the logicians describe when they distinguish between two phases of an ability: a latent ability, i.e. an ability that is there, that the human has, but is still not brought to surface, not activated; and an operative ability, i.e. the ability after it has been actualized. And they mention writing as an example: they say that a human is potentially a writing creature, i.e. they have the ability to write, if they take the trouble to receive the necessary instruction and practice enough; and once a person has actually learned to write, they are actually a writing person. We do know that many millennia passed without a human's having been able to write. And we may say in this connection that throughout this earlier, and by far longer, period, humanity was mostly deprived of the ability to employ the forces of the world to its benefit: for the Qur'an teaches us that it is only normal to bring the universe to serve us: "And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13; see also 14:32).

It is interesting to notice how Muslims not long ago prayed to Allah for rain in the name of 'kaf ha ya 'ayn saad' (letters at the opening of Sura 19) – they were not aware of the depth of truth in such prayer: that the symbols represented in the above letters do really hold the secret of much mercy and blessing from the Lord: that the language does hold the secret of incessant bounty from the Lord. Now, these letters, and other letters are encountered in many of the Our'an's Suras, have been handled scores of times by various commentators, each contributing their own idea, in view of their own background and inclination. As for me, I find in these letters a hint to the human being's potential to employ all of creation to their advantage – that to summon the phenomena of the world to serve the human being is closely related to reading (and letters are the raw elements of reading.) Reading consists of signs that refer to all creatures, material or abstract. By having this ability of assigning a symbol to indicate creatures of the universe, the human being has been recognized as the one who holds the reins that may control the various creatures. It is through those symbols that the human has command of both the material existence and the deeper sense behind things. And from there they were qualified to fulfill the part assigned to them as in the following verse of the Qur'an: "And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13). And human beings did not stop there: they progressed, from the utterance to the alphabetical letter, a symbol of a symbol, the graphic symbol that refers to the audible symbol.

This is of course a big advance over pictographic writing that used pictures to refer to the particular object or sense. The hieroglyphic writing was a stage before the alphabetical encoding system. It seems that the Japanese and Chinese languages have not moved on to this more advanced stage: the alphabetical system of writing.

We still know little about the first beginnings of language: how humans perceived things, and how they used certain sounds to refer to any particular thing or notion – and our knowledge of that keeps developing and increasing. We know much more about the other code, the writing system: using graphic signs, encoded by the human: and this includes both language and any

other system of symbols: like the traffic lights, and the system of symbols indicating hotels, restaurants, etc. which have acquired a universal dimension.

What bearing does all this have on the definition and introduction of knowledge and systems of learning? It is really essential for discussing knowledge and science. I have focused on signs and symbols: and this ability to hold a sense in the symbol, and giving this ability an audible or visual expression: this ability has given perpetuity to knowledge. People did do experiments before language, but those experiments vanished with the death of the experimenter, and humankind had to repeat the same experiments again and again. There was no way of preserving the result of an experience from generation to generation: at least, there was less and less accuracy with the passage of time. It is in order to mention that the older religions always ended in polytheism, and that happened largely because the teachings and principles of those religions were not recorded at the time of revelation. If we reflect on the verse of the Qur'an: "We have, without doubt, revealed the Reminder [i.e. the Our'an], and We verily are its Guardians," (15: 9), we find the Prophet, peace be upon him, the illiterate prophet, commanding someone every time he received a portion of the Qur'an, to put it down in writing, a practical and tangible way of fulfilling the above verse, without letting much time elapse between the revelation and the writing. The end of the verse: "and We verily are its Guardians," announces the ushering of recording, and developing records; and this provided the Qur'an with a merit and a special status in the history of religion.

Using the pen for encoding symbols granted permanence to scientific knowledge, and safeguarded it from distortion, and from getting lost or being forgotten; let us notice in this connection when the Qur'an says about preceding peoples: "but they forgot a good part of the Message that was sent them," (5:14). Their delusion emanated from the lack of the later habit of getting events and important things written down, soon after they happened. If reads on past the same last verse, it will be seen that a lot of hostility and hatred ensued from the lack of articulation. That things are written down in as detailed a manner as possible will leave a cool stability in the heart, and that will do away with malice. Scientific knowledge will act to eliminate malice and discord in the world.

Of course, archeologists have discovered human traces, as old as hundreds of thousands of years, while the era of writing is quite recent in contrast with that. But this short period is quite replete with human progress, with the advance of science, and with the advance of getting the world to be in the service of humankind. With all that, there accumulates more and more symbols, all tokens of creativity, and the increase in creation referred to in the Qur'an.

There were a long series of prophets and religions before writing, but our knowledge of those ancient religions is quite vague – which is natural, as writing had not yet been invented. The contrast is quite striking with the prophethood after writing, for how much more we know about these latter prophethoods, despite the relatively short period of these religions? This is true of the texts revealed to Ibrahim (Abraham) and Moses: they were revealed after writing was introduced, five thousand years ago. This period contrasts sharply with the one between Adam and Ibrahim, many hundreds of thousands of years. Did Iqbal mean some of these concepts when he said: "Time is a condition of the human, not a condition of the motion of stars in their orbits"?

He could have meant here that the condition of a human, when they show their control and their employing the forces of the world, as they have done during the relative short period since the invention of writing, makes this period seem longer as compared to a chronologically much longer period of time. Millions of revolutions of millions of stars passed before writing, and then, when writing was introduced on to the stage, a new phase of life was ushered in. One may remember here the verse of the Qur'an: "Has there not been over man a long period of time, when he was nothing, not even mentioned?" (76:1) Let us mention the knife as an example: the knife, according to archeologists, was invented only six thousand years ago, but how short the time is from the knife to the man-made satellites when contrasted with the revolutions of stars and planets!

With all these details, I have listed so far, I am trying to bring science within comprehension: its genesis, its history and development – how scientific knowledge acquired permanence. I find in the verse of the Almighty: "Travel through the earth and see how Allah originated creation," (29:20) – the effective method to putting our foot on the right way to genuine scientific knowledge. To know just a little about science is like knowing just a little about the life of a certain individual: it does not reveal enough about them. To examine just a small sector of the beginnings of physical and abstract things will not rid one of illusions and subjective impressions: we cannot in this way set the distinguishing line between what is scientifically true and what is superstitious. It has always been painful for me to observe how far in the Muslim world, and indeed elsewhere too, scientific knowledge gets confused with illusions and subjective impressions, suspicions and desires. To safeguard science from illusions and subjective impressions, it is necessary to trace the first stages of material and intellectual achievements, the earliest beginnings of natural and social development, of al-afaq 'the world around us' and *al-anfus* 'the world within us.' Hence the importance of reading: for it is with reading that the human being acquired a new power, and was therefore entitled to be viceroy over the earth. Mankind possessed now the means and tools of overcoming mischief and bloodshed. Our only hope of getting to the bottom of the part reading has played in the life of humankind is through reading itself: this is how we can really appreciate what power people were provided with, the power to do what is right and beneficial – realizing these facts transports the human being beyond their limited horizons to much wider ones. It is especially telling to note that humanity had not had this ability and then obtained it – just this historical perspective of things will open the mind to new vistas: it will really invest into the human an incredible ability to solve the problems that pose before us; and to hold the reins of control over the forces of nature and life, and then to fulfill the task assigned to humankind.

We need to learn here a lesson from the Prophet Muhammad's being illiterate: it is a miracle that must teach us that only a prophet can be a guide and reformer without reading; and his being the 'seal', the last of prophets, is an indication that illiteracy will no longer help – that only through reading humans can proceed in this life.

It is through reading that history may be condensed, that the many stages of knowledge and experimentation can be brought under the human's attention. The difference is evident between the human before the age of reading and writing and the human after reading and

writing: the latter relives the life of thousands of years and thousands of lives. In just one life is condensed here the scientific force that has been amassed over so many generations: it is as if each human can live thousands of years – through reading.

Muslims have inherited a legacy of sanctifying writing; they have always revered, though without much awareness why, even slips of paper with written material on them thrown on the road, and you still see some persons who pick up such slips from under the feet of passersby. They do it though they have not really reflected on the sacredness of the word and the letter, nor the splendor of writing and the pen, nor the significance of 'in a scroll unfolded,' (the Qur'an, 52:3). But one needs to put in the necessary effort to really appreciate to what a lofty place the human has been raised through reading, how the ability of reading can enable the human to reach the status of 'the best of molds,' (the Qur'an, 95:4).

Knowledge has been condensed through writing, through the pen, as the Qur'an mentions: "By the pen and by the record which men write," (68:1). It is especially now manifest how condensed knowledge can be, with all the dictionaries and encyclopedias, etc., which have brought to everybody's attention the miracle of writing – making it even easier and handier to reach to the particular piece of information they need: what the simple symbols can achieve has become even more amazing. How much easier it is becoming to know the origins and meanings of names and facts! And history in all its senses is within reach of anybody. And then we see further condensing of facts and information with electronic devices: they have made it much faster to reach the particular facts one would like to know. But again, it is from that amazing bounty: writing with the pen that it all came forth. To have the power to harness nature in the service of human beings, they need to deal directly with the signs in the wider world and within human life, as well as resorting to the many resources of condensed knowledge and science.

It must be clear by now how serious the problem of illiteracy is. How much the illiterate misses by lacking the ability to read and write. Nothing indeed can compensate for that loss. It will be observed how the nations of a higher rate of illiteracy are less effective and productive to the same degree as their illiteracy. It cannot be otherwise: for the illiterate person has the essential artery severed which provides the knowledgeable with power: keeping them in touch with cumulative human experience. It may be added that the illiterate will not attain a reasonable stage of maturity.

And you can notice it on a person's face, the expression of the face and the tension of the muscles. Those who have no communication with books will be like logs of wood – so how can they have the power to control the forces of the world? When Allah opened the way for the human to rise to the status of 'the best of molds,' (the Qur'an, 95:4), it is through referring to books and immersing into their insights that this honored position is won. So, will you, human do your part to attain that honored place: indeed, your Lord "He Who created you. Fashioned you in the proportion, and gave you a just bias; in whatever form He wills, He puts you together," (the Qur'an, 82:7-8). This is the Lord Who, in His bounty, raised you, and perfected your creation – and it is through the pen and the book that you may rise to that height; you may find support for this in the following verse from the Qur'an: "Say: 'Are they equal, those who know and those who do not know," (39:9).

Humans will not find their way to solving their problems, and to proving that mischief and bloodshed are not the only thing that can be predicted about the human being – that they are capable of overcoming that charge – except through having the power of truth which develops through reading.

It is through reading that humans can succeed in employing the forces of the world – and hence to overcome their problems. Do not feel disheartened at witnessing the prevalence of mischief and bloodshed in many parts of the world. If one has learnt enough about the genesis of things, and the progress of development; if one has studied the past well, and seen what human beings have achieved so far – it is such persons who can achieve what has not yet been achieved: they have no doubt that there is not one hurdle but can be overcome, in the same way that humans got over obstacles previously.

When you wish to assess where some society stands, it would be a good idea to see how the written word fares in that society: see the condition of the writer, the reader, printing, editting of the book. It is by examining each of these aspects a society can be accorded its true place in history, and among its contemporaries.

So, to be in charge, to have the power as the viceroy on earth, a community will have to be true to this ritual, this sacred ritual of unlimited reading: those who are best therein, in their connection with the book, are most eligible to be the heirs to their father Adam's viceroyalty.

HOW A BLESSING CAN TURN INTO A CURSE

Let us take the example of the newborn baby: how it grows until it can sit, then stand, then walk: you will notice how life is based on gradual change; this is the law of Allah. You see how a baby would often stumble until its muscles are strong enough to make its walk steadier. Its stumbling is predicted, not an odd thing to happen; but what would be odd is to find that the baby keeps falling, not showing improvement in its development.

It is easy to notice the difference in the stumbling of a healthy child and that of a paralytic one. This is obvious enough, but what might be confusing is to observe societies' development. This will be vague as long as one has not studied the causes behind a society's stumbling and falling again and again – its failing to move steadily forward. One may understand what happens to societies by having examined many examples, by having seen the march of nations, and having investigated most carefully the slips and stumbles on the road of civilization.

The focus of this book has so far been on reading as a blessing, as a great bounty that can uplift people. But reading can turn into a curse in the hands of some people under particular circumstances. Let me try to elucidate this point by borrowing a comparison that the Prophet, peace be upon him, once used: He mentioned how some animals overeat, and their fodder is in this case doing them harm, though it is there to nourish them. This is a good example of how a blessing can turn into a curse. When the Prophet used this comparison, he was warning the Muslims that in a short while they would have great abundance of money and the good things of the world flowing rapidly into their hands; that they may very likely compete in piling up more

and more of the wealth before them, and would be likely then to fall into perdition as happened to the peoples before them. At this point, a man asked the Prophet: "But can a good thing be the cause of an evil consequence?" and the Prophet replied: "No, a good thing cannot be the cause of an evil consequence, but it happens that good fodder can kill or nearly kill the eating cow," (al-Bukhari, the Part on Jihad). Fodder is good, but some animals can cause themselves great harm by overeating of it. The idea here is that any good thing of life can, if not used well, lead to a bad outcome.

It is true that reading and writing are a blessing, at any time, that they continue to produce an abundance of benefits for humanity; that it is through reading and writing that life will prosper, talents and abilities grow – that there is no alternative to reading and writing in bringing about these blessings. But reading and writing can be used in a wrong way; they can have, if not well-used, bad effects. Muslims do use certain letters of the Qur'an (like: kaf ha ya 'ayn saad) as a talisman, instead of seeking to widen their scope and delve into human experiences, and trace the earliest stages of creation: they use these letters to conjure up red devils or blue devils; to produce or undo magical charms. When they sanctify 'nun walqalam, i.e. nun, by the pen, start of Sura 68' they have no way of showing their veneration except in picking up slips of paper with any Arabic writing on them – instead of seeing in the verse a call to examine the experiments and experiences of communities and civilizations; and instead of getting to reveal the sunan, the laws of Allah, immutable and common to all peoples. They would not find in these verses a reminder that communities are responsible for their outcomes, as affirmed in the other verse: "Verily never will Allah change the condition of a people until they first change what is in their souls," (13:11). Now, when Imam al-Ghazali said: "Be aware that anyone who seeks the content through knowing the utterances will get lost, and will only get to perdition. It will be as if they are moving away from the west, when their destination is westward" he did not mean that words and reading will not produce their function. He indeed knew very clearly the function of the symbol and utterance; but he meant that for them who lose contact with the independent existence, the world around us 'al-afaq' and the world inside us 'al-anfus' – the sign in that case will not benefit them in the least. they will then be charged with going to perdition, and to be like a person who seeks to go westward, but moves in the opposite direction.

I do remember having encountered certain experiences in my life that may shed light on the above situation. I remember my life as a student and then as a military officer. I remember when taking classes in *fiqh* 'study of the shariah law', that some of my instructors – genial and good instructors they were –when they read the statements in the *fiqh* or commentary books, the word, the graphic symbol before their eyes, was treated with reverence: they seemed to confer on the commentators' statements great sanctity. Later, as I served my term as a conscript in the army, I remember how our commanders treated the translated brochure on a certain piece of weaponry with equally great reverence, which became most visible when they disagreed among themselves about the purport of the text. In both situations, realistic dealing with the text was not given priority: it was rather great reverence for the persons behind the text, and any opinions they expressed.

It does happen that treating individuals, as well as their opinions and views with reverence, acts as a barrier between the individual and the reality out there, the independent existence. How long was Aristotle and his notions treated with sanctification! People for centuries accepted without discussion his analysis of the motion of falling objects, as if it were sacrilegious to investigate and reconsider. Galileo seemed for some time to inwardly enjoy the foolish attitude of his colleagues: he heard how confidently professors stated that an object weighing ten pounds fell ten times faster than another object weighing one pound; then, one day, he sat on the Pisa Tower, holding two objects of vastly different weights and, at the moment of the passing of those professors, he dropped both weights at the same moment – they reached the earth almost concurrently.

Aristotle had propounded his view concerning the motion of falling objects, and his view remained the prevalent one for two thousand years: For two millennia, no one undertook to test the truth of Aristotle's view. To try to test the truth of something with such an authority behind it was counted as impunity and an insult, a really preposterous attempt. When Galileo dared to test what Aristotle had stated, and when he said: "A big nail and a small nail fall to the ground with the same speed," the professors derided him and said: "Is he trying to show Aristotle's error? How conceited and impudent this man is!" (Russel mentions this story in his *The Scientific Outlook*, p. 13).

A similar situation is mentioned by Will Durant in his *The Story of Civilization* (Vol. 6, Part 27, pp. 154, 157) When Andreas Vesalius (1514-1564) collaborated with others in bringing out a new edition of Galen's Greek book on anatomy. Vesalius was amazed at the very simple errors Galen had fallen into in his anatomy of the human body, errors like: "a human mandible is in two parts ...," which showed that Galen had not even performed anatomical dissection of a human body; he only worked with animal bodies. Vesalius felt it was time to study human anatomy by dissecting human bodies, and not animals'.

A contemporary scientist of Vesalius, Dubois, wrote: "No, Galen is not mistaken; it is only that the human body has undergone some change from the time of Galen until now." Will Durant comments here: "The evidence of the senses was considered of tiny weight in comparison with a word by Galen or Avicenna. More surprising is that Vesalius himself said, when some of his findings contradicted Galen's statement: 'I almost did not believe my eye!' For at that time the successive translations and editions of Galen discouraged any new experiments."

All this is to demonstrate how reading and writing are a great favor from Allah, that they are the sure and basic way to human progress and development. But they can become a factor of rigidity and stagnation, and they can impede progress, if they are used in the wrong way.

A BOOK IS A MENTAL IMAGE

All books are no more than mental images of their authors. A book will handle some issue, whose subject matter exists outside, something that has an independent existence, maybe from nature and maybe about the human being. By our referring to the independent facts when

evaluating a book we may put right any mistake within it, and the closer one is to the facts of the world, the sounder is their dealing with the book. It is important to view a book in accordance with its closeness to the external facts, to be ready to put right any error in the book, not to perpetuate a mistake. If one realizes this well, they will not give sanctity to books: books will be to them signs and indicators that point out where somebody is, to determine the person's level, at the particular time they wrote the book. In this way, books will play their positive part, but they will not block our search around in the independent existence.

By reading more and more, one acquires a positive attitude towards books: they assign to a particular book its suitable value, not denying the sacred part of it. There is something sacred about books, for they have merged human kind into one being, an immortal being. A book condenses history, and provides people with the experiences which sometimes afflicted other people until they took root – it may really place before us the experiences of millennia, all condensed into a few minutes. What happens one pores over books for extended periods is that the descendant may become as if they are contemporaneous with the ancestors. For example, an Egyptologist who studies well the history of the pharaohs, and reaches the level of a specialist in that domain, may know more about their civilization and culture than many who were their contemporaries. What happens is that an individual's life is prolonged, sometimes to an amazing degree, through the book; and the legacy of past generations does not end with the end of their life. So, through books, life extends long into the past, perhaps the very ancient past, and can have a very long extension into the future.

When this is well comprehended, and when the value of the written word is assigned its real worth, the individual is freed from the world of persons, and moves to the world of ideas, and this is a movement from the world of mental images to the world of independent existence, the facts of the world.

The opposite has taken place in the Muslim world: a transfer from the world of ideas to the world of persons, hence the banning of *ijtihad* (seeking to come up with opinions and solutions, in an Islamic context.)

FOR CORRECTION

For any written text to fulfill its role, it is essential to get rid of the erroneous mental image concerning it. One may find in a certain book such wordiness which does not correspond with the independent facts – in which case reading the book becomes a waste of time and a move away from the required destination; in this case, an abridgment and summing up would be sufficient. You see here the heavy task awaiting the pioneers of culture at the level of a nation and at the level of humanity to protect the rising generation. For instance, what the lay person needs of the history of chemistry, astronomy, medicine, etc. is definitely not an exhaustive list of details, but some examples only. We do need to know how they took shape, their beginnings, and how far we stand from full control of the particular domain for the good of humanity. We need the past to the degree it helps us see our steps in the present and have some plans for the future.

A good example is that of microbes. They have lead to numberless deaths over history, and they were all the time hidden in their dark fortress, with no human eye to detect them and no hand to reach them. But then some humans worked tirelessly on the matter, and discovered pasteurization, infection, and vaccination ... and, as a result, many epidemic diseases just disappeared.

But the same has not yet been achieved in the sphere of social diseases. We still see them destroying the lives of multitudes of people; we see how people spill the blood of each other. That this happens though people's conception, illusions, etc. is as amenable to scientific study as the physical diseases and microbial organisms. It is within human ability to discover the 'pathogens' or concepts which drive people to inflict harm on each other and destroy the lives of each other. The present condition of the science of culture and the science of human behavior is similar to the science of microbiology before microscopic organisms were discovered and examined and analyzed.

So, in the same way as the human being has discovered germs as the cause for epidemics, and has known their long history of destroying lives – the door is open now for us to do the same concerning human behavior: for here, too, there are germs which destroy lives and stir malice and hatred among human beings. We should show our appreciation of what science can do for us by discovering the causes of our hostility and hatred, our ignorance of the means of change, and our ignorance of the past, since we fail to examine it and draw the lessons it has to teach. It is here that we need to show that knowledge can work in our service, that we can deal with the most intractable situation with the force of science.

By now, it may be said that we know where scientific knowledge belongs, and we can benefit here from Imam al-Ghazali's assertion that "should the believer hear a skeptic trying to unsettle him with some argument, the skeptic's argument can create some echo in the believer's mind. Not so is the knower, who holds on to notions not in imitation to some other party: no doubt will arise in their mind, none at all, even if they hear the arguments of the sceptic. They will be steady, unlike the believer, and have no doubt that the argument put forth by the sceptic is false."

This stability in the mind of a person who reaches at facts through direct examinination of the independent existence enables the scholar to keep checking the notions they hold against the independent facts; they do not mind such correction, as facts are given priority, not persons. This solid position is not open to a person who believes in the literal and rigid truth of a text.

We may find more enlightenment about the effect of science on a person's maturity in the words of George A. Lindberg about science; he says: "The mere acquisition of scientific knowledge and the habit of scientific thinking ... develop equanimity in our hearts, especially as we look around us and see a world full of apprehensions and agitation, and all kinds of emotions that dissipate energy and waste effort – in this way, scientific knowledge proves to establish a kind of mental health." (*Can Science Save Us?* p. 10) What al-Ghazali expresses in the words: 'no doubt will arise in their mind, none at all;' Lindberg expresses in saying that scientific thinking develops equanimity in our hearts and establishes a kind of mental health.

This, then, is the stumbling block: It is the failure to move on from observing the breakthroughs in the domain of physical health, the history of advance in this domain, and the resultant protection of our physical bodies – to the domain of psychological, cultural and intellectual health, or lack of health. It is this failure to notice the propriety to do scientific research on issues of the latter type that does us great mischief: and this failure is happening in the whole world, north and south, east and west. Everybody seems to assert that there are things that are not amenable to scientific investigation. Let me put in here that there is a vast difference between saying that there are things – the soul for instance – that are outside the domain of scientific investigation and saying that it can be studied in a scientific way, one day, although what we know about it so far is quite limited. This latter attitude is acknowledging that science will keep expanding and advancing, which is what the Qur'an asserts: "They will ask you concerning the Spirit. Say: 'The Spirit is by command of my Lord, and of (its) knowledge you have been vouchsafed but little."" (17:85).

Lindberg devotes in the above-mentioned book: *Can Science Save us?* an important chapter to this issue (p. 36), where he says: "The scientific method of thinking has not made until now any significant advance: rarely ever does one find a person who approaches the social problems with a purely scientific spirit. And to say that such problems can be solved, if they are to be solved, by resorting to accurate devices that are not subject to fear of anger, or even love – this seems to be an issue that has not even occurred to many of those who are considered scientists in the domain of the social sciences."

Two reasons may be noticed behind this conclusion that human behavior is outside scientific investigation, and not within scientific control, not governed by *sunan* 'i.e. laws':

One reason is a wrong conception of the religious faith, when Muslims cite in connection with people's behavior the Qur'an's assertion that Allah does whatever He chooses to do, "But you will not, except as Allah wills," (76:30). There has been an ongoing controversy between those who assert human freedom, that a human is free to choose their behavior; and, on the other hand, those who assert that a human's behavior is predetermined, that a human is without any choice but to act in accordance with Allah's destiny and will; those who assert that what is inside our minds will determine our condition, and those who assert that we have no control over what is in our minds. There are those who assert that as we do not even have access to Allah's destiny and will, then human behavior and destiny is entirely determined by the absolute will of Allah, Lord of the world and of all humankind. We can go on and on in citing these views, which reveal the confusion and unpleasantness surrounding this subject. But it must be conceded that Allah's will, unlimited and unbounded, does not take away people's ability to change and shape their destiny. Is it not part of Allah's will that, as the Qur'an puts it: "Allah changes not the condition of a people until they change what is in their souls,"? (13:11). People should not doubt that their destiny is in their hands (about this topic see my earlier book *Until They Change What Is in Their* Souls). Let us not elaborate here about this issue, for it has been discussed at length elsewhere. It is only that we are pointing out here one reason for this creed which denies humans their ability to take action and to determine their destiny; while the point in this book is that science can be made to serve humans in determining their destiny.

The other reason is the very long history of darkness, when human behavior seemed outside scientific prediction and control. Humankind has lived so long with the preconception that humans have no way of controlling their future, that human behavior is not amenable to being controlled; the laws concerning human behavior remained so long concealed from people's eyes – that they took this condition to be self-evident, a for-granted condition. But again we find the way to solving this problem by noticing the affinity between human behavior and the natural sciences. For in natural sciences, too, humans lived for long eons in darkness, and they knew almost nothing about predictions and control ... here, too, people did not believe that there would come the day when science would enter the domains of astronomy, chemistry, and medicine. But things changed, and human beings learned, bit by bit, until people accepted scientific investigation and findings as something for granted, and no one now disputes the scientific facts of these domains. The same thing will be true of human behavior ... the day will come when the sciences related to people's behavior will be a more exact science, dealing with laws and thus amenable to control. It will be used to eliminate a great deal of the shackles and restrictions which humans inherit from generation to generation. The human being will succeed in getting over the long-standing charge of being, as the Qur'an puts it: "unjust and foolish," (33:72). Let us remember again that if simple illiteracy is painful to witness, complex illiteracy is more painful to watch, since the illiterate will often endeavor to get over their illiteracy, while complex ignorance is often a hindrance to learning.

One instance of complex ignorance is some people's assertion that the domains amenable to scientific investigation are the known ones, and that science will not enter new domains – this happens when people have not studied the long march of science, and have not noticed how forcefully it keeps expanding its territory. Let them study the long process and the many stages: from the life of hunter-gatherer, to grazing, to agriculture; let them study the dividing of human history into eons, eras, and periods, and perhaps finer divisions: the bronze age and the iron age ... it is all a process of having more light where there used to be pitch darkness, and this is the way to bring forces into the service of the human being. It is good to remember in the meanwhile the verse of the Qur'an referring to such efforts: "And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13). It is also good to remember what is in the Book of Genesis "fill the earth and subdue it," (Gen, 1:28).

It is vital to know the progress of science, and this means searching for that which the Qur'an expects us to seek: "how He originated creation" (29:20). This will enable the individual to have a scientific position. Not to know something is not the problem, but it is a problem to have the unhealthy position of 'complex ignorance': denying that which we have not studied.

It may transpire from the above that both sources of ignorance play a part in generating erroneous attitudes to science: erroneous conceptions of religious creed, and erroneous conceptions of the scientific position. Under both influences, some people deny the possibility of conducting scientific investigation on domains like human and social affairs.

As mentioned some time earlier, the Qur'an gives special attention to sciences of human behavior: it in fact accords them a place of prominence. The Qur'an does of course urge humans to notice the sun, the moon, the stars, the mountains, the rivers, the plants, the animals, etc.; but it

gives even more importance to the behavior of peoples, the 'sunan, i.e. laws' that governed bygone nations, learning lessons from such history – unearthing the causes and outcomes of historical events, with a view to avoiding errors and holding on to the truth.

A Fifth Level of Existence

(The Sunan, i.e. Law-Related Existence)

We started this chapter by reporting that several Muslim scholars, Imam al-Ghazali and Sheikh al-Islam Ibn Taymiyah being the most prominent, have identified four levels of existence; and I have given enough detail about each level. But I think we need to add a fifth level of existence, a level pertaining to *sunan* 'i.e. laws'.

Some philosophers assert that what we call the beauty of nature – things like the brightness of the sun, the blueness of the sky, the crimson of twilight, and the green of plants – that such things have no existence outside of the human. They assert that what exists physically is no more than light waves, and it is the human who receives them and interprets them in accordance with his/her human perception. What the human brain does is not to just interpret the phenomena of nature in numbers and digits (by saying for instance that red light is so-and-so nanometers in wavelength). The brain interprets them in a different way: it bestows upon those physical objects a sense of beauty, ugliness, etc. The number, the wavelength is perceived as an image, a kind of decoding. In logic they express this by saying that color is 'accidental, i.e. non-essential', while the wavelength is 'essential'. But we may go one step further and say: what is classified as 'essential', the wavelength for instance, is 'accidental', an aspect of something more essential: the *sunnah*, i.e. the law, which governs the particular object.

We learn from the code of faith that Allah's destiny is a determining by Allah of how something will be, before creating it. Allah's knowledge and destiny come prior to creation; and knowledge and destiny are the law according to which the universe was created. I did, early in this chapter, mention that the independent existence, the external facts of existence, are the basis of all the levels of existence – and now we find that even that 'basic' existence refers to a more basic existence, that of *sunan*, 'i.e. the laws' – we find in the Qur'an references to this, as in "that is the decree of Him, the Exalted in Might, the All-Knowing," (36:38).

This *sunan*-related existence seems to be something like 'the Word of God,' in its existence being prior to what is independently in existence, prior to what the human mind takes to be the origin of all existence (what exists externally and independently). A verse of the Qur'an tells us: "Verily, when He intends a thing, His command is 'Be', and it is," (36:82).

If you think of the symbol H²O, you find in it a symbol of the chemical formula for water: H²O does not exist except in its visible form- water, but it has its law-related existence, and the chemical symbol is an indication of this. So take this and generalize it: all the phenomena of the universe are the visible representations of the *sunan*. It should be added here that not every law-related existence has its visible, tangible counterpart or representation, and this may be most plainly demonstrated in chemistry. The original constituent parts of matter begin with two particles: the electron and the proton, and these two compose the hydrogen atom. And then, all the elements of the universe stem from the diversity in the number and organization of these particles, the electrons and protons; and the reaction of two elements or more together produces a new material, with properties different from the consisting elements, properties that were not there before. Mendeleev compiled his periodic table depending on the systematic increase in the

atomic mass, revealing the serial order of elements, a law-related existence, that is true whether or not the element mentioned has been actually discovered or not, not yet. He predicted the existence of elements that were not yet known, and he left their place blank on his table, predicting at the same time their characteristics. And then, those same elements were discovered, confirming Mendeleev's predictions. So, this is a very good example of *sunan*-related existence.

It is in chemistry, too, that this relation is exhibited most clearly at present. We keep being surprised with more chemical compounds, with new characteristics and properties, different from those of their constituent elements. These compounds with new properties show the difference between existence at the level of *sunan*, which was a latent, hidden fact in the universe, and that of the actual compound once it is produced in the lab. The different medicines available today are the clearest example of this. These compounds were theoretically there, and all their elements were there, and that is the law-related existence.

Maybe one day this fifth level of existence could help human beings know more about the soul. So far it has not gone beyond the level of existence that is not understood by humans; it is described in the Qur'an as "Say: 'The spirit (soul) is there by command of my Lord," (17:85); now this 'command of my Lord' can be synonymous with 'sunnah of Allah,' which we have discussed in several locations of this book: what we know is that the sunnah, or law, of Allah is stable and immutable, which is what the Qur'an teaches us.

Now two issues are essential to note in connection with *sunan*:

1. The Stability of Sunan.

Two points are to be noticed in connection with *sunan*.

One is the stability of *sunan*. The other is that *sunan*, or laws, when mentioned in the Qur'an, refer to those connected to individuals' and societies' behaviors. This is, for instance, what the following verse is referring to: "Such was the *sunnah* of Allah among those who lived aforetime: no change you will find in the sunnah of Allah," (33:62). These two points seem to be confused in the Muslim's mind, and so we need to work on that. It is a fact that a Muslim takes science to be an ever-changing thing (you hear it said: 'What science asserts today it negates tomorrow'). Behind this impression in the Muslim's mind is that there were assumptions that had been quite widely prevalent among people, and had been supposed to be truths, and then they were found to be erroneous. A Muslim may take this to discredit science or to prove the *sunnah*, or law, to be changeable. But it is not so. What happens sometimes is that certain facts are discovered piecemeal, not all at the same time. It may take quite some time for the whole truth to be revealed. As you see in this case, it is not that science is discredited, but it integrates. Nor is there here a change in law, but one law is revealed or discovered and then another. The other problem for the Muslim is that though they may concede that science can reveal facts, they confine that to the natural world, and cannot imagine it to be true in the social domain. These two problems block a Muslim's accepting science as reliable.

One very brief definition of science is that it is the admission of a law of nature into the mind (and its comprehension). Given that the *sunnah* (natural law) does not change, "no change will you find in Allah's sunnah, no turning off will you find in Allah's sunnah," (35:43) then is it not the case that science also is not subject to change. The law of the composition of water is stable and permanent; and when this law becomes part of science, when people get it right, this scientific fact will enjoy durability.

The same is true about social affairs: a society that loses justice will lose stability. We may refer in this to a Tradition of the Prophet's: "What brought past peoples to perdition was that they carried out the Divinely-determined penalty when the culprit was from humble descent, and failed to carry it out when the culprit was from noble descent. By Allah, had it been Fatimah bint Muhammad who had perpetrated this deed (of theft), I would not have hesitated to carry out the punishment on her." (*al-Bukhari*, the Part on the Divinely-determined Penalties).

When the Almighty refers to the *sunnah* in the Qur'an, He mentions it in relation with the behavior of individuals and communities, rather than in reference to nature and the physical world. While people do the opposite: they find a *sunnah*, or law, applicable only in relation to nature, not in the behavior of humans – as if the world of human behavior is outside stable phenomena, or laws. I find that to run opposite to Qur'anic principles – and even to the methods of Muslims in previous times. The Muslim world has only recently learned from the Western world to restrict science to the world of nature.

It is incumbent on us to put things right here. How often must it be repeated! For something which is given such prominence and clarity in the Qur'an must not remain vague and uncertain in our minds to this degree. We need to dedicate all the effort it takes to get over these obstacles.

I may declare that when I show boldness and firmness in adopting these views concerning science: its stability and universality, I draw much support from such verses of the Qur'an as the reader finds in this book. This gives me the resolve to continue propounding and elaborating these ideas.

That life is based on laws is a given – indeed, not only for granted, but inborn in human consciousness. How can science be fruitful unless it enjoys permanence, durability and stability? A human does not go one step, does nothing in this life, but with the assumption of constant and stable *sunan*. If, for instance, somebody used glasses with lenses that diminish or enlarge things, to a size that is not appropriate for their eyesight, and tried to climb a mountain, he/she might stumble and fall. We know, implicitly, but with confidence, that vision is governed by laws: we would not go one step without this confidence in the stability of the laws of vision. This is evident enough, but we need to elaborate and emphasize this permanence and stability and constancy, so that a human deals with things with confidence and certainty. Sheikh al-Islam Ibn Taymiyah has a fine definition of the sunnah: "The sunnah," he says, "is to apply in a latter situation what was applied in a former one." In case this definition needs clarification, the idea here is that if the same conditions exist as those in a former situation, then the same result will ensue: and that is true in the world of nature, as well as in the life of individuals and

communities. And what controls this is science: when you have comprehended and mastered the conditions of a situation, you prove your mastery in repeating, or replicating, what had happened before. The sunnah tells you that if something happened once, it can happen again, should the conditions be realized.

Bertrand Russel repeats Ibn Taymiyah's definition, but in modern terms when he says: "Scientific method, although in its more refined forms it may seem complicated, is in essence remarkably simple. It consists in observing such facts as will enable the observer to discover general laws governing facts of the kind in question. The two stages, first of observation, and second of inference to a law, are both essential, and each is susceptible of almost indefinite refinement; but in essence the first man who said "fire burns" was employing scientific method, at any rate if he had allowed himself to be burnt several times. This man had already passed through the two stages of observation and generalization. He had not, however, what scientific technique demands ... Scientific method, simple as it is in essence, has been acquired only with great difficulty, and is still employed only by a minority, who themselves confine its employment to a minority of the questions upon which they have opinions.

" (in B. Russel's: *The Scientific Outlook*, p. 6)

2. The Sunnah and the Miracle

Iqbal explains an illuminating idea about Islam: "It is true," he says, "that Islam emerged in a pre-scientific environment, but it transferred humanity towards the scientific life." Iqbal shows himself here as possessing a penetrating view of history; he really puts things in their right perspective. The Qur'an does report the miracles of ancient times, Moses' stick, Jesus's breathing life into mud, and the she-camel of Saleh, etc. It mentions that such miracles did have their part, and that they fulfilled that part – at a time when people demanded a miracle like these to believe: miracles which are not governed by natural laws. That was the kind of mentality of those communities. But the Qur'an, though it relates the stories of belief – or disbelief – after the miracles were performed, the Qur'an itself does not deal with people with reference to miracles: it relies on a more advanced and superior evidence. About this, the Messenger, peace be upon him, says: "Not a prophet came before me but was provided with signs that helped in having people join the faith. As for me, what I was provided with is this revelation from the Almighty Lord, and I hope thereby to have a larger following than any of them, as will be seen on the Last Day." (Musnad of Imam Ahmad, Vol. 2, p. 341; also reported by Muslim.)

This Tradition is relevant to our discussion: it specifies the evidence used by the Prophet, peace be upon him, to prove his authenticity, and the result in terms of the number of followers. His sign is the Qur'an, and the Qur'an (unlike the miracles of previous prophets) is a sign that can be witnessed by anyone, at any time. That the Qur'an suffices for evidence of the authenticity of the Prophet is mentioned also in the Qur'an, though the context is different. When the Meccans demanded that the Messenger, peace be upon him, show them a proof, in the same way as earlier prophets had shown, the Qur'an replied: "Yet they say: 'Why are not Signs sent down to him from his Lord?' Say: 'the Signs are indeed with Allah: and I am indeed a clear

Warner.' And is it not enough for them that We have sent down to you the Book which is rehearsed to them? Verily, in it is Mercy and a Reminder to those who believe," (29:50-51). This is what Iqbal is saying, that though Islam was revealed before the age of science, it was itself the harbinger of the age of science, and the 'miracles' of scientific discovery. This is important to note, when we aim to advance proofs and evidence for these arguments. This steady and well-founded faith was certainly there in al-Ghazali's mind when he said, in his *al-Munqidh min al-Dalal 'i.e. The Savior from Delusion*': "Should someone say: 'My proof that one is more than three is that I will, before your eyes, transmute this stick into a snake,' and even if he does transmute it as he said, my certainty that one is less than three will not be shaken, though I will wonder how it was that he changed the stick into a snake."

If we analyze al-Imam al-Ghazali's statement, we shall conclude that a mind like al-Ghazali's would no longer find in changing a stick into a serpent a proof of the authenticity of prophethood: If one views the message of a prophet from a scientific perspective, then its proof must be closely pertaining to the message itself. You see how the Prophet Muhammad held the Qur'an and presented it as a proof, but it was itself the message that ensured happiness in this world and the Hereafter – for those who adhere to it and observe its teachings. The proof is here what you may observe in the real condition of a society that has abided by the message, the Qur'an, not in changing a stick into a snake.

When you wish to assess the proficiency of an engineer, you examine their accomplishments in the same domain where they claim to be professional: you look at the bridge, tunnel, building, dam, or rocket designed or supervised by them — definitely not by any irrelevant miracle to prove their claim ... this is then the conversion to the scientific phase in the Prophet's message.

Not that the Prophet Muhammad's contemporaries did not importune him for signs, or miracles, like the ones performed by earlier prophets: they did, but the Prophet, peace be upon him, and the Qur'an directed them, every time, and in all possible styles, to the scientific view. Ibn Abbas relates: "Quraysh went to the Jews and asked: 'What kind of signs and miracles did Moses bring to you to prove his message?' 'It was his stick,' they said, 'and raising his glowing hand.' Then they went to see the Christians. 'What did Jesus do?' they asked. 'He healed the blind, the leprous, and resurrected the dead.' So, they came to the Prophet, peace be upon him, and said: 'Supplicate to your Lord to transmute the mount of Safa into gold,' so he did supplicate to his Lord. In reply, the following verse was revealed: 'In the creation of the heavens and the earth, and the alteration of night and day – there are indeed Signs for men of understanding – Men who celebrate the praise of Allah, standing, sitting, and lying down on their sides, and contemplate the wonders of creation in the heavens and the earth, with the thought: "Our Lord! You have not created all this for nothing!" (3:190-1991), so that they may ponder the creation."

In another story, when they asked for a miracle, the Prophet, peace be upon him, said: "No, it is not this that I was requested to bring forth. It is this religion. So, if you embrace it, it will be your winning choice for this world and the Life-to-Come; but if you decline, then I only have patience." (see about these incidents the Commentary of Ibn Kathir on verse (17: 90)). What we have in the Prophet's replies is a very scientific and firm method, far-sighted and solid

like rock. It is a call to societies to turn their vision to history in connection with people's behavior. This method is not designed to reap rapid results in attracting people to accept the new faith, but, in the long-run, it is the method which will ensure for the Prophet's message the largest number of followers.

But Muslims have not learnt this lesson, except for a few exceptions – they still think in terms of the pre-prophetic era, and hence do not deal with science. It is true that they do not ask for miracles like those asked by the people of Moses, Jesus, etc. But, when they are celebrating the memory of the Prophet's birth they focus on miracles similar to those of people before them. I mean by this, it is miracles of the Prophet like multiplying water and food, and when the stone spoke to the Prophet, that strike them. They totally ignore the propounding, through the Qur'an, of the age of science, the signs of *al-afaq*, the universe, and *al-anfus*, human life and behavior.

We may get some further enlightenment from a Tradition related by Muslim (Exerpt from 'the Merits of the Companions'). Anas relates that Abu Bakr said to Umar bin al-Khattab, after the Messenger, peace be upon him, had died: "Come on. Let us visit Um Ayman (a wet nurse of the baby Muhammad), as the Messenger, peace be upon him, visited her." They did, and when she saw them, she cried. "What makes you cry?" they said. "You know, do you not, that what Allah has stored for the Messenger, peace be upon him, (after death) is better (than this worldly life)." "No," she said. "What drives me to tears is not that I do not realize that what Allah has for His Messenger, peace be upon him, is better for the Messenger. I cry because revelation from heaven has stopped." And when they heard this, it induced them to cry, and they cried with her."

One can learn profound lessons from the above Tradition. What concerns us in this book is that, even if the door of revelation from heaven was closed, there is another door that the Qur'an opened, as we learn from the Tradition before this, about the Qur'an's attracting more followers than the miracles of previous prophets: this is the door of directing people to observe the signs of *al-afaq*, the natural world, and *al-anfus*, the world of human behavior and human nature. It is a door that will prove more effective over time, and more telling about the authenticity of the Prophet and the Qur'an. By observing the signs of the world and human behavior and human life we come closer to the Qur'an – which is exactly what another verse asserts: "Soon will We show them Our Signs in regions of the earth, and in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that your Lord witnesses all things?" (41:53)

But we, Muslims, have not yet entered that age indicated by Iqbal: we have not gone beyond the scientific threshold. Indeed, we have not acted in light of the Qur'an, to be among those indicated by the Prophet. In another book of mine, *Work*, I quoted from Ibn Taymiyah his stressing that Allah has signs, apart from the verses of His Scripture, in the world and signs in human life and behavior. Back to Iqbal, we find the latter, in his *Reconstruction of Religious Thought*, referring to more or less the same idea, in the course of his discussion of the 'seal of prophethood'. He asserts that the Glorious Qur'an, being the last of the Divine Books, has a special quality of producing revival: each age will find in it the suitable sign or aspect which suits it. As for us, we are at the threshold of the age of *al-afaq* and *al-anfus* – though many are

not aware of the fact; and though some meet the new age with eagerness and delight, and some are wary and apprehensive about it – but to really be part of the age of these signs will take real effort and exertion. This age will not be appreciated by those who do not strain their attention to peer closely at the creation Allah put before their eyes, in both the world of nature and human life. For those who do not look well and long enough, they will not appreciate verses of the Qur'an like the following: "O mankind! Verily there has come to you a convincing proof from your Lord: for We have sent to you a light that is manifest. Then those who believe in Allah, and hold fast to Him – soon will He admit them to Mercy and Grace from Himself, and guide them to Himself by a straight way," (4:174-175). It is a new dawn, but not everyone is qualified to notice it.

How heartening it is to see those who are on the alert, wakeful for any sign to take note of it! And how heartening it is to see those who have dedicated themselves to bringing to people the signs of *al-afaq*, the world and of *al-anfus*, human behavior, in the most palatable style, to help others see the mercy and bounty of comprehending the lessons of history, and of watching out for signs and laws in the world and in human experience. So, how can I induce the youngsters of our Ummah to dedicate themselves to a mission like this! It is really uplifting for me to think of such individuals in the rising generation!

One can, in light of all the above, recite the Qur'an with the task of looking for signs indicating the natural world and the world of human behavior. One example is concerned with resurrection. "And he [a certain unbeliever] makes comparisons for Us, and forgets his own origin and creation," (36:78). The sign pointed out in this verse is there, before the eyes, in the world: it is plain, decisive; a sign most telling, though expressed in the shortest of phrases: 'forgets his own origin and creation'. Of course, discussion of plain evidence denied by people is not always so condensed in the Qur'an: there may be more words, though again quite concise, as in: "Were We then weary with the first Creation, that they should be in confused doubt about a new creation?" (50:15); or "And you certainly know already the first form of creation: Why then do you not celebrate His praise?" (56:62)

This question about resurrection has been raised again and again, from ancient times and up to the present. We have it often in the Qur'an, as in: "O take the similitude of one who passed by a hamlet, all in ruins to its roofs. He said: 'Oh! How shall Allah bring it ever to life, after its death?' But Allah caused him to die for a hundred years, then raised him again, ... " (2:259); "Behold! Abraham said: 'My Lord! Show me how You give life to the dead.' He said: 'Do you not then believe?' He said: 'Yes! But to satisfy my own understanding' He said: 'Take four birds; tame them to turn to you; put a portion of them on every hill, and call to them: they will come to you," (2:260); and "Does not man see that it is We Who created him from sperm? Yet behold! He stands forth as an open adversary! And he makes comparisons for Us, and forgets his own origin and creation: he says: 'Who can give life to the dry bones and decomposed ones at that?' Say: 'He will give them life Who created them for the first time!" (36:77-79).

So, in the story of the man who passed through a village, the Lord showed him a sign from his own life, a most telling experiment. In Abraham's case, peace be upon him, the sign is drawn from outside his own life. In the story of Ubayy bin Khalaf (of Sura 36), the Qur'an is

referring people to some scientific observation, to the natural laws, and exhorting them not to forget His *sunan*. It may be remembered here that a *sunnah*, or law, as Ibn Taymiyah pointed out, is: "to apply to a latter situation what applied to a former one." This rule, however, is an echo of verses in the Qur'an, where humans are reminded of an earlier case that relates to a later one, to realize that what applied to earlier cases (or peoples), can apply again to the present. Let us then look at another instance from the Qur'an, in the same spirit: "Man says: 'What! When I am dead, shall I then be raised up alive?' But does not man call to mind that We created him before, out of nothing?" (19: 66-67)

CHAPTER TWO SCIENCE

No good definition of science exists in our society; hence the need for lengthy details and shedding light at the various manifestations of science, so that the reader has a good grasp of science – this is because, to reap some of the benefits of science, one needs to comprehend it well. If faith is a science in its certainty, then science is faith in its rejection of being confused with falsehood. That is why we need to work hard on disentangling science from delusions and superstitions, to free it from all weed, so that humans may enjoy the benefits of science, pure and unalloyed. When we speak of religion, we say that, to be accepted by Allah, it should be pure, free from innovation or foreign matter – science must also be safeguarded from foreign matter, from results claimed to be scientific without legitimate basis. H.G. Wells says in his *Outline of History* (Vol. 2, p. 504, 1956):

"Historians of the present age are erudite and most scholarly: They are wary of any small slip more than they are wary of inconsistency between premises and outcome. They are for ever scared of having someone deride them if they commit the slightest mistake in specifying the date of something – more than they scared of ascribing to a certain activity a value above what it is worth... therefore ... we do need in this age of speed and daring, to see the emergence of a whole band of new scholars, dedicated to science: a band whose task is to develop binding criteria of science, to strictly control scientific work."

So, What is Science Like?

Before we go deeper, we need to put forth a number of rules:

Rule One: There is no mental relation between cause and effect.

To drive this rule home, we need to be clear about all three terms: cause, effect, and mental (pertaining to mind). But before I elaborate about the three terms, let me say a little more about the rule itself. When we say: 'There is no mental relation between cause and effect,' we mean that the mind has no way of relating causes to results or results to causes before the human has sensed this relation in the real world, the independent existence. An example of this is that there is no mental relation between a disease and its medicine. Had it been possible to establish such relation mentally, then the mind could determine it before the person has seen this relation —

² Let me remind the reader of my earlier apology for having to retranslate into English the quotations that the author had picked from Arabic translations of the English origins. In only one or two instances I have been able to locate the original text; for the rest, I have had to undertake a retranslation into English. (Translator)

which is not the case. As we see, people can establish a relation, negative or positive, only after the event. They see how, once the cause is there, the effect will happen: no effect without the cause. The same may be said about the relation between water and oxygen and hydrogen: they need to be there, and the right conditions must exist, before water comes into being. The same may be said about table salt and sodium and chlorine, for they produce salt as a result of their reaction. We observe something to result into something, and we observe it again and again, until we state that there is this relation. We state the law of the salt and say: there is a settled law that two elements, sodium and chlorine react together, under certain conditions, and the result is the composition of salt. It is a settled law. This must help in comprehending science: specific causes lead to specific effects. If the observer is exact enough, and if they observe well enough and long enough, or if they conduct the necessary experiment, they will establish the exact link between cause and effect: a scientific relation is established, and the mind gets it. It is as simple as that. The mind itself has no way of establishing the relation cause to effect. It happens that a human sees the effects without seeing the causes, as happened for long centuries with epidemics: their results were terrible, and the human watched passively without detecting their causes. And then, somebody came and said: the cause is that, and they pointed out the evidence observed, people saw, and saw again, until they believed. Then it was a scientific fact.

Had it been that the mind could spontaneously relate causes and effects, people would have specified the causes of epidemics before they had seen them in reality. But it was not so. The mind, which has it firmly established in it that events have causes, starts to search until it reaches a definite cause; and when a person says: "Now, I understand," they mean: "Now, I can see the link between cause and effect." It is out of direct observation that a link is established. So, the mind does have the inborn principle that events have causes, before seeing the cause in reality, but the human needs to see in real terms the link; or an experiment is positively conducted to check whether there is a link or not. And this is true in the domain of material things, like chemical or organic compositions; and in social affairs, like the problems of society in which justice, for instance, is absent; or the trouble with a particular individual. In all cases, it is they who observe and look well who make scientific conclusions.

It is true that observing causes in natural phenomena is easier than observing them in social phenomena – and the Qur'an actually puts them in this order: "Soon will We show them Our signs in the regions of the earth, and in their own souls, until becomes manifest to them that this is the Truth," (41:53). There is a science of astronomy, another of chemistry, etc.; there is on the other hand a science of society, another of psychology, a third of ethics, etc. That the findings of a certain science are more accessible and numerous does not mean that the effects in another science are not the result of causes: it is only that we have not worked hard enough to reveal the links, to relate effects to their causes. The simple fact is that for establishing relations between causes and effects, one needs to work well on observing the events in the world and the social events, to keep watching: and the prize would be discovering the relations between causes and effects. The mind will then comprehend the situation, and the issue becomes scientific.

What we are discussing here are not difficult issues – in fact, intuition and innate thinking lead us this way. But people let themselves be fooled when they allow the dominant figures, the

big names to say: chemistry is a science and astronomy is a science; but social affairs are not subject to scientific study, nor is morality subject to scientific study — we just yield and do not have doubts. What happens is that we do not deal with the facts out there, but we see things through persons, and through what is written. This is why al-Ghazali says: "Should the believer hear a skeptic trying to unsettle him with some argument, the skeptic's argument can create some echo in the believer's mind. Not so is the knower, who holds on to notions not in imitation to some other party: no doubt will arise in his mind, none at all." This steady position happens when dealing with the independent facts is placed above dealing with books and persons: for the independent mind, books and persons do support coming in touch with the independent facts, but will not be a barrier that blocks one's reaching the independent facts.

The point here (in **Rule One**) is getting to comprehend the kernel of 'science'. Indeed, the main point of this book is to come to a better comprehension of science, and to see of what it consists. Once an individual gets this firmly, they will not be confused, and will not confound what is scientific with what is surmise, illusion, or desire. This for me is an essential distinction. By just grasping even one issue, and having it settled how to assert whether that single issue is to be classified as scientific or otherwise, and with perfect accuracy – then we can go on from there to discussing any other issue: having mastered the conditions which make us name something as scientifically true³. If one loses grasp of science, the alternative is surmises, wishes, love and hate. And to act by the dictates of wishes blocks one's vision and hearing, as we see in a Tradition of the Prophet's: "To love something makes one blind and deaf." (Reported by Ahmad and Abu Dawud.)

Once one has fully understood the above – that science is linking causes and effects, that it is not the sedentary reflection of one's mind without reference to cause-effect relations – once that is fully comprehended, we may go on to say: Our faith in Allah and the Last Day is scientific. That we believe in Allah and the Last Day is based on causes that lead to certain effects; and, in the same way as was expounded and exemplified above, there is no mental linking between causes and effects – the same as we may say of any other scientific conclusion: it is merely based on observation. You observe the consequences of belief in Allah and the Last Day in reality – the world of the 'seen' as witness to the world of the 'unseen' – you watch how this belief brings forth positive consequences: if this is true, then your belief in Allah and the Last Day is true. You are bound to concede the relation between this belief and its consequences. It is the same as you have confidence in any medicine that proves to be effective.

³ The Glorious Qur'an lists many examples of self-evident facts, to be used as starting point for less evident matters. It for instance reminds people: "The blind and the seeing are not alike; nor are the depths of darkness and the light; nor are the chilly shade and the genial heat of the sun; nor are alike the living and those who are dead;" (35:19-22). It is virtually saying that in the same way that shade and scorching sun are not the same, and you realize that a living being needs a specific temperature to survive, in the same way as no sane person will say that cold and heat are the same – one must be equally sensible by realizing that no happiness will be realized for humankind without justice: that justice and injustice will not be the same … This Qur'anic reasoning starts by negating universal skepticism, the way sophistry asserted, that there is no right and wrong in life – the Qur'an starts from there to help humans distinguish between things. That is why Sheikh al-Islam Ibn Taymiyah states: "One of the most glorious features of the mind is realizing distinctions and resemblance: by observing two things resembling each other, it realizes this and decides they must be treated in the same way …" (*Al-Fatawa*, Vol. 9, p. 239)

You may watch this in real situations. You ask somebody: "What makes you believe that somebody who is talking to you really exists?" they would be disturbed, at least when they first hear the question: It seems too self-evident to ask! But they could reflect on the scientific facts before them: the light waves sent out by the interlocutor's body, and their impact on the vision modality, and their transmission to the brain, where they are decoded; the interlocutor's speech, carried through sound waves, their entering the ears, their transmission to the brain, and the latter's interpretation of these waves ... all this is hard evidence that the processes of sensing the interlocuter's presence are not beyond our understanding, and this will eliminate the initial disturbance. The same could be said about the taste of table salt, its taste on the tongue, and the brain's interpretation of the signal ... It is like this for all we sense and perceive.

The scientific aspect of the above is seen in the linking of outer signals – the light waves and the sound waves, and the taste registered by the buds on the tongue, acquire meaning when the brain supplies them with meaning. After accepting these facts, we may say that the universe is pitch dark, and dead-silent – physically. All there is, is the waves, and it is the brain which gives those waves meaning: light, color, sound, tune … beauty that we perceive in the world around us is beauty in the brain. What we need to realize now is that the moral beauty may be perceived through its consequences in real life: the same as we perceive color and sound.

Let it be affirmed now that the consequences of our faith in Allah and the Last Day – in real and visible consequences in life – are not less evident than the reality of sound and color. This we learn from the Qur'an, when it teaches us to generalize the application of science. It asserts that the reality of believing in Allah and the Last Day is as certain as your confidence that your interlocutor, standing there in front of you, is a reality. We recite in Sura 51, after having given details of scenes of the universe: the winds, the clouds, the stars in the sky, the conflicting views of religion – the Almighty continues: "On the earth are signs for those of assured faith, as also in your own selves: will you not then see? And in heaven is your sustenance, as also that which you are promised. Then, by the Lord of heaven and earth, this is the very truth, even as true as you do speak," (51:20-23). The discourse in this text describes natural phenomena, and mental and human phenomena: like the conflicting views concerning belief, disbelief, truthfulness, falsehood, and other human positions, and referring to the Day of Judgment ... after all this, the Lord asserts that the truth, as perceived by humans is not different from the mental facts: belief, disbelief, etc.: "Then, by the Lord of heaven and earth, this is the very truth, even as true as you do speak". We do know that certain compositions of elements supply a human with nutritious materials and water that are necessary for life, and that other compositions result in death or poisoning (copper oxide, etc.) ... We may go on to say that belief in certain values leads to decent life, and belief in others leads to destruction, debasement of the human character, and the corruption of society. I hope things are getting clear: Our faith will be a science when we believe in the Divine values in the same way as we believe in any tangible fact, for this is what the above verse is urging us to do: "Then, by the Lord of heaven and earth, this is the very truth, even as true as you do speak." So often does the Qur'an direct us to ponder about the world around us, so that we may draw proofs, from the world of the 'seen', for our belief in Allah.

If the scientist affirms the existence of a system that governs the world, a settled and stable system – a system that maintains its sustainability across time and space – as a conclusion from the stability and constancy of sunan, or laws – a believer, for his part, by his faith, bestows on the system of the world and the *sunan* a deeper and more sacred sense: he/she is declaring their belief in a Lord Who is above any restriction or envisioning: He, God, is the Sovereign, the Holy One, the Source of Peace and Perfection, the Guardian of Faith (see the Qur'an, 59:23). This faith in Allah, Who has nothing resembling Him, "There is nothing like unto him," (112:4) - as Islam teaches - places Allah in a position of exaltation and perfection, to a point where a believer may not envision Him. This Lord is then too exalted to be the object of bickering and disputation, not to be as He was handled in that 'ilmul-kalam: science of Islamic sophistry'. Disputation may only occur in relation to human behavior: whether it is up to the ideal or inconsistent with it. From this, it is stated in a Tradition narrated by Sahih Muslim that any suspicions flitting through the mind are a sign of 'pure faith': this Tradition comes in reply to some people's wondering: "Who, then, created Allah?" In contrast, one can be a disbeliever through certain sins, as declared in another authentic Tradition: "A person who fails to perform prayer is a disbeliever." Muslims have reversed things, when they treated suspicion in faith as an enormous sin, to the point of declaring the culprit outside the boundary of faith, and treated with leniency when a Muslim does not observe the enjoined commands. To observe faith, therefore, is not fulfilled by merely faith in Allah: adhering to the true faith must be shown in worship and behavior which are compatible with Allah's commands; it must be shown in a believer's treating others with unselfishness: one reads in a Tradition of the Prophet's (as narrated by Muslim, the Part on Doing Good), that to visit a sick person will be like meeting Allah there, and to feed a hungry person will be like feeding Allah.

Belief is not just a declaration of faith – it is Oneness: for the believer to connect directly with independent facts, to break free from the world of persons and mental images.

One finds that scientists often complain that people have very poorly acquired the habit of scientific approach to things, that they have not dealt with knowledge and science in an earnest way, as a reference to be generalized and resorted to in frequent situations – one factor for this slackness in referring to science must be the recent emergence and taking root of science. Now, belief in the One God is no more or less than holding well to the scientific principles – the rejection of worshipping idols would also imply the rejection of blind imitation. Belief in the One God requires that one directs their attention to independent facts, to attach oneself to independent facts: this implies sanctifying the process of creation, an act of bringing something out of nothing.

When one gets to the depths of things, science boils down in the final analysis to faith, and faith to science. Conversely, polytheism in its deeper sense is ignorance, and ignorance is polytheism. Let us recite this verse: "And those to whom knowledge has come see that the revelation sent down to you from your Lord – that is the truth, and that it guides to the Path of the Exalted in Might, Worthy of all praise," (34:6). In the same way as acquiring knowledge and scientific thinking and belief are enjoined, ignorance and polytheism are unforgivable sins, and they entail inevitable penalty.

Both the believer and the scientist are disgusted at witnessing how many humiliate themselves by fawning on dominant persons, and idolize them: whether in a religious or political subservience. It is true that some, who are considered scholars or scientists, by the shallow multitude, behave in this abject manner. Some people let themselves fall in the idolatry behavior which they are ordained by religion to eschew, but the practitioners of science, and the diligent students of sciences, steer clear of such idolatry. It is no excuse for those who demean themselves, by bootlicking and debasing themselves before magnets of power or fortune, when they claim they must be forgiven their abject behavior since they need to protect their sustenance, or to protect their nears and dears – the Qur'an refutes such excuse for falling in this idolatry when it states: "then you seek sustenance from Allah," (29:17) The enlightenment of knowledge and science teaches the individual to be content with straightforward earning of a living, by doing one's share in constructing a society based on faith in the One God and in scientific principles – definitely not the kind of seeking sustenance by drawing from the sweat of the ignorant and oppressed. Those who have attained this level of faith and enlightenment are careful to keep within the bounds of decency, steering away from idolatry: they have broken away from worshipping mortals. Yes, they do share the life of others, but would not fall into acts of polytheism. The point I am trying to bring to the notice of the reader is that in all these traits and behaviors, the person of faith in the One God is the same as the person who has really acquired the scientific approach. Their attitudes to the social issues are identical, which may be concluded from a verse of the Qur'an like this: "And those to whom knowledge has come see that the revelation sent down to you from your Lord – that is the truth, and that it guides to the Path of the Exalted in Might, Worthy of all praise," (34:6).

Once we have fully perceived the essence of linking causes and effects – that it is not an intellectual achievement, but comes through observation – we would be in a position to link faith to effects: by observing faith and its effects, we would have fulfilled the scientific conditions in the domain of faith as well. This is indeed there in the Qur'an, for it presents faith as science, and affirms that those who have acquired knowledge perceive this: "And such are the examples We set forth for mankind, but only grasp them those who have knowledge," (29: 43).

The job of the mind is this observation of linking causes and effects, realizing that such linking is not the fruit of mental effort, but the fruit of observation, that it is yielding to what compels the mind to accept. The only part for the mind here is to surrender and concede – that is because failing to concede such facts is an elimination of the part of the mind. This issue has taken such a long time with me, and since I did not come across anyone who put it in this way, I told the late Malek Bennabi, during his last visit to Damascus in 1972, of this idea, and he said: "This is a revolution in thinking." It might be so, if this kind of thinking is an echo of verses of the Qur'an like the following: "In the creation of the heavens and the earth, and the alternation of night and day – there are indeed signs for persons of understanding – persons who celebrate the praises of Allah, standing sitting, and lying down on their sides, and contemplate the wonders of creation in the heavens and the earth, with the thought: 'Our Lord! You have created all this not for nothing! Glory to You! Give us salvation from penalty of the Fire," (3:190-191. See al-Suyuti's comment on the causes of revelation in his *Asbabul-Nuzul*).

SCIENCE IS THE MIRACLE

And once religion has become a science, like chemistry, people will stop disputing about its facts: it is so because science cuts off disputes. It will be as the Lord said in the Qur'an: "for the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth," (13:17).

In the same way as science has extended its light over astronomy, medicine, and chemistry – it will extend its light over religion. This will be for the good of the true religion. It will put an end to the unfounded theories about religion that still circulate among people – in the same way as the old theories about astronomy and chemistry came to an end. The facts of religion will take root, in the same way as the facts of chemistry and astronomy have taken root. This reminds one of the verse of the Qur'an: "And those to whom knowledge has come see that the revelation send down to your from your Lord – that is the truth, and that it guides to the Path of the Exalted in Might, Worthy of all praise," (34:6).

There is no national color of scientific knowledge: anything that develops into science acquires universality. You see how none of us would refuse to take a medicine because it was discovered by an enemy, and none would hold a hostile attitude to the medicine once it has become scientifically established. In the same way, the values which become endorsed by science will be universal. As for those who are scared that their values and beliefs may be discredited by science, they are cannot be firm in their faith, and their faith is not firmly based on knowledge.

We still see glamorous names in the ancestor-idealizing tradition, and such leaders will keep confusing people – all the ideological and bigoted conflicts, and all the clashes that refer to ancestor-idealizing principles, or to any fanatic reverence for certain figures, they are all conflicts that fall outside the scientific domain: no matter how impressive or revered the names of the cited persons are. So many of the establishments have turned over history into centers of idolizing certain names, and hence into ideological attitudes: this is when the world of persons is allowed to replace the world of ideas and laws. Take the Western democracy and its establishments, the parliaments for instance: you will find that they have lost their soul. Wells says of these establishments: "Democracy has brought to authority men who are no better than any invader who conquers and dominates a certain land, and no better than an inheritor of throne;" but we still find that these establishments are treated with all the sanctification awarded to ideology.

It is through knowledge and science that the world can unite; it is also the way to faith in the One God. Holding up persons and yielding to them, on the other hand, is the way to polytheism and disintegration of the world and disunity within societies. The confrontations and conflicts that tear societies apart, a common enough phenomenon – they are actually the natural result of holding up illusions and superstitions; taking ancestors and distinguished figures, or even parties, parliaments, etc. to be the criterion for truth rather than the scientific facts. The

right way to uniting people, as well as faith in the One God, is the scientific evidence: it is the miracle that eliminates illusions.

SECOND RULE: THE MIND IS NOT AN INSTRUMENT, BUT A FUNCTION

A legend from China tells us that an Emperor of China, at acceding to rule, consulted the foremost philosopher of his time what he was supposed to do. "The first thing to do," the philosopher said, "is to put right the use of names." The philosopher seems to mean that names must be checked as a first step so that they are not vitiated of their meaning; so that words do not lose their effectiveness – that they do not lose their *sunan* basis, and so that life does not turn into polytheism. We may draw some relevant enlightenment here from a verse of the Qur'an: "These are nothing but names which you have devised – you and your fathers – for which Allah has sent down no authority," (53:23).

One word or name that needs to come under correction and redefinition is the 'mind'. It is such a widely-used term, especially in writings about thought and knowledge – since the rational trend is holding sway in the modern world.

What I would like to put forth here is that the 'mind' is a function, and not a device or a tool or an instrument. One may notice that the word 'aql, i.e. mind' has not been used in the Qur'an: It is the action or activity that is used. The disbelievers, for instance, are not rebuked for not having a 'mind', but that they 'do not 'ya'qil, comprehend, perceive'; one example in the Qur'an is: "They will further say: 'Had we but listened or had sense, we should not now be among the dwellers in the blazing fire," (66:10)

Like reading and writing, having 'aql is like any other function or skill that a human attains through endeavor and effort. No one, when 'writing' is mentioned, would imagine that it is a device or instrument: what occurs to us, without hesitation, is that it is a skill, a function, that an individual will, or will not, acquire. We do not, for instance, say of a certain person: 'He has no writing,': we rather say: 'He cannot write.' In the same way, the mind is not mentioned in the Qur'an as a word, 'aql' does not occur – only the verb is there. There are in the Qur'an words like 'qalb', 'fu'ad, 'lubb', 'al-nuha', as devices or instruments: and these do the function of the 'mind', which is linking between causes and effects. Should a human lose this ability of linking causes and effects, they will have lost the human's essential function.

Ibn Taymiyah has something relevant on this; he says: "In Muslims' usage, the 'mind' is a feature, a function, performed by certain systems. It is an instinct, knowledge, or acting by the dictates of knowledge: it is not, according to Islamic usage, a substance in itself ... It is the philosophers who assign to the mind its being a substance – while Muslims do not accept this sense of the mind ..." (See *al-Fatawa*, Vol. 8, p. 338).

By regarding the 'mind' as a skill, a function, like writing, swimming, or any other skill, we would seek the necessary arrangements for acquiring this function: at the lowest possible cost in effort and time, and to the best level.

We do this in teaching languages, do we not? Acquiring a language is one of the skills. In teaching or acquiring this skill, we would inquire into the effort, money, and time invested in the process, and how well the results are in comparison to what has been invested. The same must be done when we examine our acquiring the skills of developing mental skills and acquiring knowledge and scientific methods. It is disappointing to see how our current curricula teach glimpses of scientific facts, in a way that the student does not acquire the scientific spirit ... It is such curricula that present religion as opposed to science.

Some Muslim scholars of the golden age of Islam did have a sense of the truth of scientific knowledge: that its essence is not in reviewing so many details. Al-Imam Malek, for instance said: "Acquiring knowledge is not in memorizing a lot of detailed issues: it is a light bestowed by Allah on the heart of a believer." Malek is here detecting the true meaning of knowledge – although what he says needs to be developed into a functional method, a detailed way to acquiring that light he detects and mentions. Those who specialize in creativity and its conditions endeavor to develop it into a science, to use it for the good of society; so let us in light of this think of the 'light' mentioned by al-Imam Malek, the talent of being a scientific and a creative person – by doing this we would have realized the function of having the mind do its job.

THE THIRD RULE: NOT PUTTING PERSONS IN PLACE OF SUNAN

Malek Bennabi mentions in his *The Problem of Thoughts in the Muslim World*, that a child passes through three stages (of growth): the first stage is that of 'things', when the child cannot distinguish between a feeding bottle and its mother's breast: it is for the child the world of things and biological needs. Then the child enters the stage of persons, when a child begins to distinguish its mother's face from any other face ..." Malek Bennabi mentions how the child feels estranged outside its home, and how he/she suffers during the first days of school. Stage three is that of thoughts and ideas.

Scientists tell us that a cell holds in its genes all the characteristics and features of all previous generations, in relation to the biological inheritance – all compressed in the cell. In a similar manner, a child repeats all human history in the three stages humans passed through: the stages of things, persons, and thoughts. The embryo passes through the stages of organic creation, compressing the history of existence ... and then it passes through the intellectual stages of the world of things, the world of persons, and the world of thoughts – in the same way as the embryo passes through the stages of organic creation, compressing the history of existence. This is very useful for tracing the origins of creation, and as an introduction to comprehending these worlds.

The child feels it will have to face a most complex and wide-ranging environment; and, to be able to absorb it, it seeks the help of its surroundings and family, asking volleys of questions, to form, in this way an image and a conception of the existence around it. It is a most interesting world, the child's world, in adaptation, socialization, learning, and growth. And this great phenomenon is renewed with every new child. So, there is this world of the child before

our eyes: a vast field of study, for us to determine how it becomes a human, how it is molded by its parents, how the community gives it a specific character. Its parents lay many basics for the kind of person it will grow to be, and then they participate – in a little or a great degree – with the rest of society in molding the growing youngster.

This is then the domain of sciences focusing on the human, and the *sunan*, laws, which mold the human: starting with the pressing drive in the child to acquire an image and conception of the world around it. It will of necessity turn for help in developing such image and conception to the persons who happen to have spent a long time in the world, who are familiar with this life, which is new to the child. It is the most natural thing that the ancestors, and the parents, should compose the world of persons, and to the child they will be accorded the value due to the world of laws. The child will spontaneously adopt the ancestors' mental images in place of the sunan of the independent existence: humans in this case will take the place of Allah's laws, and this is a kind of religious polytheism. This is not a minor fact that may be passed by. The Qur'an often mentions how those opposed to the prophets cite their own ancestors had followed the ways that they, the disbelievers, now followed – the ancestors, and the fathers, are treated in this case as adequate for evidence and proof that their position is the right one. Very simply, instead of seeking truth in the independent existence, truth is now to be looked for in the mental images of the ancestors. A person who has not been trained to deal with the independent facts will spontaneously turn to the world of persons – for inspiration and guidance: from these they get acquainted with the independent existence. A human is in need of knowledge and science, and as science is not readily available, they resort to persons, bestowing on them the function of *sunan*, laws; or bestowing on books the position due to laws – a situation similar to having the carriage before the horse.

In the Glorious Qur'an, doing this is polytheism, a heresy in faith: When persons are given the position of laws, they are treated as associates of the Lord. This is so since only the Lord may issue sharia rulings. Sharia's only source is the Almighty, not the humans who issue rulings as dictated by their views and maybe caprices. The solid and stable commands are what Allah ordains: they are the law which is not object to change or alteration; and to award to persons the position only due to the *sunan* of Allah is tantamount to taking them for associates to the Lord: therefore, it is an aspect of heresy and polytheism.

These are vital facts that we need to comprehend fully and deeply. Neither life nor religion will go right and properly without observing these rules. By failing to refer to science, we shall be falling into idolatry; to hold on to the Oneness of Allah, on the other hand, is to hold on to the stable laws, or *sunan*, in all that happens in the universe. To ascribe to persons the status of *sunan* is a disruption of science; and it is at the same time a disruption of the faith in the One God. And in practical terms, you may observe how people in backward societies, where the scientific approach is least developed, fall in the sin of idolizing and worshipping persons, in both a religious sense and political sense. To take persons for idols is polytheistic, in both a scientific and religious sense. All the assault in the Qur'an against the polytheists focuses on idolizing persons: to warn us against worshipping persons, not against just particular persons: all are mortals like us, and so it is the deadly sin to take them as objects of idolization and worship.

It is disgusting and horrifying for persons well imbued with the Oneness of Allah, or with the scientific outlook, to see the subjugation and enslavement of societies where knowledge and science do not thrive – and this is by and large true of our part of the world, where we idolize persons, and hence cannot enjoy the dignity that characterizes people of knowledge and science; nor can we boast being the people of faith *tawhid*, the One God, for it would have safeguarded us from taking persons for idols – is that not what the Qur'an commands us: "Shun the abomination of idols, and shun the word that is false – being true in faith to Allah, and never assigning partners to Him," (22:30-31)?

It is only when persons of knowledge and science occupy an honorable place in our communities – scholars who have a firm background and a passion for scientific work – that we shall see walking among us figures of knowledge, affability, dignity, and modesty; figures of spiritual richness and selflessness: it is such persons who may uplift our morale and heal the many wounds and afflictions of our societies. It is such persons who may save us from the mire of idolatry – in a way that the star of knowledge and science and the sun of the Oneness of God may glow over our parts. It is then that we may be sure to come out of the stagnation of idolatry, and words will regain their glow and richness – for until now, our words are nebulous and vague. Our souls will then come out into light, and be purified and uplifted; there will prevail among us intellectual and psychological wellness; our looks will be inspiring, and our words will be rich and significant. Indeed, wherever knowledge and science prevail, faith in the One God will flourish: people will be rid of this duality and ambivalence. We shall have our clear direction, and it will be read on our faces. The Lord is One, and He honors the children of Adam, so let them turn to Him, not to idols and associates who keep squabbling and hassling: for the latter will do nothing but precipitate us into more delusion and trouble.

Is it by now clear how injurious it is to replace the world of persons for the world of knowledge and science? I wish I could be there when writings come out in our part of the world after people have healed from ignorance, and our temples are rid of idols. For until now, our souls, barren of the light of knowledge and science, cannot perceive the causes of our problems, though the ailments have lingered too long until they stink and pester. We cannot use the right words, for our words have little sense, and they are not expressive enough, especially when we have to deal with the huge issues we have to face.

It is the language of knowledge and science that we need to heal the battered and despondent souls; that is the language that is panacea for the hearts that crave wellness ... we refer to the tangible existence to learn from as well as to the words of the Almighty, for that is what the Qur'an teaches us: calling for witness the world, side by side with Allah and His angels as witnesses: "There is no god but He: that is the witness of Allah, His angels, and those endued with knowledge, standing firm on justice," (3:18).

Similar texts abound. In a *hadith qudsi* 'i.e. Divine Tradition', the Almighty addresses those who rise in the middle of night to pray, to reflect on the creation of the heaven and earth, of the great creation of the Almighty, and keep tracing the originating of creation – those who gaze and reflect, who pry into the signs of the Lord in *al-afaq*, the world around them and in *al-anfus*, the world of the human being; He addresses such individuals with the words: "Who is that who

prays to Me – for I will heed their prayer; who is that who asks My bounty – for I will give them their quest; who is that who prays Me for forgiveness – for I will forgive them," (reported by al-Bukhari and Muslim.)

So you see, human! the noble objectives are waiting for you to seek ... Noble wishes and states are there to cherish ... justice and goodness are waiting for you to revive ... and knowledge and science and *tawhid* are there to uphold ... for the Generous Lord has all this ... and more.

THE TWO ASPECTS OF THE WORLD OF PERSONS

It will occur to some minds that it will not do to downplay the part of the world of persons – is it not they who introduce to us knowledge and science? How can they be an obstacle to knowledge and science? Some discrepancy seems to need tackling there; for it is true that this issue has two sides.

It is absolutely vital to render the world of persons its due value, but at the same time there is the danger of giving that world more than is right. A scholar must be treated with all the deference that they merit, and we need to benefit all we can from them. But there must be a limit to this deference and respect. Indeed, those who raise certain individuals to the level of blind imitation and sanctification – maybe the followers are not genuinely capable of appreciating what it is that has won the elevated individuals the status they have earned.

I do realize that an individual is literally nothing without the experiences developed across centuries. To be more exact, let us quote from a good source: *Man, Civilization, and Society*:

"A group of ant eggs, if incubated properly, without any full-grown ants caring for them, will hatch and produce a swarm of ants which, once grown to the right age, will relive, without any flow and down to the tiniest details, the whole behavior of the innumerable generations of the species that have preceded them ... can we say that much of the humans? Can a group of children, who for some reason have broken away from the caring, surveillance, and support of adults, relive the lives of preceding generations of their species? Indeed, supposing they survived, and they would not, we cannot expect them to exhibit any of the distinctive features of behavior which distinguished their parents: they will be without language, without tools, without fire, without arts, and without religion ..."

Like all species, the humans inherit the instincts of their species – but there is something else in the case of humans: the social and educational inheritance, the accumulated experience of all humankind – it is this other dimension which makes a human a human. We see how in a few years, the person specialized in any domain acquires in what humankind toiled for thousands of years to amass. What the new scientist or scholar adds can be a tiny fraction, besides that great edifice, but it is still the way to the growth of science. And it is the great thing which distinguishes the human species from ants or bees. Should our generation decide not to depend on the experience of the past generations, to discover all the facts for itself, it would have to

spend the same time humankind have spent so far to gain the experience that has descended to us. The point here is that we cannot afford but to accept the experience gained and transmitted through the world of persons – not because of the importance of certain persons, but for serving the world of *sunan*.

From the above, it must transpire that the world of persons has its negative as well as its positive role. It is positive when persons are viewed as steps up the long ladder of knowledge; but it is negative when those persons are taken to be the highest possible steps on the ladder of knowledge: that Allah has given those particular persons the utmost He would bestow on His creation.

All this discussion is especially relevant nowadays, when we hear ongoing debates concerning substantiation and modernity, and concerning the ancient heritage and revival. Some of the best minds direct their efforts to detecting the right path. I hope there is some light, no matter how faint, in our discussion in this book to help people find their way to this objective.

PROOFS OF SCIENCE

What is our proof that a particular idea is scientific or not?

Two proofs ensure that a concept is scientific: prediction and manipulation.

A. As for prediction: it is perhaps best defined in the words of Sheik al-Islam Ibn Taymiyah, quoted before: "To apply to a latter situation what was applied in a first situation." If we can predict, on the basis of observing a former situation, what will take place in a second situation – then we have knowledge. By observing the conditions the first time, and finding later that the same conditions are being realized, then we predict that what happened before will happen again. If it does happen again, and what we predicted does happen again, then we can say our prediction was based on a scientific observation.

Here is an example from the domain of physics. We state that iron will expand at raising its temperature, and we say that on the basis of previous observation. In the domain of sociology – which is a main concern of the Qur'an, to which it often turns our attention – we predict that a certain community will lose it stability and progress, and that disasters and catastrophes will befall it, once it has deviated from the straight path, once justice is no longer the basis of life in that society, and the law is operative on certain layers of society and not all others. This verdict is arrived at through a study of history and reviewing the lives of peoples and nations – which is something that the Qur'an keeps urging us to do: the Qur'an itself narrates many stories of the past peoples, the behaviors and states of disbelievers. It sometimes goes into detail, and sometimes just mentions briefly the states and behaviors of some communities. It does all that in order that the laws, the *sunnah* in Qur'anic terms, is well-established in the consciousness of believers; and so that people comprehend well that the outcome of a previous people will come again once a later people behaved the same way as the past people behaved. It is to be noted that

whenever the experience of a people is narrated by the Qur'an, there is always some conclusion to affirm the *sunnah*, the law, the scientific fact. Here are some examples of such conclusions: "and never do We give such requital except to such as ungrateful rejecters," (34:17); "Is there any reward for the good – other than good?" (55:60); "Are your unbelievers, O Quraish, better than they? Or do you have an immunity in the Sacred Book?" (54:43); "Did We not destroy the men of old (for their evil)? So shall We make later generations follow them. Thus do We deal with men of sin," (77: 16-18); "thus do We deliver those who have faith," (21:88); "are they but looking for the way the ancients were dealt with? But no change will you find in Allah's way of dealing '*sunnah*'," (35:43).

It must be noted here that when it is affirmed that Allah's law will apply, absolutely and inevitably, this is not to deny people's part in causing nations' destiny. Allah's *sunnah*, law, is based on a basic principle, best expressed in the following verse of the Qur'an: "Verily never will Allah change the condition of a people until they change what is in their souls," (13:11). This principle asserts that peoples and nations hold their destiny in their hands, the outcome of their own conduct. This is emphasized in other verses: "When We give men a taste of mercy, they exult thereat: and when some evil afflicts them because of what their own hands have sent forth, behold, they are in despair!" (30:36); "each individual is in pledge for his deeds," (52:21); "That was a people who have passed away. They shall reap the fruit of what they did, and you of what you do!" (2:134).

B. As for the Other Proof: Manipulation; this is made possible once the human has discovered the law, that it is invariably steady and not subject to change. After this has settled in humans' consciousness they begin to intervene and direct this force to their own benefit. From observing how **thorough** and **general** the exploitation is, we can deduce the extent of the particular group's scientific comprehension of the *sunnah* they are dealing with. This is then the proof, or the two proofs, of the acquiring of scientific knowledge: prediction and manipulation.

It should be expounded, however, that by prediction we do not mean the mere theorizing: for putting forth a hypothesis or theory consists in offering a probability that one thinks, intuitively, to be the cause of the phenomenon they are investigating. If that probability is seen to be true in rigorous observation, the hypothesis is promoted to being scientific. Prediction has been realized, and what was only a guess has passed the first scientific test. But of course, not all proofs are of the same rank: there is a hypothesis, then its promotion to being scientific in case the prediction is vindicated in real terms, and now it is scientific; but then, when the humans can manipulate the scientific finding to serve human objectives, the issue has passed the final test.

It may be noted in the discussion so far that prediction occurs before exploitation. The weather forecaster would declare what weather they predict, like the wind and rain, and all the related phenomena. If the forecaster is seen to have sufficient accuracy in their prediction, people will take the forecast seriously: trying to benefit from the positive aspects and avoid the harm of the negative ones. This is not to say that our ancestors did not have their ways of predicting the weather: they had their observations about the behaviors of animals, and found in that indications

of weather. They also said that when the winter was freezing cold, the summer would be blazing hot. However, since such observations did not prove to be consistent every year, the predictions were not quite reliable. Things have changed: for the modern forecast for a day or two, satellites would be observed intently: observing the winds: their speed and direction, the temperature at various levels ... one would see how huge the improvement is in climatology. And we keep asking or hoping for more — what about the forecast for a week or two or the season. And this is natural, for Allah 'creates other things of which you have no knowledge," (16:8). Humans have no way of bringing about climatic changes, but we keep trying to benefit from their good aspects and avoid their negative aspects. Besides, there is nothing to prevent humans proceeding from predicting the weather to controlling it, in the same way as arable lands are controlled in various ways; and control and dominance are huge in many industrial, agricultural, breeding, metallurgy, and other domains.

C. Al-'Aqibah: This is scientific proof in relation to human behavior

In the same way as prediction vindicated by later actual occurrence of what was predicted proves the prediction to be scientific, and in the same way as exploitation of what had been discovered is a scientific proof of its scientific truth – al-'Aqibah 'outcome, result, sequel, in people's life' is a scientific proof (see, for example, the Qur'an, 7:128.)

We are distinguishing this proof from the first two because a correct prediction and exploitation are scientific proofs in the world of nature: in astronomy, physics, chemistry, botany, zoology, etc. This is not to say that prediction and exploitation have no part to play as proofs in judging a society, its values, and morality. But there is this extra scientific proof, *al-'Aqibah*, in judging a society in particular, and in dealing with values and ethics. In the Qur'an, we find prediction and exploitation, in relation with the world in general. For instance, the Almighty says of the sun, the moon, the night and the day: "We have made the night and the day as two of Our signs: the sign of the night We have obscured, while the sign of the day We have made to enlighten you; that you may seek bounty from your Lord, and that you may know the number and count of the years: We have explained all things in detail," (17:12) In this verse, determining the passage of years and doing calculation belong to astronomy. By calculating the exact and constant movement of the bodies in the space, astronomers predict the future movement of the same bodies.

Al-'Aqibah, on the other hand, is confined to human and social values and morality. It may be noted that the Qur'an does not mention al-'Aqibah as a scientific proof except in relation with values and ethics – as in: "and the 'aqibah, or end, is best for the righteous," (28:83); "the 'aqibha is (favorable) for righteousness," (20:132); "travel in the earth, and see what was the 'aqibah, the end, of those who denied the truth," (16:36).

These aspects which we have been commanded by the Qur'an to observe and to consider their 'aqibas' are concerned with society, values, and ethics; not concerned with chemistry, physics, or medicine: they are the outcome of societies, true of all societies. The 'aqibah must be then accepted as proof of the soundness and scientific reliability of values and morality. The

Glorious Qur'an does not mention the 'aqibah of money, weapons, ships, plants, animals or iron ... This is so because the sunan of such things do not have 'aqibah in themselves: their 'aqibah is related to the human who uses them for good or bad purposes. This is important, for many scholars insist that science is morally neutral ... One reason for this assumption is something I alluded to before: that they take science to be restricted to nature, while they take issues related to values as not covered by science; the other reason is that they do not take 'al-aqibah as scientific proof, especially the existence of a science of values.

Nature and its laws are not good or bad in themselves... they acquire this quality or that depending on the way the human uses them – in view of the human's values and life principles. A Tradition of the Prophet, peace be upon him, sheds light on this: "Good money is most vital indeed for a good person," (*Musnad Ahmad*, Vol. 4, p. 177) – one would infer from this that: "Money obtained in a forbidden way is such a bad thing in the hand of the perverted person." We also have the Qur'anic verse: "Make not your hand tied like a miser's to your neck, nor stretch it forth to its utmost reach," (17:29). Wastage and meanness are not prohibited without their relation to the person who is dealing with money: this pertains to the moral values. That must be why modern economic studies would not handle the study of economy except in a framework of civilization – and this is indirect admitting of values in such studies. This is why economy pertains to nature plus the human being; and when something is related to the human being, it may not be investigated without taking the human values in consideration. And when we speak of the human values, we are thinking of goodness and badness, of the harmful and useful – certainly not nature in itself.

What we have in the Qur'an is that values and ethics are scientific, and they have their constant and steady laws: hence the exhortation of the Qur'an that we explore the 'aqibah of those who preceded us, the 'aqibah of piety, the 'aqibah of intrigues, and the 'aqibah of injustice.

Now, sciences like physics and chemistry have their labs, and have instruments and materials to prove their laws and put them in the service of the human being. In the same way, history and the *sunan* of those who preceded us, and their 'aqibah, are the lab of sociology and social life, civilization and values. Muhammad Iqbal is one of those who noticed this aspect, when he said: "One of the things by which we judge the worth of the message of a certain prophet and endeavor is the kind of character he developed, and it is by examining the cultural world which his call gave rise to." (*Reconstruction of Religious Thought*, Cairo, 1955; p. 142.)

History is the lab for values, and for comparison of civilizations. Therefore, a great deal of effort needs to be directed to history, for in-depth studies and for critical analysis of history. Careful critical analyses of history must be carried out, studies that run chronologically and spatially, geographically and historically. To comply with the Qur'an's command that we travel in the earth and see how Allah originated creation (29:20), and with the other commands of the Qur'an to investigate *sunan* of those who preceded us, we need to develop a thorough inventory of Allah's dealing with people across history, the 'days of Allah' in Qur'anic terms. We can perceive by now that such investigation of human behavior has its scientific value: the science of good behavior and bad behavior will not be developed without investigating the 'aqibah of

people's behavior across history, and in the modern world – and such study must not be confined to peoples mentioned in the Qur'an. We need to include every community we can reach, since the samples mentioned in the Qur'an are just for extracting the *sunnan*, the laws necessary for the science of good behavior and bad behavior, and it only handled the history that preceded the revelation. But the Qur'an itself does alert us that, when rules and laws may not be drawn from past history, we need to go to future, for more of Allah's *suanan* will come to surface as time passes. If you cannot find the proof for a certain verdict until the time of revelation, then look for it in later times, for it will be sure to appear. Two examples from the Qur'an about referring to future events are: "Whether We shall show you part of what We promised them or take to Ourselves your soul before it is accomplished – your duty it to make the Message reach them: it is Our part to call them to account," (13:40); "and soon will the unbelievers know who gets home in the end," (13:42).

So, here is a Qur'anic science, a Qur'anic method, that we need to develop: referring to history: past, current, and future, to sort out good values and bad values. We have more instances from the Qur'an: "And you shall certainly know the truth of it all after a while," (38:88); "Soon will We show them Our signs in *al-afaq* (the regions of the earth) and in their *anfus* (their own souls), until it becomes manifest to them that this is the truth. Is it not enough that your Lord witnesses all things?" (41:53). We find in the Bible similar injunctions: "Beware of false prophets, which come to you in sheep's clothing, but inwardly they are ravening wolves. Ye shall know them by their fruits. Do men gather grapes of thorns, or figs of thistles?" (Mat, 7:15-16). Also elsewhere in Mat: "Therefore say I unto you, The kingdom of God shall be taken from you, and given to a nation bringing forth the fruits thereof," (Mat, 21:43).

Does the Qur'an not command us to be witnesses of people (see, for instance 2:143), in justice, and even against ourselves? So, does not testimony require that we be present? Now, one aspect of being present in the world is that scholars and historians walk in the earth, investigating and studying ... This is so since those who do discerning investigation and analysis of history will rise to the level of living with the events, the same as their contemporaries – indeed, they often do better in discerning events than any contemporary of them.

D. The Scientific Is What Is 'Better and More Enduring'

We still have a fourth proof of something being scientific: What is better and more enduring (a Qur'anic expression; see 87:17). Any discourse or issue are scientific in so far as they realize the condition of what is better and more enduring.

To elaborate, and as such issues need to be traced down to their roots, for what is prevalent among people about this concept is really very shallow and vague: we do really need to dig deep until we get to the root of this thing in the human consciousness.

What is 'good'? Here we need to start, because there will be no definition of science until and unless we begin with the simplest and most evident elements. As was mentioned earlier, the Qur'an does refer to observation that no two persons should argue about: "The blind and the seeing are not alike; nor are the depths of darkness and the light; nor are the chilly shade and the

genial heat," (35:19-21): it is saying that you and I need some agreed-upon points, and to take these to be the starting point for defining what is scientific knowledge, what is truth and goodness: it starts from visible, for granted elements – will anyone argue that to have a seeing eye is the same as a blind eye? Will someone argue that to have light is the same as to be in the dark? And for the eye to keep functioning, it requires a range of temperature, for, otherwise vision will be disrupted. A human needs a certain range of temperature to keep acting properly – all the activities of the universe function within certain ranges: if things go beyond or beneath the required range, what is good and what is beneficial will not continue properly. And should someone claim that to have vision is no better than not to have vision, then the way with such a person is to give up arguing with them: they have lost the required balance. It is true that imbalance does occur to many people, but without a reasonable degree of balanced-life would not have started, nor would it continue and develop. In all walks of life, a basis of adequate conditions is necessary: It is the basis of truth in the world that enables life and humans to go ahead and develop their abilities. And the history of the world will utter this in the most expressive of tongues, exhibiting how truth works according to constant and steady sunan, and how it overcomes the obstacles in its way.

I do realize that what is said here about such complex issues is little, that a lot of elaboration and explication are necessary. We do need to continually review these facts so that we are fully aware of how things start to take shape: no link in the evolution of things must be left missing, no void must be left in this chain of events. This might be the biggest hurdle to the Muslim's progress and overcoming their problems: being cognizant of how things start, and how things develop to be, the growth of social life. Any rupture in the chain of information will open the way to uninformed parties to speak like groping in the dark, maybe establishing fancy castles whose material is illusions and surmises. That is why there must be unbroken access from the beginning of events to their end – we do know that any break to the process of development of our knowledge in some area will keep the last stages of it inaccessible to comprehension. No matter how well the rhetoric tries to cover up for the gap, the current dealing with the relevant situation will be without solid foundation. This may help us understand why the backward nations in the contemporary world fail to pick up with the scientific advance: it may well be in that there are stages in the scientific progress that are still concealed from their eyes: the chain is broken. There must be an exploration of the origins of knowing something, how it continued to develop – this is inevitable for fruitful scientific knowledge. This may help us now realize why the Qur'an devotes attention to searching the creation back to its beginning, to reveal the origins and go from there: nothing can compensate for ignoring the simple, obvious beginnings. And, then, a scholar may proceed from there to a stage after stage, proceeding along a well paved road, to resume a viable growth. This is a vital way of viewing scientific knowledge: maybe it cannot be overstressed, for any neglect here in tracing the successive stages of things will cost us very dearly. This beginning from the primary and self-evident point for a start of our progress is very beneficial: this starting point is what is good and right. It is the great starting point, and I hope I have made it clear – even if not, let all the researchers and scholars devote to clarifying this point much of their energy, and let them even compete who can express it better: I mean bringing out in the most effective style the vital importance of tracing the starting point of things, and going from there in the most systematic method. It is when loopholes are left out that the

Devil's work begins; it is when the way to goodness is not fully clarified and mapped out. Any doubts neglected in reaching from beginning to end are manipulated by the forces of evil. I can cite here what the simple people say: that full clarification when at the farm prevents much wrangling at the harvest. It does happen that very homely adages bear the wisdom of huge experience. Very often people would have paid a great deal in hardship until they learn a wise saying, but treat it later as a sacred saying. This is not to deny that what is called a wise saying can work not for the good of people, for it again bears the effect of immature passions, and then it enters the dark paths of ignorance. Wise statements lose in this way their precious practical value, and the folks are forced to go through all the labor of paying the price in suffering for their poor comprehension of automatically transmitted statements – indeed, it is not unlikely that people pay again and again the price of learning a precious lesson summed up in a statement. This is the idea in this section: that by careful review and refreshment of the steps on the way from the first inception of an idea, a principle, or wisdom, until its latest stages – by a most diligent revival of every stage and step of the way, people are not forced to undergo the same ordeal that they had or others had to go through some time before.

What we are discussing here is that anything that has been shown to render more beneficial consequences is good and truthful: it is scientific to the point it does good.

But this not everything to say about what is beneficial. It must be added that for what is beneficial to involve less harm, for what is scientific to be less confused with ignorance, and for truth to be less confounded with falsehood: the factor of duration must be included. Goodness is not goodness until it lasts longer than other processes or situations: sustainability is a crucial element in goodness. The longer a good thing survives and is sustained, the more it proves to be truthful – and hence scientific. Permanence and sustainability are the thing that provides a good thing with goodness. You may notice in this connection how the Qur'an condemns those who fail to observe the long-run consequences, those impatient to see the quick results alone: "As to those, they love the fleeting life, and put away behind them a Day that will be hard," (76:27).

It condemns likewise those who are not prepared to endure some hardships in the way of attaining objectives that fulfil this quality of being better and more enduring 'Ar.: *alkhair walabqa*, as in the Qur'an, 87:17'

We may get some elucidation from Ibn al-Muqaffa', the bright writer (724-759 CE), when he says:

"It is reasonable to assume that people are equal in liking and preferring what is advantageous to them and disliking what is injurious – this much is agreed upon by both judicious and injudicious persons. Differences and diversity appear after this: one difference is that a judicious person will examine carefully what brings them harm and what is of advantage to them. They will perceive that what is worth their effort to seek, if it is really desired; and what is right to eschew, if it is something undesirable – is that which is most lasting, most permanent." (Preface to *al-Adab al-Saghir*).

Another thing to note here is that the proof of a scientific statement we are discussing now pertains to the science focusing on al-anfus, on human behavior and traits – in contrast with

al-afaq, facts related to nature. In this sense, the Qur'an treats science as moral: the proof of science is *al-'aqibah*, including what is better and more enduring. This is so as morality is what is beneficial to people: morality is rooted, in real terms, in what proved to be beneficial to people over history, the aspects of behavior which have been found to be what is better and more enduring.

Again, one sees the vital importance of history, for we refer to history to ascertain what is better and more enduring. Those who have not studied history will assume that morality is imposed arbitrarily, that it is no more than a bundle of restrictions that are designed to curb people's desires and lusts. It is true of course that the ethics of what is better and more enduring are not there to serve desires and lusts: they are ethics drawn from reflecting on history and the consequences of behaviors in the long run.

There appeared lately careful studies that have revealed the signs (Ar.: 'ayat') of Allah in the domains of al-afaq, the natural world as well as the domain of al-anfus, the human mind and behavior. These studies do reveal that the morality enjoined in religion, and the teachings of those who command what is fair and just, are actually supported by science originating in the consequences of human behavior over history.

Ibn al-Muqaffa' also mentions, in classifying the kinds of monarchs, 'that monarchy – politics in modern terms – can be based on religion, on reason, or on desire.' And he adds about the last type: 'It is short-term pleasure followed by long-lasting devastation'. This is an example of a view based on history, scientific perspective, and morality. With such insights in mind, you should denounce the commonly accepted view of dissociating science from morality, values, and religion – denounce it as dictated by desires, and by ignorance of realities of the world and of history. The Qur'an does not accept such a reading of science as dissociated from morality, values, and religion: when urging people to take its injunctions more seriously, it scolds certain groups for being: 'do not know', 'do not understand' and that 'on their eyes is a veil'.

This discussion concerning proofs of science and 'what is better and more enduring' should not left without shedding some light on pragmatism, the well-known American philosophy. To be fair, let it be said that pragmatism can be, in its best interpretations, not unlike 'what is better and more enduring': seeking benefit that is the most comprehensive and general, the most enduring, and the best for people. If we understood like this, then it is the same as in the Qur'an. You will notice that the more just among people, the more loving, and the most sensible humans keep advocating and promoting this principle. And this is what Ibn al-Muqaffa' is harping on. But not all pragmatism is like this: in some of its aspects it can be a call to securing quick advantages, even when they lead to malice and bloodshed and provoking animosity and hatred. This pragmatism, or pragmatism in this sense, is short-sighted and seeks quick and selfish advantages; it does not consider the consequences in the long run of indulging immediate desires: it is devoid of historical dimensions. It is this kind of mentality that the Qur'an castigates when it says: "Nay you men! But you love the fleeting life, and leave alone the Hereafter," (75:20-21); and we all see what this view of pragmatism can lead to: robbing the destitute of the little they possess, subjugating and oppressing week nations, and enjoying all the good things of life at the expense of those nations' nakedness and hunger ... and all this cannot happen without

destructive wars ... If pragmatism is understood like this: the affluence and ascendance of a nation or group at the expense of other groups, then this is right to be condemned: it is short-sighted and short-lived; it is the pragmatism of those who are driven by their desires and lusts. Let us contrast this most sharply with the best sense of pragmatism, which is synonymous with 'what is better and more enduring', pragmatism which is designed to lead to the best consequences for the greatest number of persons and for the longest duration.

It is worthwhile to emphasize that moral behavior is that which has been proven over long history to be the most beneficial behavior, behavior which does more good than any other, and has the best consequences in the long run. It is this which makes ethics a science – it is indeed the most beneficial of sciences. Should a human lose sight of the 'aqibah of behavior, then they may use that which is meant to do good to them and to others in a way that it does evil.

We may have a further insight from Ibn Taymiyah to drive home this idea of 'what is better and more enduring', which meets the conditions of scientific rigor, and occupied a vital part of religion at the same time. Ibn Taymiyah has this to say: "What is enjoined is that which is beneficial, invariably or mostly; and what is *haram* is that which is harmful, invariably or mostly." This is a very scientific approach, and it helps us see how religion and morality occupy a very secure position from a scientific perspective. When I am keen on dinning on morality and religion being scientific, it is because so much needs to be said about that at this very age, when the prevalent culture dissociates morality and science on the on hand, and science on the other. This dissociation happens for what is beneficial in the short run is being preferred to what is beneficial in a sustainable and permanent sense. This must go with the other rule: that when the human is happy for being able to manipulate the forces of nature, but fails to have control of the human behavior – by curbing his own behavior, not having 'had restrained themselves from lower desires' in Qur'anic terms (80:40) – then the blessing they enjoy will turn into a curse.

It is a crucial thing to adopt *al-'aqibah* as a criterion; hence Bertrand Russel's emphasis that when the Bible states: "Ye shall know them by their fruits. Do men gather grapes of thorns, or figs of thistles?" (Mat, 7:15-16), it is a scientific and historical way in determining what is truthful ... but Russel did not elaborate this bright observation – he just left it there instead of taking this up as a major epistemological method.

Similarly, Hussein Muruwa did mention, in his huge tome *The Material Trend*, rather in passing this idea, the idea of taking 'aqibah as criterion; but again, he dismissed it after a few lines. He did not use on this occasion his otherwise elaborate, patient, style in discussing matters: he could have done much more in revealing how this issue may be met with in the domain of human behavior. One may find, in Russel's and Hussein Muruwa's brief mention of *al-'aqibah* what they had picked from the dominant culture about religion – hence their bypassing this crucial issue which they could have helped develop into a genuine scientific method, in both religion and history. They rather treated this idea as alien to religion, failing to notice its true importance as a cornerstone in dealing with religion and morality – since religion takes it most seriously and on purpose.

When the above two writers treat this vital topic with the indifference we have noticed, one must trace this back to the neglect of the pious believers who do not give this idea its due value. They should have noticed how this principle is taken up in earnest in both the Bible and the Qur'an – briefly, yes, for the future researchers to elaborate. Let us admit, however, that both Russel and Muruwa have done a nice job by raising the point, for others have failed to even notice the issue. It is not so odd in the history of science that an issue is raised, forgotten, then raised again in a more serious and deeper manner.

Once 'aqibah is adopted as scientific evidence, the impact will be decisive in many of the individual's attitudes. It will necessitate, at the same time, drastic changes in the definitions of things like science, mind, truth, and history.

It is of course a major change in perspective when science accepts religion, for new elements have been added as scientific proof: Religion is here gauged by its consequences, not by the usual subjective evaluation of its supporters and its detractors. And when this perspective is adopted the long-standing conflict between the intellectual trend and the tradition-tied trend will come to an end. For instance, when they say that the rituals of *al-hajj* are outside the reach of the mind, and so are the rituals of prayer, fasting; and detailed acts of worship like the stoning of Mina pillars, or the pre-dawn meal of Ramadan ... when they represent these acts and rituals as outside the reach of the intellect, they do not think of the mind as meaning the linking of causes and effects – had they done that, they would perceive the above acts and rituals differently: for these acts and rituals do have their vital effects and functions: for one thing they have kept up, and still keep up, the unity of the Muslim world, and they maintain the precious bonds of brotherhood and cohesion. Iqbal says about that:

It is a handful of Zamzam (the sacred water of Mecca) that a Muslim sips,

But the outcome is that the Byzantine Emperor views the Muslims as super-human.

It is perhaps the sociologists, those who devote a lot of their efforts to detecting what provides society with its solidarity and cohesion, who can appreciate the value of the above rituals. It would be seen that, even after Muslims had lost the state, the intellectual ascendance, and hegemony, what preserved, and still preserves, the continuity of their survival and selfesteem is those acts of worship – which are represented by some as having nothing to do with intellectual analysis, as having nothing to do with the integrity of community and individual. In his *The New World of Islam* (1921), Lothrop Stoddard declares that, after Muslims had lost their dominance and caliphate, what preserved their unity and this surviving brotherhood is pilgrimage to the Holy Mosque of Mecca.

It is a certainty that these rituals have preserved the remaining breath in the Muslim body, and such a function is not something that any substitute factors can produce. So, it is a mistake to think that the intellect cannot perceive the value of the religious rituals. Rather than view the Islamic acts of worship as not amenable to intellectual analysis, I find in them a huge cause of sanctification and reverence, in view of their 'aqibah 'i.e. outcome, consequence, fruit' the rare function they, and only they, can perform.

In these acts and rituals one can discover symbols and methods for communion, on an individual as well as collective level, with the meaning and significance of existence; as well as both the release and controlling of energies and talents. They are also a great communion with the Creator of life, the Originator of heaven and the earth ... So, let me repeat that these things must not be viewed apart from their functions and objectives. Let those capable of conducting studies on these phenomena do so: to reveal the *sunan* and 'aqibahs of these acts. Iqbal did handle this, but in his poetic vein; he says for instance:

The gem of belief in the One God is prayer – let that be known to you,

It is prayer which is compressed pilgrimage you perform,

A Muslim has this weapon, prayer,

To eliminate with it vice and heinous deeds.

A last argument in this respect is this: They criticize the Greek science for its being theoretical, dissociated from experimentation and action.

Now, 'aqibah is a kind of super-experiment: it is experiment with something more. This is so because it is experiment with the addition of what is better and more enduring. When we view acts in view of their 'aqibah we also gain something else: for with this perspective, there will be an end to the conflict concerning secularism. It is so for secularism emerged when people assumed that religion and science are incompatible, that faith and religion are inaccessible to the enterprise of science: some placing faith and religion too lofty to be examined by science, and some regarding religion as a-scientific (having nothing to do with science), and for a third group religion is opposed to science. It was in this context that secularism emerged as a catch-word or motto of resisting superstition, whatever was irrational, or illogical. But we now say: if secularism is accepting the scientific results and 'aqibahs of things, then a Muslim is not disconcerted by this motto or term. Instead, they would feel that the conception of knowledge must be corrected in a way that all the issues must enter the domain of science: let science have dominance over religion, for the science's dominance may not be opposed.

What I have said about these issues is not much, but if you can deal with these words not on a basis of 'Who is the sayer'? but rather on the basis of their relevance to *sunan* and the realities of life, then you will benefit by these words. I mean by these ideas to be the starting point for a new approach to knowledge – this will be also a beginning for effecting a change in our condition, which is a source of great displeasure for both those involved and the rest of the world. It is a principle that I keep referring to, that our condition will not change until we act in light of the verse: "Verily never will Allah change the condition of a people until they change what is in their own souls" (13:11): what happens at present is that we cling with all our might to what is in our minds and souls – while we detest and abhor our condition which are only the outcome of our concepts and illusions. If we succeed in detecting the link between our visible condition and that which is in our minds and characters, and if we can discern that which is inside our souls, then we may act on putting that right, even reversing what we hold to if necessary. We can do that, with much less suffering than we undergo at present, when we do

perceive the bearing of what is inside us on what is visible to our eyes. Indeed, all the delusion and groping in the dark that we see are the result of failing to see this relation between what we bear inside us and the kind of circumstances that afflict us. It is there that we should start with: seeking to trace, in all exactness and perseverance, what concepts and attitudes and all the mindset that we bear — and how they are reflected in the consequences that we all notice and complain of: it is only then that we may say that we have started to see the first ray of light, because we will have removed the scales that prevent our eyes from seeing things for what they are. One sign that we can notice, which indicates our issuing from the wilderness, is that we will completely stop looking for the scapegoats for our crises: scapegoats that we keep finding in our midst, or outside our world.

One benefit of this new approach is that the Ummah's energies and effort will no longer be wasted.

When we understand things in terms of their 'aqibah and definite causes, we shall have got hold of the fast handhold; at the same time, we shall let go of things that we used to cling to, and they will go like any litter. We have in the Lord's words in the Qur'an: "the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth," (13:17) a solid historical, epistemological and sunan-tied system: it tells us that what is to remain in this life is what is beneficial, while that which does not have a beneficial value will go to the winds, no matter how fast some will cling to it. Hence, what is for us to do is gaze well at the realities of the world, to see how the bases of science and methods of knowledge get firmly established across history on a basis of benefit and injury: this is the law of 'what is better and more enduring'. This doctrine of the Qur'an, which refers us most surely to this principle talks with confidence about the past history, and with confidence about the future. It talks with confidence because the truth of this world is seen in that what is froth will go away, while what is beneficial for people will remain.

THE SCIENTIFIC OUTLOOK

I feel it necessary now to focus some light on the scientific outlook. We shall have to discuss here our attitude to the unknown, our attitude to what has not yet entered the circle of science. What a human usually does is to compress the past and let the fancy float into the future. It is like flying with the two wings of past and future, the two wings of the known and the unknown. To the extent that a human knows the past, 'the originating of creation' in Qur'anic terms, they possess light enough to speculate about the future and the unknown. In the same way, the more experiences and knowledge they have digested from the accumulated mass over time,

their attitude to the unknown will be optimistic: it is simply that they assume that what at present they are ignorant of they will come to know in the same way as they learnt what had been unknown to them at some time – there is no reason for them to feel desperate or despondent when facing the vague unknown: they have their stock of accomplishing triumph over the hurdles of the unknown in the past, and they have often overcome the obstacles of the way. The rule is that when we have encountered problems, and we analyze and solve them, this will shed light on the problems that are yet to be solved.

This topic is related to that of 'Travel through the earth and see how Allah originated creation' (29:20): for a person who knows how creation started will have an amount of envisioning how the creation will be in the future, no matter how vaguely. It is a speculation that naturally extends from the previous developments. They will be sure that things will not stay as they are, that the present will change, as the past has changed. In the same way as the creation in its current state is different from what it was at the beginning, its future will not be as it is now. There are allusions to this in the Qur'an, such as: "He adds to creation as He please," (35:1); "every day He exercises universal power," (55:29).

One thing that prevents some people from adopting a scientific attitude is when they assume that the world was created all at once, that what we see now is what was at the beginning. This is not true of course. All the created things: the rocks, the mountains, the stars, the galaxies, plants, animals, etc. all have their history of creation: for each there is a beginning from which it kept developing. But tracing this process from the start and through the stages of creation, we possess a strong light that enables us to speculate how they will develop in the future. The Qur'an itself enjoins on believers to observe the past developments, to move to the locations, observe, reflect and analyze. Once an individual has learnt much about the past, they will be sure to have a better envisioning of the future: it is a most normal extension of one's view. Such a person will be sure to have their assumptions and weighing of possibilities. Conversely, those who have no stock of knowledge of the originating of creation, in Qur'an's terms, cannot envision or speculate about the future, which will come out of the womb of the present.

Muslims have it settled in their minds how exactly creation took place: they refer for this to the literal meaning of revealed texts, instead of seeking such information from searching in the earth. This has been the reason why they took a hostile attitude towards the theory of evolution, a theory which was introduced into the Muslim world a century ago. They were quite oblivious of the vivid indication in a Qur'anic verse of where to seek information about the beginning of creation: "Travel through the earth and see how Allah originated creation' (29:20)". I have not come across even one research by a Muslim quoting this verse as being relevant. This is not to support or deny the theory of evolution, but to determine the proper way of doing research.

Take for instance our attitude to the world's current problems! We hardly ever trace a problem to its first and tiny emergence in the past. That we fail to comprehend the problems of the past will naturally make the present problems long standing and hard to overcome – indeed, as long as one fails to see the source of a problem, all their efforts to solve it will be in vain; their efforts will be really paralyzed in the end, for they will desist from trying.

It transpires from the above that the scientific outlook (the historical and *sunan*-based position) distinguishes those who move about and investigate the early emergence of things. This is indeed what ensures for the scholar a solid and steady position, an active and efficient manipulation of efforts, and confidence that is not tarnished with hesitation or doubt. This position is not inaccessible to those who seek it: it is gained through having 'basirah: i.e. sure knowledge', as believers are expected to be: "Say: this is my way: I call to Allah with sure knowledge, I and whoever follows me," (12:108). This leads us to say that those who have little cognizance of the past are not equipped to deal efficiently with the problems of the present. It must be understood from this our urgent need for developing our effective and productive system of getting acquainted with the past: in its broad lines for everybody, and in its intricacies and fine points for the specialist.

It is one of the most important services we can offer to science to know the past well, and being able to offer it in a most accessible and palatable way: as clearly as possible, and as a continuous chain. No creature but we must trace its development from its first appearance: in both natural and human worlds. What has come over us did happen to the people before us: as a result of the long duration of time that has passed, they, and we after them, have our hearts hardened: this has taken the form of an extreme restriction of our vision to the current moment – a natural result when people have lost the *sunan*-based view. This strictly moment-bound vision will inevitably be deterministic, cut off from the past and its lessons, and cut off from the future and its aspirations and hope – a strictly restricted vision which leaves no chance for struggling to break free from our ties and chains. But this true of not only our community: it is true of all humankind. It is so for they fail to turn to the saving element – that of a thorough comprehension of the past: how things came to be, and what factors brought peoples to their present state. This is really the starting point to plan for the future, to cooperate for a future that we ourselves shape: In this planning, we specify not only what things will be like, but also how that can be brought about. Allah will be always there to bestow upon us all the aid and mercy: for He has entrusted us with tasks, but once we have started on the right way, using our intelligence to good purpose, He will provide us with all the help. Indeed, to show our gratitude to Him, we must put to good use the intellectual ability He has bestowed on us. It is an essential aspect of gratitude to the Lord that we bring to life the potential that science can put in our hands, the potential of manipulating the forces of nature and life for good purpose. When we thank Allah then, our thanking will be rich in meaning: the opening Sura of the Qur'an 'al-Fatihah' will be really full of life and vigor when we turn in supplication to 'the all-Compassionate, the all-Merciful'.

I say that because a person who goes without a scientific outlook cannot avoid taking a desperate and helpless attitude to potentials and opportunities of a better tomorrow; and they cannot afford to show mercy and forgiveness: this is really the reaction of a person's failure in facing problems. When they feel all gates closed in their face, they turn to malice and a vengeful approach; their motto would be 'let the roof fall upon me and my foes', the way Samson cried. These are the ones who, to heal heads, they cut the heads off – rather than guiding people and indicating the right path. This is when they happen to have the upper hand, when they are among the haughty elite. When they are among the miserable and down-trodden, they keep dwelling on their rancor and malice; they keep biding their time to cut off the heads of people who they

cannot find the means of guiding and leading along the way of safety. It is knowledge and science that produce mercy, forgiveness, and tolerance. It is the learned scholars, as Ibn Taymiyah says, who know the truth and have mercy for all mortals. Ignorance, on the other hand, breeds roughness and boorishness — it is among the ignorance that you meet persons who long to crush some people and eradicate whole nations; those who nothing quench their indignation but destruction and blood.

Has it happened to you at any time that you were so agitated and irate that you hit some inanimate thing before you, after having failed in dealing with it according to the rules by which it operated. If you experienced that, or saw somebody experience it and then say: "There is no way of getting this to work, or this problem to be solved," you should know that this attitude and behavior are unscientific, incompatible with history's lessons, and even inhuman. This is so because knowledge, science, and being acquainted with history beget mercy, forgiveness, endurance, tolerance and a bright, hopeful view of the future – and despondent despair has no place there. Indeed, this is how we should understand the heaven and earth being created 'with truth, to realize truth' as the Qur'an puts it (see, for instance 45:22): they were created in a way that their problems can be solved, and they are there to be subdued for the good of humankind, not to be destroyed.

Therefore, if you see people desperate of changing their state and solving their problems, if you find people careless, disaffected, and disinclined to listen to anything – then you may be sure that they fell in utter despair, which is, according to the Qur'an, almost tantamount to disbelief, as you may see in the following verse: "truly no one despairs of Allah's soothing Mercy, except those who have no faith," (12:87). Helplessness, indolence, cowardice, and miserliness are the progeny of ignorance ... On the other hand, efficiency, energy, courage, and generosity are the fruits of knowledge and understanding. And knowledge has only one way to be obtained: working hard to gain it; and tolerance and magnanimity may be obtained by endeavoring to acquire them: nothing of that is ready fortune; they are human traits and abilities to be earned through endurance and hard work; and they are areas of life that may be conquered through knowledge and labor ... and this road has no end to it.

SCIENCE AND AL-HAWA, I.E. INDULGING DESIRES, PLEASURES

When I decide to include this section on 'science and *al-hawa*, or indulging pleasures, desires, partiality', I cannot assume to be in a position of develop this topic to a satisfactory level. I merely feel we need to put this issue forth, to bring it to the notice of many people, in view of its exceeding impact on people's behavior. And in a more general word, the more we take up significant issues, explore them and study them and reflect on the events related to them, they would have come nearer what is more vivid, crystal clear, and closer to scientific probing.

When we use the term: science versus indulging al-hawa, the implication is that the two terms are opposites. In the Qur'an, al-hawa is treated as a source of risk, and warned against, and a believer is exhorted not to surrender to it – and it makes no difference, in this latter case, whether one heeds their own hawa – as in the verses: "do you see such a one as takes as his god

his own *hawa* 'vain desire'" (45:23); "and who is more astray than one who follows his own *hawa*, 'lusts', devoid of guidance from Allah?" (28:50); "nor obey any who whose heart We have permitted to neglect the remembrance of Us, one who follows his own hawa 'desire', who case has gone beyond all bounds," (18:28); or it was yielding to others' *hawa*, as in: "If you after the knowledge has reached you, were to follow their *hawa* 'vain desire' – then you were indeed clearly in the wrong," (2:145). On the other hand, the Qur'an compliments those who forbid themselves to yield to *al-hawa*, as yielding to *al-hawa* diverts one from justice and causes one to commit injustice, and it deflects one from the way of Allah, as in: "Follow not the *hawa* 'the lusts' of your heart lest you swerve," (4:135); "so you judge between men in truth and justice: nor do you follow the *hawa* 'lusts of your heart', for they will mislead you from the Path of Allah," (38:26); "But many do mislead men by their *hawa*, i.e. appetites, unchecked by knowledge," (6:119).

So, how can we go about defining *al-hawa*? How can we perceive it and trace it in our own character and in others'? How can we chart out its sources and its paths? How does it come into being? What are its distinguishing marks? And then, how can we overcome it? Many Muslim scholars used to dwell long on the ways to deliverance from *al-hawa* – in the sense that: to be saved, you need to overcome and get rid of your *hawa*; that whatever your *hawa* calls you to do is to your harm and can be detrimental to you. In al-Busiri's renowned poem, we find this idea:

Disobey both your desire and the Devil – be sure to take them for enemies,

Even when they seem sincere in their advice, think ill of their counselling.

Psychologists have contributed long discussions on desires and wishes, and all that is worth our while to review.

I may affirm that no conflict rages in the world but al-hawa has a major part in it. It is so, for al-hawa colors one's view, and each of the parties will see the point from a perspective that is different, and perhaps in conflict with the perspective from which the other party views it. Alhawa is most pronounced in the case of children and ignorant persons: those who have the least knowledge and science, who are least knowledgeable about the events of history, the affairs of the world, and the sunan of the world. It is simply like this: the less knowledge, the more alhawa. When things have to do with what is advantageous or disadvantageous to the person, and have a negative or positive effect on their children, business, doctrine, ethnicity, etc. – all such factors will affect one's attitude: al-hawa is sure to have its share in the evaluation of the situation: it will surely block or blur the objective viewing of things; no doubt a person involved in the ways we have mentioned will not view things the same as another will. All this will mostly happen without the concerned person being aware of the forces inside. Different nations and cultures have noticed this partiality: that is why all nations and cultures have their proverbs to show how this *al-hawa*, in the sense of partiality or bias, deeply affects people's way of evaluating things. One proverb goes like this: "I do hate the one who indulges in self-praise – but as for me, I am worth nine men." Here is a child yelling most loudly and non-stop in a children's amusement park. His grandmother, the administrator of the park, happened to be teaching in a

class-room that overlooked the park. She said to an attendant: "If this child were not my grandchild I would have said he was most annoying – but being my grand-child I say: 'he is talented to be a leader.' It is commonly noticed how a naïve person views things done by them or belonging to them in a different way from viewing things done by others or belonging to others: even one's litter is seen as less dirty than that of others. Maybe the judges in the law-courts have more chance than others to see this conflict in partiality between the adversaries. We find in the Our'an an excellent story, that of David with the two adversaries, and the main focus in the story is partiality and indulging wishes and desires. At the end of the story, the Almighty addresses David like this: "We did indeed make you a vicegerent on earth: so you judge between men in truth and justice: nor do you follow the hawa 'i.e. the lusts of your heart', for they will mislead you from the Path of Allah," (38:26); it is an admonition to any person who occupies a place of judging people. Before telling the story, Allah tells some of the painful and arduous experience of the Prophet Muhammad, peace be upon him, with his people, when they, as the Qur'an puts it, "they wonder that a Warner has come to them from among themselves! And the unbelievers say, 'this a sorcerer telling lies. Has he made the gods all into one God? Truly this is a wonderful thing!" (38:4-5); then the Almighty directs His Messenger with the words: "Have patience at what they say, and remember Our servant David, the man of strength: for he ever turned to Allah. It was We that made the hills declare, in unison with him, Our praises, at eventide and at break of day. And the birds gathered in assemblies: all with him turned to Allah. We strengthened his kingdom, and gave him wisdom and sound judgment in speech and decision," (38:17-20). It is quite generous praise of David at the outset of the story – that he was distinguished with wisdom, stable royalty, and sound judgment. Now, after preparing the ground, the Lord says: "Has the story of the disputants reached you? Behold, they climbed over the wall of the private chamber; when they entered the presence of David, and he was terrified of them, they said: 'Fear not: we are two disputants, one of whom has wronged the other: decide now between us with truth, and treat us not with injustice, but guide us to the even path. This man is my brother: he has nine and twenty ewes, and I have but one: yet he says, "Commit her to my care," and is moreover harsh to me in speech.' David said: 'He has undoubtedly wrong you in demanding your single ewe to be added to his flock of ewes: truly many are the partners in business who wrong each other: not so do those who believe and work deeds of righteousness, and how few are they?' – and David gathered that We had tried him: he asked forgiveness of his Lord, fell down, bowing in prostration, and turned to Allah in repentance. So we forgave him this lapse: he enjoyed, indeed, a near approach to Us, and a beautiful place of return. O David! We did indeed make you a vicegerent on earth: so you judge between men in truth and justice: nor do you follow the hawa, 'i.e. the lusts of your heart', for they will mislead you from the path of Allah: for those who wander astray from the path of Allah, is a penalty grievous, for that they forgot the Day of Account!" (38:21-26).

The two adversaries are the point of focus here: one has just one ewe, and the other has ninety-nine ewes. The former is the plaintive, and he presents the case with astonishment: the man with the ninety-nine ewes felt he had to get the other man's ewe, and he actually argued with him, and mentioned his supporting evidence – until the man with the one ewe felt he was overwhelmed, that the evidence of the rich man left him no way of refuting the other ... This is very usual on the part of people with big fortunes: in gold and silver, in herds, in lands – they can

sometimes speak eloquently about their right to things ... piles of fortune inspire the wealthy with strange arguments. It is a story chosen to represent a whole class of people – people who act as their *al-hawa* dictates to them; and a great length they would go to have their way.

One may find scenes and stories to illustrate this dominance of *al-hawa* everywhere. In the relations of so many households, among husband and wife, among siblings; among neighbors in houses or in villages and towns ... it is such a widespread phenomenon ... and at the root of all this is that the issue seems to one party utterly unlike how it seems to the other. Did not the owner of ninety-nine ewes find himself justified in claiming the single ewe in the possession of his adversary?

It is such a telling situation chosen to be revealed in the Qur'an. It is there so that one would say: It is really a universal phenomenon! Does not each one of us fall in this trap? But the problem does stay and persist until now: that an individual keeps seeing themselves as the center of things; their own interest as the thing that counts. The other and the interest of the other seem so insignificant as compared with our own interest. From this we may see how *al-hawa* can be the cause of deflecting one from the way of Allah, how it can turn a human into a deaf and blind person (a Tradition of the Prophet's, reported by Abu Dawud, says: "Your love of something can turn you into a blind and deaf person.") When the prophet David received the two men who had climbed the wall and entered his private spot of worship, he was appalled at the extent to which one may go in upholding his own interest and partiality. He realized that no one but may be exposed to this, and so he asked forgiveness of his Lord, fell down, bowing in prostration, and turned to Allah in repentance.

This is then the significance of this story as I see it. It is a universal problem that it demonstrates: the story of nations, societies, and families. It is, indeed, glaring in the Security Council. It is the problem of humans everywhere on this Globe: whenever two persons come in contact, the problem is very likely to crop up.

The problem of *al-hawa* emanates from self-love. Now, self-love does an important and positive job in the human's life, for the individual is stimulated by this emotion to preserve his/her life. The idea here, however, is that one needs to go beyond the limited boundary of their well-being, that the interest of the one individual is right to preserve, but must not be the only objective and concern of theirs. One does not survive without others, and therefore, the individual needs to bear in mind that in the same way as his/her own pleasure is necessary to maintain, there are the interests of others. One's *hawa* will, much of the time, do them and others mischief: it mostly hampers one's rising to a higher level. Therefore, an individual needs to go beyond the individual incentives in order to serve the community's interests. This is the development one needs to realize: it is a rise from the ego-centered drives to altruism; it is acquiring the spirit of acting for the interests of others. Nothing will serve social life more than selflessness and altruism: and this is why a human may not have a higher ideal than this to work for. This is why the Qur'an describes the best believers as: "give others preference over themselves, even though poverty was their own lot" (59:9).

Bearing in mind what has been said so far about the issue of *al-hawa*, we can think of the conflicts among humans: their causes and ways to solving them – and where in all this one can turn to history for enlightenment. In fact, the speed and spread of modern media and ways of contact bring before our eyes the international and regional conflicts: and one discovers that they are quite similar to the bickering within a single family. They revolve round the claims of the various parties that they should get more of the benefits, and should bear less of the duties; and they often rise from the style of communication, or the way statements are interpreted. One does notice that, on the international level, as on the individual level, there is the patronizing and debasing words and tones; and there is the same underrating the disliked other, and overrating oneself or the liked other.

Anyone may notice how a dominating part *al-hawa* has in the children's conflicts and quarrels. It is the most natural thing to see when they disagree about their roles, belongings, and games and toys. But one needs to have more attention to see the same *al-hawa* operate in the conflicts among the leaders of the world.

We may notice it also in so many disputes, or rather talking at cross purposes, on the level of whole masses of humans, when the disputes are conducted verbally or with weapons. In such conflicts, the others' conduct is described as brutal, inhuman, aggressive, and terrorist; while one's own conduct is described as preserving the citizens' security, self-defense, protecting the innocent, security zones, and the like.

That most countries have overcome this problem at the level of the one state is significant: enough laws have been enacted, and the judiciary has been empowered and organized to let the contestant parties refer to it for solving their conflicts. The judges are seen to vary widely in connection with administering justice, so that some come very close to admirable balance in establishing rights. This is a great improvement upon the establishing of rights in the past, when each sought justice for themselves: individuals are notorious for each finding right to be on their side every time: the improvement, as represented by respectable judiciary, has certainly distanced nations within the borders of their states from the law of the jungle, from the essential inequality of people: their division into the haughty and the subdued. One would wish that the same should happen at the level of nations; the family of nations can achieve that which has been accomplished at the level of citizens within states.

The international law is there, but it remains as ink on paper. Similarly, the International Court of Law is mentioned, but does no real service. Such international establishments must be activated and made efficient; and this cannot happen without the united efforts of interested parties: it is the subdued of the world who are the real beneficiaries of the above establishments being really efficient. They will benefit when wars are prevented among nations, in the same way as wars are now prevented in most nations at the local level, when wars for ethnic, cultural, class, color, regional, reasons, are prevented: in all such war *al-hawa* of the various parties have the major part to play. The right way out of aggressive conflicts, when each party insists it is they who are in the right, seems to be referring to a third party, not biased towards or against either of the two adversaries. This third party can be well nearer to justice, while both the two contestant parties are too interested to see truth.

What happens just now is that we live in a world dominated by *al-hawa*, and the world stands helpless, incapable of curbing the *hawa* of the different parties, just a spectator of the conflicts that are at the root of all mischief everywhere in the world. When the United Nations tried to come up with a definition of 'aggression', it desisted after several attempts. The final conclusion was that 'the word 'aggression' is a concept that is not amenable to definition' (quoted from: *Will Science Save Us*, Beirut, 1963, p. 66). That no definition could be reached is because each party will view the situation from their own perspective, and interpret it accordingly, in view of their different *hawas*. Had this verdict of the UN been right about 'aggression', and had judges in the law-court adopted it, there would be no conviction and no settlement of disputes. What the above failure to define aggression implies is that the law of the jungle is still prevalent, and that issues are not settled in accordance with the amount of right on this side or that; it is the 'might is right' rule which works: the victorious party dictates how 'aggression' must be defined.

We are trying here to look at *al-hawa* from all possible perspectives because it is quite hard work to know *al-hawa* for what it is. One aspect that adds to the difficulty is that in its deeper meaning, *al-hawa* is doing oneself harm and wronging oneself before others. So, there is a paradox here; people are most prone to deceive themselves when succumbing to *al-hawa*, and not many people can rise above that. History is again the best source of drawing lessons and learning better behavior; it is from history that a human can learn what spares one the stumbling blocks that have brought down so many people before.

About a person falling prey to *al-hawa* wronging themselves before any other, we may refer to the Qur'an, when the Lord calls the wrong-doer as 'wronging their own souls' (as in 35:32): this is to alert people to reconsider their long-standing habit of not seeing themselves as the perpetrators of wronging themselves, but in rather ascribing the mischief to others. No book puts this more succinctly than the Qur'an: that a wrong-doer has done themselves harm 'wronging their own souls'; more striking is the Qur'an's calling even the subdued as 'wronging themselves', which is what we find in the following verse: "When angels take the souls of those who die in sin against their souls, they say: 'In what plight were you?' They reply: 'Weak and oppressed were we in the earth." They say: 'Was not the earth of Allah spacious enough for you to move yourselves away from evil?" (4:97).

Allah's *sunan* for overcoming the state of being subjugated are numerous; but when ignorance stifles people with its grip, what is wide appears narrow, and the commodious land appears to be incommodious. The restrictions inside create restrictions everywhere outside. When *al-hawa* has the upper hand, it will deflect one from the way of Allah and the laws of Allah.

It is right to reflect here on how the idea of law emerged among people. What was the urgent need which compelled the early human beings to develop a law to organize life's affairs and curb *al-hawa*? We are commanded by Allah to move about in the earth and trace the originating of creation. I do feel it most vital that people investigate the creation of law as a system for organizing and controlling human life. How did the concept of 'haram, i.e. prohibited' as the religion teaches us, and 'taboo' as psychology calls it – how did it develop and

take root as a constituent of people's doctrines? We need it badly to know how the human felt the urgency of curbing their own instincts and controlling their *hawa*. For no civilization in history but has felt this need to organize a human's instincts and control their *hawas*, insisting on having them restrained within a more sublime ideal. The different cultures have their way of inspecting individuals' *hawas*, to curb them and subdue them to their paradigm. And even now, when we feel that science is subservient to *al-hawa*, we should not draw pessimistic conclusions, for *al-'aqibah* will invariably be in favor of science.

Several terms are in use to cover the concept we are dealing, more or less, with what we are discussing here as al-hawa: the subconscious, emotions (positive and negative), subjectivity, narcissism, instincts, the 'human soul enjoins what is evil' (the Qur'an, 12:53), and egoism. The Sufis are especially known for following up the tiny nuances of *al-hawa* when it dominates the character. Psychologists have much to say here, too. In Russel's usage, *al-hawa* becomes desires and hopes. He has this to say: "People have difficulty to lay their opinions to any degree on evidence and proofs rather than on their hopes and wishes. If their neighbors were charged with misconduct or straying from the virtuous way, they would believe this: it is almost impossible for them to wait until the charge is proved or disproved. If, on the other hand, one considers his/her own conduct, they will be sure that they are well-behaved. The objective basis in all these situations can be extremely meagre, but our desire drives us with an almost invincible force. The scientific method would throw our desires to one side. When people buy lottery tickets, they are being led by their wishes, and are not guided by scientific findings, and so they end up losing their money. The party who or which issue the lottery tickets, on the other hand, are guided by scientific facts (scientific to the point of making sure they make the others fall in the trap – otherwise they are not far-sighted enough, as they are oblivious of al-'aqibah), and end up garnering the fortunes of the gamblers." (Russel: *The Scientific Outlook*, p. 36 and before.)

We do have in our Sufi and literary heritage a lot of good writing on the working of *alhawa* on thought and behavior. In a previously quoted Tradition, the Prophet, peace be upon him says: "Your love of something can lead you to be [biased to the point of being] blind and deaf." (reported by Abu Dawud.) This Tradition is telling us that we often are too partial that we cannot see things for what they are or hear them correctly; we often distort the received message to suit our inclinations. We have some interesting illustration of this in Abu Hayyan al-Tawhidi's narrative manner; he writes:

"One day, my friend Maskaweih said to me: 'Do you agree that our friend – in reference to Ibn al-'Amid – was at fault in granting so-and-so a thousand dinars at one blow! It has been a lot of money squandered on a person who did not deserve it.' And he expatiated and spoke long, expressing his displeasure at Ibn al-'Amid's wastefulness. At last, I – al-Tawhidi continues – said: 'Well, look here, friend! I have one thing to ask of you – and, mind you, tell me the truth: there is no cause whatsoever for you to elude the truth, or disguise it. Suppose your friend had done the same mistake, but it was to you that he granted this amount, or perhaps several times this amount: would you, and tell me honestly, for there is no reason between you and me to misrepresent things, would you have thought him a spendthrift or a wasteful person? Or you would say: 'How well he spends his money, and I wish it was more that he granted me!' Think

well of this, and you will be sure that what induced you to say what you said is nothing but envy, and other similar emotions. Here you are, a writer and speaker on morality, and an erudite scholar of that, but you had better look well into your conscience, and be awake to your secret and corrupt inclinations!" (Zakariya Ibrahim, *Abu Hayyan al-Tawhidi*, A'lam al-'Arab Series, p. 21).

Al-Tawhidi, also in the same source (p. 216) quotes his master Abu Sulaiman as saying:

"Many of a person's traits keep concealed from their eyes, while they are evident to their companion, their neighbor, and their community; while the same person can detect similar, and even less visible, traits in their companion and interlocuter. This is the paradox: that the same person is learned and ignorant at the same time, wakeful and inattentive ... gentle and irritable together: for the same person connives at something when done by themselves, and are annoyed at another's doing the same."

This issue bears more examples. An interesting example may be drawn from al-Jaheth who, in his *al-Bayan wal-Tabyin*, tells a story to illustrate the part of gestures and body-language in expression.

"When Abu Shummar argued with somebody," al-Jaheth relates, "he would not blink or make any gesture with his hands or shoulders or head — you would say his words issued from a crack in the mountain. According to him, a person who used gestures, nods, and eye movement, did that out of need, to compensate for their poor argument and expression; and he used to say: 'Logic must stand by itself, not by support.' That was so until, one day, he had to argue with Ibrahim al-Nazzam in the council of Ayyub bin Ja'far. Al-Nazzam proved to be too much for Abu Shummar: he refuted all his arguments, and showed distinction in his evidence and expression — in such a way that Abu Shummar moved his hands, changed his posture, and moved on all fours until he took al-Nazzam by the hands. It was on that day that Abu Ayyub changed sides, shifting from Abu Shummar's convictions to al-Nazzam's."

"What had induced Abu Shummar, and tempted him to assume his way of disputation," adds al-Jaheth, "was that his companions used to listen to him, yield to his views, and show every sign of deference: they accepted without dispute all that he told them and affirmed to be true. As long as this status of being raised above others lasted, and he every time showed himself to be superior to his interlocutor, he took it for granted that by mere words he could vanquish any contestant or counterpart." (Egyptian edition, 1926, p. 78).

It would help in conceiving *al-hawa* better to notice that while instincts and desires are physical, *al-hawas* are cultural. It is true that culture does affect instincts and desires, but these are physical in origin; while *hawas* are cultural, and they are psychological characteristics. An individual puts their energy in the service of a certain social establishment, and it is hard for them to go beyond that circle: one may be confined to the circle of the family, or the clan, or the nation, or all humankind. There was a time when the number of human beings on earth was small, and they had very slow communication, and the family dominated at that time the individual's energy. With the passage of time, there were larger groups, and throngs began to swarm together – to get in touch with this larger assemblage, the individual needed knowledge.

When knowledge was insufficient what rallied groups together were things like chanting together, spiritual guidance, rituals, praise and admonition. This level of social allegiance, allegiance to the clan and settlement, lasted quite long: this size of social gathering seemed convenient enough from a political perspective: you can rally a relatively small group and exhort them to do some deed in a short time. It is good to review this, since we need how things came to be what they are at present: without this historical review we shall be quite at a loss how things stand at the moment, how the Lord adds to creation.

Over long epochs of time, following ways of molding the human happened spontaneously: those interested just chose existent ways that history said they worked well. That the most efficient ways are chosen upon scientific investigation is not yet really adopted in managing societies.

People have of course gone a long way in their attempt to refine their behavior and language. They have tried to quit the brutality and barbarism and bestiality which characterized humankind in their early stage. Yes, they have moved forward, but they hesitated and their movement was unsure, on account of the little scientific knowledge they had. What progress the human has accomplished has been the fruit of spontaneous trial-and-error and fumbling: little did they know of the laws of the world and the light of science.

No wonder then that people have little confidence or hope in humankind's achieving real elevation of their level. To infuse more hope, we need to acquaint those interested in bases and principles which lie beyond the human's manipulation of the forces of other humans to effect the transformation from a state of primitiveness to a state of fine humans – to rise to the level Allah has chosen for humans. Those who have justifiable hope are those who have reflected long enough on the significance of the debate between the Almighty and angels when they said:

"Will You place therein one who will make mischief therein and shed blood? – while we do celebrate Your praise and glorify Your name?' He said: 'I know what you do not know" (2:30). It is such persons who rise and aspire to the level the prophet Yusuf (Joseph) aspired to when he said: "Truly to no good come those who do wrong," (Yusuf:23).

What happens at present is that the supposedly civilized people cover their body, metaphorically, with a thin garment of civilization, which, at the slightest provocation, is thrown to one side, and the same 'civilized' persons are seen to be robbers and butchers. You may see people's true caliber at the time of earthquakes, tornadoes, or any crisis in which the authority loses its grip on things: you may see how many people turn into wolves. This shows that the fragile wall behind which we feel secure cannot be trusted to restrain the much more savage impulses of supposedly 'civilized' individuals and groups.

When the Qur'an issues charges that 'few of My servants feel grateful,' (34:13) or 'little is it they believe,' (2:88) and other similar texts, we find in the real world conditions that affirm fully that humans have not overcome the above failing. This is true enough, but it is not true to affirm that things will always be as they are at present: a really different world may be established by science once we have observed the signs of Allah in *al-afaq*, the world out there and *al-anfus*, the world inside us. It is after we have mastered dealing with Allah's *sunan*, as

related to the human, and how they can live in harmony with the Allah's *sunan*. It is the devout and righteous person who can prohibit his soul from yielding to *al-hawa*, from being a prey to it: it is this kind of person who, when they go one way, the devil will choose another. But, to be honest, people are still far from having the upper hand over their *hawa*; and this is true of both the 'civilized' and 'backward' for both are backward on the psychological level.

Some might find it inconceivable that mischief can be really defeated in this world, that the circle of science can be extended and people will be less controlled by the devil. It did happen before when medicine started to make amazing progress that some people would not believe that the scientific advance would rid people of their diseases, and will produce vaccines to prevent the infections.

It is, however, the diseases related to morality, the psychological and cultural failings which are of real interest in the Qur'an: they are 'the diseases in the heart' according to Qur'anic terms. It gives all the attention to treating and healing these diseases. Diseases of the heart here are of course in a religious and moral sense, the cultural and psychological sense, not in the physical sense. The Qur'an stresses the seriousness of the heart's sins: sins like lying and hypocrisy ... more than the sins perpetrated by the physical organs.

Hypocrisy and falsehood happen when people pretend to accept values, but their behavior is incompatible with those values. This again happens when *al-hawa* has its grip over these persons, in a way that their serious and enormous transgressions appear insignificant in their own eyes: their transgressions are usually noticed by others rather than by themselves. But the consequences are enormous enough: great civilization are shaken to the roots, and values may crumble in the earth when *al-hwa* prevails. That is why the Lord admonishes the prophet David: "O David! We did indeed make you a vicegerent on earth: so you judge between men in truth and justice: nor do you follow the *hawa*, 'i.e. the lusts of your heart', for they will mislead you from the path of Allah," (38:26).

Civilization falls into a crisis when values diminish in the eyes of its members who allow *al-hawas* to dominate their minds, and this happens especially to those who enjoy the boons of civilization without having paid the cost of establishing it. They act under the dictates of *al-hawa*, and the whispering of desires, as any review of history may reveal. Toynbee has this rule about the civilization in a phase of rise or a phase of decline: "Civilization will be rising when its elite is the creative elite; but when this group has lost its creative talent, it will resort instead to the rod of dominance by force, and the civilization will have then started the phase of decline and disintegration: this is not to be wondered at because the proletariat of the civilization will have stopped giving their loyalty to the elite." The latter phase is what the following verse of the Qur'an is representing: "For those who wander astray from the path of Allah, is a penalty grievous!" (sad:26).

Freud chose to describe civilization at a phase similar to what we have presented so far – the time that Oswald Spengler calls the time of decline in the life of a civilization; "Civilization tramples with its feet," say Freud, "the idea of basic justice in connection with the distribution of fortune. When civilization fails in satisfying a sector of its members except through oppression

another sector – and maybe the majority, as is the state in the current civilizations – we have no way of expecting the cultural values to find a place in the consciousness of the oppressed. They will be prepared to refuse to recognize it; maybe to the point of destroying it and denying its boons ... They adopt towards that civilization a hostile attitude; they have no hope of its survival: it even does not deserve that survival ..." (Edgar Beach, *Freud*. Published in Beirut, 1954. Chapter on justice and freedom. P. 223).

The historical facts we are reviewing here may drive the hasty to feel desperate. But not if we view these situations through the rule set down by the verse of the Qur'an: "Verily never will Allah change the condition of a people until that change what is in their souls," (13:11); for in the latter case the issue is right within the perspective of science ... It would not do to be either overoptimistic or over-pessimistic ... It is just that we need to collect the necessary information, and then to put in the needed effort to steer the rudder towards salvation.

If we take up the last-quoted verse, or the other, similar one, "Allah will never change the grace which He has bestowed on a people until they change what is in their own souls," (8:53), as just Divine words to only sanctify and glorify and feel blessed to receive; if we stop at the unseen implication of such revealed texts, then we learn nothing from them to light our way. We need to remember another verse, in hope we get to action:: "Travel through the earth and see how Allah originated creation," (29:20).

By directing one's attention to history, to know what happened and how it happened, this opens up to humans the way to study and reflection, to observing new horizons of law, and getting acquainted with the rules of manipulating things. It is then that a human is promoted to the level set up by the Qur'an – rising to be 'in the best of molds' (95:4); they will fulfill in their movement the fine image represented in the Qur'an as 'one who walks evenly on a straight way," (67:20). This level is not available to those who cast rapid looks at the events of history, for the latter will conclude that there is imbalance between the suffering and the gain: such hasty looks may end up in the individual's concluding that humanity has suffered much more than it has gained. These individuals do not realize that the way to ascendancy and integration must be full of toil and pain; that those progressing will have to pay the cost in tears and blood.

Let us recall how much the humankind had suffered from epidemics which plagued the earth. And then, when science threw its light at the vagueness that enwrapped the causes of epidemics, and when the human ignorance in that domain began to clear, the old darkness began to lift, and to be replaced with light. The human attitude to the same catastrophes changed. It is true that the human still struggles to overcome more of these disasters, and it is true that there is suffering until today, but humanity's attitude has changed: those who can see, and who know much about the crises are very different from those who ignore the sources and causes and treatment. There is no doubt that humankind has a different view of the physical diseases in the world. We need now to change our view of the cultural suffering, which is caused by *al-ahwas*' having a dominant position. It is by overcoming these latter diseases that a human will really regain their balance and vigor: it will be literally like one untied after having suffered in their ties for a long time. It is to be noted that healing from psychological trouble – once the healing element is found and treated – is more decisive than the case is in the healing of physical

diseases. Anyone of us can feel how, once they have overcome a psychological problem, they seem as if set free from a heavy iron chain... But again, our panacea is in scientific work: it is science that will change our ignorance into a happy discovery of the facts.

SCIENCE AND TAWHID (BELIEF IN THE ONE GOD)

As we all know, *tawhid* (faith in the One God) is at the very heart of religion and worship. It is the first and foremost fundamental of Islam, and it is summed up in "*la ilaha illa* Allah; i.e. there is no god but Allah", as is best expressed in the Sura 112: "*qul huwa Allah ahad*; i.e. Say: 'He is Allah, the One and Only,'", and in other similar verses like, "My prayer and my service of sacrifice, my life and my death, are all for Allah, the Cherisher of the worlds: no partner has He," (6:162163).

This much is known to all believers, but what is not quite clear and requires expounding is that *tawhid* appears in three aspects: *tawhid* of God Himself; *tawhid* of legislation; and *tawhid* of desire and fear.

- **1.** *Tawhid* of God Himself: I mean by this that the Creator is only One. We find in the Qur'an: "Is there a Creator, other than Allah?" (35:3). Many polytheists at the time of the Messenger, peace be upon him, had this level of *tawhid*, as the Qur'an itself affirms: "If indeed you ask them who has created the heavens and the earth and subjected the sun and the moon to His law, they will certainly reply: 'Allah'," (29:61). And, yet, this level of *tawhid* is inadequate. As long as the Creator is One, obedience is due to Him alone.
- **2.** *Tawhid* **of legislation:** This means that obedience is due to the commands of Allah alone. In the past, Muslim scholars used the term 'tawhid of *al-rububiyah*, i.e. of Sustenance' to include both *tawhid* of God Himself and *tawhid* of legislation. We find in the Qur'an: "it is verily His to create and to govern," (7:54). Since it is only Allah who created, and there is no associate to Him in creation, it follows that there is no associate to Him in command, or in legislation. To illustrate, we have this Tradition. Adyy bin Hatem [still a Christian at the time] heard the Prophet recite this verse: "They take their priests and their anchorites to be their lords in derogation of Allah," and he objected: "No, they did not worship them." But the Messenger, peace be upon him, replied: "But they did: those priests deemed *haram* what was *halal*, and they obeyed them; and they deemed as *halal* what was *haram*, and they obeyed them. And this is the kind of worship they offered them." (reported by Ahmad and al-Tirmidhi).
- **3. As for the third kind of** *tawhid*, it is the *tawhid* of desire and fear. This is the kind called 'tawhid *al-uluhiyah*' by earlier scholars. It is, on the other hand, a kind of *tawhid* which the polytheists contemporary to the Prophet denied, as the Qur'an reports: "Has he made the gods all into one God? Truly this is a wonderful thing," (38:5).

The first type of tawhid is not accepted by materialists and pantheists. The second is contradicted by those who submit to mortal legislators, whether their legislation were compatible or incompatible with Allah's commands; and they command others to surrender to those

dominant figures, as mentioned in the Qur'an about Egypt's Pharaoh: "If you put forward any god other than me, I will certainly put you in prison," (26:29)

As for the third type, it is contradicted and ignored by most people who fear certain creatures or attach hope of benefit to them.

This is then a glimpse of *tawhid*, but what concerns us in this book is: How does *tawhid* bear on science?

We shall have, in replying to this question, to start with Allah's commands and abiding by them: for it turns out that lacking knowledge and scientific awareness leads to not complying with *tawhid*. Knowledge and science form the foundation on which *tawhid* is based. Where scientific knowledge is absent, *tawhid* is absent. Since there is no salvation without *tawhid*, and *tawhid* will not be established without science, then there is no salvation without science.

This is all comprehensible when we consider Allah's commands pertaining to legislation (abiding by religion's *halal* and *haram*). But we need to extend the same logic to dealing with Allah's commands pertaining to Allah's signs in the world generally and the world of humans, too: that is, in endeavoring to bring the forces of the world to serve human needs: and this is relevant here because no manipulation of the forces of the world may take place without scientific knowledge. This may be readily understood in domains like agriculture, industry, breeding of animals; but it is equally applicable in the domain of dealing with the human. To sum up, there is no salvation or advance in relation to the Last Day, or in relation to this world, without knowledge.

So far so good, but can we move another step and consider the above in the context of the human dilemmas or the human values? And can we think of the above in relation to a specific time and place?

It will help to start from thinking why *tawhid* is given such a prominent place in religion. Can we really specify tangible aspects of the importance of *tawhid* in the actual experience of individual or community? Does it really bear on the hardships of life? We did say, and will elaborate further down, that there is no salvation or advance in relation to the Last Day, or in relation to this world, without scientific knowledge. It is just a tiny step in the present discussion to notice that in most of these expressions, one can replace the word *tawhid* with the expression 'scientific knowledge' with no change to significance.

In earlier sections I pointed out that to acquire scientific knowledge, we need to deal with the facts of the independent existence, the world out there, and that to put right or examine people's ideas the way is to refer to the independent existence from which those ideas were drawn. I also discussed that one obstacle to acquiring scientific knowledge is adopting the world of persons as the source of facts, or scientific knowledge – while the Qur'an condemns this way of drawing knowledge and calls it 'the ways we found our fathers following' (in 5:104, and elsewhere). The Qur'an insists, instead, on referring to the independent existence, and on judging things by their 'aqibahs.

It is indeed a most laborious task to treat with suspicion what has accrued to one from the world of the ancestors, and to decide to examine that against the actual facts of the world. The cost can be exorbitant and unbearable to most people. One reason is that such knowledge as descended to the individual has for its source those particular ancestors, and it is no wonder then that the individual feels quite dwindled before the heritage of those forefathers. It is hard work to seek to obtain scientific knowledge from its real source: the independent existence, or to seek to fulfill the requirements of *tawhid*. But it will help a lot to review how creation was and how it has become, it will transpire that Allah did not create things all at once: 'He adds to creation as He pleases,' as the Qur'an put it (35:1) – that creation was originated as a feeble thing, and then developed and grew to be a robust thing.

To follow up how creation was originated and how it proceeded along its way is as vital to know as knowing *tawhid* and science. It is indeed part and parcel of science. This is how vital it is to know how Allah destined creation to proceed – failing to be cognizant of this will result in our thinking of Allah in the same way as the ignorant thought of Him, a situation which the Qur'an alludes to in the words: "moved by suspicions of Allah – suspicions due to ignorance," (3:154).

It may further develop this issue to refer to a book by Kevin Riley (*The West and the World: History of Civilization Through Issues*, 1985. Vol. 1, p. 151.):

"We have not yet developed the viewing of emergence of individualism as a historical stage – we tend to regard the individuals' appearance to be synonymous with the humans' appearance on the earth. This is true in a sense of the word, for no human being who has lived on the earth, at any time, but is an individual. But it is interesting to notice that most people, and across most of the history of human beings, have not had the slightest sense of their individualism. The concept of individualism, as a distinguishable fact of life, over history, and as an ideal for which a human may live and struggle."

An additional light, no matter how faint, might be shed on this issue, when we observe people in our part of the world saying, nowadays, when they have to consider the social problems: 'What can a person like me do about it?' This is a starting point for any competent social reformer, for the latter needs to awaken individuals to their abilities and talents, which they allow to go untapped. A person who wishes to do their share in changing things needs to pore a hole in this illusory wall: I mean the wall of taking it as for granted that one can do nothing about changing things; to shake this assumption which paralyzes individuals' abilities to move things a little towards a better life. A reformer who can effect some change in this direction will have put us on the way of solving our problems – by changing our attitude to them. The problem is then not in our not having objectives, but in the absence of means towards realizing those objectives: in a word, it is the problem of lack in science and *tawhid*.

My idea in the last paragraph is to add a little light to the concept of individualism, as pointed out by Riley in the above quotation.

If we survey the social scene and try to analyze it, we may not find a hurdle to going ahead bigger than that of a deep-seated feeling of helplessness – even to start a first step in that

direction seems to be blocked on that account. No effort that people have made in their long history is more fruitful and sacred than stressing and stirring an individual's abilities and potentials towards change. Urgent indeed is our need for effective writers and speakers to resurrect life in this dormant seed, and to open a window in that wall: for here do the efforts of reformers rebound, and here are those efforts lost again and again.

This problem is not specific to the Muslim world. All over the world, there is this downtuning of the individual's ability to effect change – for some reason, many would not like to set out the individual's potentials, or to awaken individuals to the ways and times for effecting change.

But it is really a magnificent moment: that of the human's consciousness of his/her individuality; that is, to discover the excellent force lying inside them. It is the moment of realizing that the world is waiting for the individual to trigger their ability to manipulate the forces of the world. It is also the moment of the individual's being in communion with the Primary Truth (the Great Lord) which will save them from the clutches of those who are intent on stifling that true potential inside them. It is scientific knowledge which supplies the individual with that consciousness of their individuality and transcendence; it is the scientific knowledge which sets the individual free from ignorance and polytheism to move towards the domain of *tawhid*, in a way that they would bear their responsibility, and be a positive force in life.

In the same source by Riley quoted a few paragraphs above we read that "individualism, and a person's feeling of personal responsibility was not there in primitive tribes, the hunters. Therefore, whenever we speak about individualism and the individual trend in the modern society, it is important to perceive that we are dealing with concepts that have a limited history and a specific meaning. It helps to notice in this regard that in our best consciousness of our individualism, we have no terminology to express ourselves except that drawn from our cultural history." (Vol. 1, Chapter on individualism and culture, p. 152).

One can find in language some indication of when the concept of individualism has settled in the minds. The study of languages indicates that it is not long ago that words were used to express the independence of the individual person. At the same time, we find in the study of civilizations and the establishment of cities that these processes contributed to molding the character of the individual person.

"Though the Greeks were quite advanced in comparison with the hunting tribes," adds Riley, "we may study what happened to Socrates. When Socrates directed sharp criticism to the way people dealt with knowledge, and when he posed penetrating questions that challenged the conventional ideas, wondering how such ideas came into existence ... we find that though it was in Athens itself that Socrates was raised, the Athenian society was incapable of showing tolerance towards that individualistic trend. That he was given a death sentence demonstrates the strict limits to which the individualistic trend was allowed to expand at that time." (pp. 159-160)

"The Spartan children received, from the age of seven, training that was designed to prepare them for the strict military discipline and absolute obedience to the state," (p. 161).

Toynbee mentions how the pagan Romans and Greeks received the Christian idea, seeing in it a 'social cancer', responsible for the dissolution of the state. In support of this, he quotes a certain Roman poet as saying: "Here is a nobly-born young man from our nation, a young man from really noble descent, who was drawn by this madness and the idea of repudiating the world..." and Toynbee continues, "and then Gibbon came and described the triumphs of barbarism and of religion ... and then, in the twentieth century there came a writer well-learned in anthropology, not less scholarly than Gibbon, who is Frazer. This Frazer wrote in his *The Golden Bough*:

"The Greco-Roman society was established on the idea of the individual's being submissive to the community and the state's dominance over the citizen. This principle takes the soundness of society as the basis of behavior and the individuals' ideal. It put this as superior to the individual's safety in this life or life on the Last Day. But with the arrival of the eastern religions and the spread of their teachings all that changed from the roots: they established the individual's salvation as the sole objective, to which all life must be dedicated. In contrast, the prosperity of the state, and even its very existence, receded until it fell to the lowest degree of significance and appreciation ... This idea continued to dominate people's minds for a thousand years, and then the Roman law and Aristotle's philosophy and the ancient arts were revived towards the end of the Middle Ages.

"Thus ended the long halt which civilization sustained, and the tide of eastern influence started to ebb, and keeps ebbing to this day ...

"But what would the spectator think," continues Toynbee, "of some of the manifestations of Europe's return to the ancient ideals ... it is a return of polytheism appearing with the arrival of a new generation." (Toynbee, *Study of History*; Vol. 3, p. 145. Toynbee also mentions more examples of this new polytheism, like Nazism, Fascism, and racism.).

I chose to include this long quotation to help the reader have a better conception of the chain of the human dilemma: how giving the individual back their right place, as individuals, or in other words putting them back on the way of *tawhid*, is considered by Frazer as an obstacle to civilization; while Toynbee criticizes Frazer for what the former calls a regression to polytheism. They certainly have very different perspectives, but where is the truth? And what does history tell us about the beginning and the future developments?

It is clear enough that the Greco-Roman civilization enslaved the individual, considering them subservient to the state. And the truth of the matter is that it is not the individual's prosperity and safety alone or the community's prosperity and safety alone that count: it is the prosperity and safety of both the individual and the community. There is no prosperity for the community without the individuals' initiative: a society that insists on effacing the individual in favor of the community will not be better than a society of ants. On the other hand, an individual is literally nothing without the society. It is only by study, scientific knowledge, and reflection that we can put things in their right places. But this has not often been appreciated by societies: an individual like Socrates, who understood how creation progressed, were persecuted. And this is what we notice in the experience of prophets and their peoples. The Qur'an related how people

repelled the prophets' call to the individual's adopting an independent position by replies like: "Never did we hear the like among our fathers of old," (28:36); or; or "we shall drive you out of our land, or you shall return to our religion," (14:13); or "Never did We send a warner to a population, but the wealthy ones among them said: 'We do not believe in the message with which you have been sent," (34:34).

Scientific achievement always comes as a result of individual initiative that has developed in a social environment. This is the whole truth: but society wants to suppress these initiatives even when directed to improving control of natural environment. The basic principle here in the domain of truth is that the individuals who discover a truth will have to bear their responsibility and see the discovered fact see light, forbearing all the pressure that society is going to exercise: it is a trust that they will have to bear. The prophets were aware of this, and the individuals who commanded justice among people, too, that they will have to have patience – following in the steps of 'messengers of inflexible purpose' (ref. to the Qur'an, 46:35). The Prophet Muhammad, peace be upon him, once said, in a certain difficult situation: "May Allah grant mercy to my brother Moses: it was more than this injury that he sustained, but he showed patience."

To see how much humans have endured to acquire and impart scientific knowledge, the way is to study history and review its lessons and enlightenments.

There is no alternative to revealing the *sunnah*, or law, for the human to learn patience: the rule here is that of 'equivalent voltage': the universe is there, waiting for the human to manipulate it, on condition that the human learn the law of manipulation. 'Equivalent voltage' because things are neither too easy nor too difficult: by being ready to endure the hardship, the 'aqibah will be on the side of truth. We find this in the Qur'an: "the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth," (13:17). It is incumbent on the advocators of *tawhid* and scientific knowledge to reveal what they have learned and make it publicly known.

The essence of *tawhid* is repudiating the sanctification of ancestors and ancestor-worship. And this, repudiating the blind following of ancestors, is the basis for all human achievements. Even when we notice some rise in opposition of religion, we find their opposition not directed at religion itself: it has been clearly directed at the idea of ancestor-worship and sanctification.

The earlier generations have always insisted on molding the children in their own likeness, to the point of leaving them no margin for change. And the younger ones usually accepted this restriction, for the human is a very pliable being, and they would willingly accept to be molded in the shape chosen for them. But, fortunately, the human has also an innate crave to seek the truth and adopt it. This ambivalent nature of the human can be put to best use: we need them to be completely loyal to the community, but not to hesitate to utter what they know to be the truth. Take Bilal, the Prophet's Companion. He definitely had this two-sided responsibility. He did not think of himself as an insignificant number. On the contrary, he felt he could, and had to, do his duty, as he proved it in his call, under all the torture: "One [Lord]! One [Lord]!" It did not occur to him to say: "Things are beyond my ability to effect any change!" or

"Who am I to think I can change the outcome of this conflict!" He was, formally and legally, a slave, and he was an alien to the community, being of Abyssinian extraction – but the amount of freedom and responsibility he exercised has not been matched by those who came after slavery was, legally, abolished: for the latter are more of slave-like persons when they cannot enjoy the great feeling of exercising their right of professing and proclaiming what they know to be the truth.

It must be by now clear that the conflict is between civilization and backwardness, but it is at the same time between *tawhid* and polytheism: civilization and *tawhid* tell a human: "You must exercise this right to uphold to the truth; for you are responsible before truth, before Allah, who created everything in truth; and you are responsible before yourself ... you advocate truth and adopt it. You will be known for allegiance to the truth, and let them who choose oppose truth and be backward and idolater. You will not compel them for, as the Qur'an teaches us, 'Let there be no compulsion in religion' (2:256). It is as Umar said: "How can you enslave people when they were born of their mothers as free persons!"

Galileo had to face the pressure of upholding truth and had to face the pressure of a jury which would not hear of his announcing his scientific findings. He did announce that he denounced his heretic conviction, but knew that what he advocated was the truth and scientific facts. His position was as the Qur'an describes believers under torment, 'Anyone who, after accepting faith, utters disbelief – except under compulsion, his heart remaining firm in faith," (16:106).

To determine what is froth that is destined to vanish, and what is for the good of mankind, and, therefore, will remain in the earth (13:17), let us not be misled by appearances. If we think back to Ibrahim (Abraham), we find in him the model of this ideal: upholding truth, having mercy for people, but not holding back for their pleasure the proclaiming of truth as he knew it to be. He announced, in defiance of the unbelievers, as the Qur'an tells us: "How should I fear the beings you associate with Allah, when you do not fear to give partners to Allah without any warrant having been given to you? Which of us two parties has more right to security? Tell me if you know," (6:81); and hence we are instructed: "There is for you an excellent example to follow in Abraham and those with him ..." (60:4).

It was the perfect attitude towards the ancestors in Ibrahim's case: that one may not contradict the truth and what the conscience dictates for the sake of ancestors: So it boils down to this: the conflict is between truth and one's conscience versus ancestors and the community. This is not to say that truth and the conscience are hostile to ancestors and the community – they are hostile to falsehood and error. This balanced view is vital to maintain justice.

When a civilization is at a low ebb, the older generation wish the human to be a thing, an object like any other object that is used and exploited. Scientific knowledge and *tawhid*, on the other hand, tell the human: "You are a human, not a thing, and not like any other creature." Frazer adopts a view which enhances the negative attitude to the human: he complains that the religions which came from the east did away with the Greco-Roman religions, for the latter molded the person as subservient to the community and the state, caring nothing for the

individual's welfare in this world or the Hereafter. This idea dominated people's minds for a thousand years, but there was after that a revival of the ancient Roman law and Aristotle's philosophy near the end of the Middle Ages, to replace the Christian thought. When Frazer says: 'Then there was a resurrection of the Roman law,' he is upholding the idea of treating the human as any object possessed by society. We come across things of this sort in Toynbee, when he compares the armies of empires to the dogs of shepherds, and, elsewhere, a human is compared to a horse or a boat.

But even in our day we find the Greco-Roman idea to have been resurrected, and has its grip over the world. You see how all the armies of the world instruct their soldiers to carry out the commands of their commanders without hesitation or protest; that, even when they wish to object, they could do that only after having complied with the command.

This discipline treats the soldier as a gun or a loudspeaker. A gun would not hold back from firing once you pulled the trigger. It would not say: "No, I will not kill that man because he is innocent!" Nor would the loudspeaker hold back from announcing a piece of news and say: "No, I will not announce this news, for it is false!" The same may be said of a whip, for it will come down with lashes on the body of the guilty or the innocent. Now, the civilizations and armies want their soldiers to be like these objects. *Tawhid*, religions, and science, on the contrary, tell he human: "You may not be like a gun, a stick, or a loudspeaker, in the hands of others. You are above the other creatures – you can distinguish the truth from falsehood, and right from wrong. So, you may not obey when what somebody commands is sinful. It is as we have been admonished in a Tradition of the Prophet's: "No mortal may be obeyed in contradiction with the Creator's commands." And "Obedience is right only within the limits of the permitted." *Tawhid*, religions, and science also admonish a human: "What you do is your responsibility. You are not exonerated because it was some authority which issued the command. No, everybody is subject to responsibility."

All attitudes towards responsibility will come to surface on the Day of Judgment. The followers will say, as the Qur'an tells us: "Our Lord! We obeyed our chiefs and our great ones, and they misled us as to the right path. Our Lord! Give them double penalty and curse them with a very great curse," (33:67-68); and will say: "Our Lord! It is these that misled us: so give them a double penalty in the Fire.' He will say: 'Doubled for all," (7:38). This states the basic and pivotal point in which the religion of *Tawhid* is different from civilizations. This is why Toynbee considers civilizations to be a regression from the Higher Religions: the Higher Religions call to what is superior and exalted. They are not, as Frazer and his likes call them – a cancer to civilizations or a regression from them: on the contrary, it is civilizations which are a cancer to religions and a regression from them: it is civilizations which breed doctrines like Nazism, Fascism, and racism: these are cancers indeed. (See Toynbee's Study of History, Part 7. Vol. 3, in the 1960 edition.)

Religions degenerate when they follow the lead of civilizations, when religion is contaminated with idolatry, and people are instructed to believe in the infallibility of ancestors and the clergy. People accept that because it is easy to go downhill: it is the opposite of mounting uphill towards the peak of a wakeful conscience and exercising freedom which is synonymous

with responsibility. In an earlier quotation from Riley we have seen the pivotal place of individualism in the advance of history. It will be also good to quote from Wells' *Outline of History*, to shed more light on this issue: it is to see in real terms the tangible aspect of *tawhid*. It may also help in establishing the link between the historical research – the tangible facts, on the one hand, and, on the other, the Qur'an's commands that one moves in the earth and examine how creation originated. Says Wells:

"At the beginning, people accepted to submit to the principle of raising and idolizing the tribal community, driven by fearing God and the king. We have no evidence before the last three or four millennia at the most that the human voluntarily accepted self-negation in favor of a greater cause, without compensation or reward: this idea was accepted to people, or maybe it was something suggested by a certain individual.

"But in later developments, something new began to float on the surface of human affairs, in the way spots of sunray spread and then crawl on hill-sides on a glorious spring day. This new idea was this: that in dedicating oneself to a higher cause one realizes greater ecstasy than any self-centered satisfaction or personal achievement; since the life of humanity is different and more worthy than the sum of all the individual lives of individuals who compose humanity. This idea developed into a glowing and bright guiding light – and this is how it may be observed in the teachings of Buddha and LaoTse, but stands out more glaringly in the teachings of the Nazarene Jesus.

"Christianity was never completely forgotten as a result of all the alterations and distortions that came over it: the allusion is 'people's transfer of allegiance from the Kingdom of the Lord Who grants luxury to kings and rulers, Who permits the wealthy such pomp and indulgence of desires that is very akin to the life of robbers'.

"No one who lives in a society that has received the revelation of Christianity or Islam can be a total slave of any human, for there is a quality in these two faiths that would not prevent the followers from judging their betters and acting up to their own responsibility towards the world." (*Outline of History*, p. 1037).

Let us add something relevant from Toynbee's *Study of History* (Ch. 25):

"New Eruptions of Spiritual Life. From the year B.C. 600 - 480, a period of no more than 120 years, a period of only four generations, there appeared five sages of the ancient world (which extends between B.C. 1060 and C.E. 632 the year of the death of the Prophet of Islam, peace be upon him). They are:

- **1. Zoroaster:** His activities appeared in the early years of the sixth century B.C. and his area was the basins of Amu Darya (Oxus) and Syr Darya.
- **2. Isiah II:** was a contemporary of Coresh who gave the Jews the permission to come back from Babel, in B.C. 539.
 - **3. Buddha:** He may have lived around B.C. 567-487. Was active in Bihar, India.
 - **4.** Confucius: If the reports are true, he lived between B.C. 551-479. A native of China.

5. Pythagoras: Almost contemporary of Buddha. Was born in the island of Samos.

These five have until today a more direct influence on humankind than any other human being.

What distinguishes the five sages is that they connected the human being to the Ultimate Truth (i.e. God) on a personal basis. They, each one of them, succeeded in going beyond their immediate culture, which imposed the spiritual submission to the community in which they grew up – but these sages threw up the traditions, and in this they were repudiating both types of worship: worshipping nature, and worshipping humans. At the same time these sages were keen to have others follow the new way they discovered. Buddha and Pythagoras both believed that death was not the end of life. What these five sages taught brought about a transformation in viewing the truth and human behavior in an irreversible way. As for Isiah, he was a monotheistic Jew, the really first monotheist since Ikhnaton's abortive attempt."

This historical perspective of the evolution of faith and behavior alert us to two important advances. One is that of seeking guidance beyond the boundary of their community, which means overthrowing enslavement to the community and to the traditions of ancestors. The other is that death is not the end of life.

Turning now to the Qur'an, we find that it does survey this historical development, leaving aside the exact timing. We find in the Qur'an: "Allah chose Adam and Noah, the family of Abraham, and the family of 'Imran, above all people," (3:33). By referring to both the verses of the Qur'an and the illumination of the facts drawn from history (the signs of *al-afaq* and *al-anfus*), *tawhid* will acquire a new dimension in the future.

It is vital that we get acquainted with humankind's long agony through history: for so many centuries the human was denied any dignity, and their rights were quite crushed. This was clearly so in the political rituals, as in slaying all a king's servants at his death, in the Indian woman's having to offer her life after her husband's death, and in so many other instances. Indeed, even today, a human is mostly treated like a stick, when they have to do what they are commanded to do without the right of objection.

It is by tracing the process of creation: how it started, and how it developed and keeps developing, that one acquires wider horizons and new perspectives on the origins and the destination of human life. It is in this way that one understands *tawhid* as a human need that will not be accomplished before raising the level of all human beings to the level of bearing the responsibility and the trust. No human but has their share of any injustice that takes place in the world. When any human is aggressed against, anywhere in the world, it is like aggressing against every human on the earth. The Creator is One, and humanity must be regarded as the same.

Let us mention here a different kind of historical event, which will shed more light on the *tawhid* objectives of raising the level of the human being, by alerting them to their responsibility, each and every individual, and as a member who feels their equality to every other member of humanity in sharing the responsibility for all humankind. Abu Bakr, the first caliph in Islam stood to declare his method of rule, and to remind people of their responsibility towards the

society. In Abu Bakr's first speech, as soon as he was given fealty as caliph, he pointed out the basic points about *tawhid* – how it directly determined the limits and conditions of obedience to those in authority. He was actually applying the cardinal principle of Islam, as expressed by the Prophet, peace be upon him, that: "no obedience is due in disobedience of the Creator." As for Abu Bakr's expression of his and people's position, he said:

"Obey me as long as I obey Allah and His Prophet. If I disobey them, then I have no right of being obeyed."

That this principle was announced in the very first speech by the first caliph to the society shows the importance of this principle, for both the speaker and the addressed society. And what we find in this speech is reminding people of not yielding to be a stick or a whip or a horn in the hands of those who have authority. The importance of this principle laid down by Abu Bakr, and humankind's need of it would appear later – in fact, the world is now in urgent need of reviewing and applying this lesson.

Once the world has overcome the idolatry of idolizing ancestors, great figures, and high-ranking persons, it will recall the days in human history when the principle of human dignity was announced, not just as a right, but as a duty, a duty that a human may not concede – this will be a fact of life when they stand, submitting to no one but their Creator.

But a light like that shone by Abu Bakr was soon extinguished, and people forgot it, especially with all the upheaval that took place within one generation. It is painful to witness that those who were addressed with these principles, the Muslims, are now further from adopting them than any people on earth: one indeed can detect hardly the least shadow of these principles in our life. But it was really very early on after the ideal principle was proclaimed by Abu Bakr, when a very different discourse was announced, focusing on the way of transferring rule from individual to individual. The speaker for the ruler spoke up like this to people: "The caliph is this," indicating the present caliph; "once he dies, the caliph will be this," indicating the crown-prince; "and as for him who refuses, then the alternative is this," pointing to his sword. There were protests, like: "Woe to you! Are you reestablishing a dynasty in the steps of Croesus: having one ruler inherit his predecessor!" but the protests were not loud enough or wide enough to change the course of things.

Let us not give too much attention to the authenticity of this detail of history – for indeed, the events of those days and later periods, and people's general behavior, endorsed this kind of attitude. They certainly disregarded Abu Bakr's declaration, and, more important, disregarded the pledge the Messenger, peace be upon him, used to have several new believers take, "to declare the truth, not dreading when some take it amiss," and, as in the other Tradition of the Prophet mentioned above, "not to obey anyone when they command that which is sinful." All this comes under the general principle of *tawhid* issued in the Qur'an: "Come to common terms as between us and you: that we worship none but Allah; that we associate no partners with Him; that we do not erect, from among ourselves, lords and partners other than Allah." If they turn back, you say: 'Bear witness that we at least are Muslims, bowing to Allah's Will," (3:64)

We state these principles in theoretical statements, but those who will implement them will do so after having seen and studied the actual events of life: this is what we learn from the Qur'anic law: "For the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth," (13:17). Those who will see to it that the above principles are really operative in life are those who trace Allah's signs in *al-afaq*, the world around them and in *al-anfus*, the world of the human being. They will come to experience in real terms the laws, Allah's *sunan* – how they work in history, how history really originated, and how the humans are active agents in shaping history. They are active agents only because the Almighty has willed that they be enabled to manipulate the forces of the world. It is Allah's will that the human be raised above being a mere thing to 'another creation' (the Qur'an, 23:14), a level called by Iqbal 'being Allah's viceroy'. This is a level in which the human comes to perceive their potentials, the potential of individuals to save themselves and to save others, to actually shed light on the way of humankind. Is not that what the prophets taught people, as the Qur'an reports: "O you who believe! Save yourselves and your families from a Fire whose fuel is men and stones," (66:6).

It must be added here that, when we are instructed, in Islamic texts, about the behavior which will save us in the Hereafter, the same behavior will save individuals and communities from the hell of backwardness and subjugation, a hell which is now stoked up by the mighty and haughty people, and the rest of us just acquiesce in living in all misery just as the tyrants dictate.

But it happens that for us to rid ourselves of being oppressed is at the same time to rid the oppressors of their tyranny: they are the two sides of the same coin. The oppressors are both treating the other and themselves as devoid of dignity. When the down-trodden accepts to live without dignity, it will be a call to the other to feel tempted to treat the former as really not entitled to have dignity. At the same time, the haughty oppressor who robs the other of dignity is, even before denying the other their humanity, denying themselves dignity. The idea here is that if you have really experienced the dignity of the human being, you will feel it to be a unitary thing, indivisible; that to deny it to anybody is to deny it to everybody. The more one trespasses on the other's dignity, the more of their own dignity is forfeited. In other words, the more you subdue a human the more you are subdued.

Do you see the relation of this to *tawhid*? When we are careful to safeguard our *tawhid* for the sake of Allah, it will come back to us in the form of the universal dignity that is every human's and all humanity's right. *Tawhid* has here its social function: it is to put right the human behavior, to make of the human a real human. When a human being is maltreated, it is the same as if every human in the world is maltreated: when you concede in seeing oppression afflict somebody, concede in any unjustified aggression, then you can no longer be safe from the same befalling you. By the same token, those who endeavor to see the human dignity established and enhanced, they are doing a service to every single human being in the world. This is how to understand the following verse of the Qur'an: "if any one slew a person – unless it be for murder or for spreading mischief in the land – it would be as if he slew the whole people: and if any one saved a life, it would be as if he saved the life of the whole people," (5:32).

Perhaps we deride the method of the Sufis of the recent past, when the follower was warned that to say: "why?" to any of their sheikh's orders would condemn the follower to

permanent failure in the spiritual career. But the bitter fact is that the modern world still applies the same method until today. Do not all the states of the world and their establishments instruct people to obey the orders and act upon them without having the right to object, at least before they have complied with them? Religion, however, does not share this blind obedience, for it commands, as a Tradition of the Prophet tells us: "No obedience is due in disobedience of the Creator's command." The modern world does not find this principle convenient – it would mean that the citizen would rise and argue and weigh matters whenever a command is issued. The modern establishments feel that to grant people this right would lead to the disruption of the human organization, that it would create chaos. But this is not true: the principle mentioned here must be at the basis of human civilization.

This problem of no blind obedience is not ready to be comprehended and applied by most people. For to expect the soldier to act on this principle subsumes that we inculcate in the mind of each citizen the basics of the constitution. It is only then that they can distinguish who is acting on it and who is violating it.

It will transpire from our discussion so far that a world in which the paradigm drawn from religion is applied is entirely different from the world in which we live. A Muslim thinker, Abul A'la Maududi, perceived this and commented: "The generals of today's armies are not fit to be even soldiers in a Muslim army": it is so because a soldier who obeys what he is commanded without objection is dangerous, whether high-ranked or low-ranked.

There are indications that ideas like these begin to find their way to the minds of modern thinkers, but they have not won their place in the branches of cultural organizations. The world is not primed yet to envision how it will be once these ideas have taken root. But it is the duty of those who have accepted to observe and declare what they observe about the world, and those who undertake to command what is fair and just – such person must carry this further and act upon the responsibility given to them.

So, to sum up about this chapter,

Scientific knowledge and *tawhid* have quite a number of common elements: they are really the two sides of the same issue. **One element** is that *tawhid* will not be established without scientific knowledge. It is so since *tawhid* comes on a basis of scientific knowledge, in the same way as manipulating the forces of the world comes on a basis of scientific knowledge. **Another element** is that an error in either science or *tawhid* may not be forgiven. It is commonly known by Muslims that the unforgivable sin is idolatry, and we see this in the Qur'an: "Allah does not forgive that partners should be set up with Him; but He forgives anything else, to whom He pleases," (4:48). An error in scientific knowledge is also inevitably and immediately punishable. See what happens when someone makes a mistake in taking medicine, or in dealing with the electric power; and we should think the same of giving wrong information about social life ... in all these cases, the penalty is certain, and there is no tolerance there: we may notice this when somebody takes a poisonous stuff, or touches an electric wire: the result can be a fatal shock ... but erroneous concepts in social life can make people's life so bad.

A third element is that both science and *tawhid* have the same attitude to the world of persons, to ancestors for example: they both insist on giving persons their fair and correct value: testing whatever comes from them, and not accepting what comes from the world of persons except in so far as it proves to be true and right, and the proof comes from the 'aqibahs of things. It is true that we derive from other humans enlightenment concerning science and *tawhid*, but both science and *tawhid* must be examined again and again, for refinement and correction.

CHAPTER THREE

QUR'ANIC EMBRYOS

In a letter to Nicholson, Iqbal regrets and deplores the neglect of 'Qur'anic embryos', embryonic elements that should have been developed for the construction of a sound society. He elaborates like this: "I am fully convinced that the conquest of many lands had not been part of the Islamic plan. On the contrary, I consider that Islam, as a geographically expanding force, halted the growth of the 'embryos' of social, democratic and economic organization, which I find to be distributed over the pages of the Qur'an and the Prophet's *Sunnah*." (Malek Bennabi, *The Afro-Asian Idea*, 2nd ed., Beirut. P. 304)

Now, as an epilogue to this book, I propose to handle a number of verses from the Qur'an that I consider to have potential principles that have not been developed by Muslim scholars.

The approach that the reader will notice here is quite unlike the attempts of some people in the last few decades to find in the Qur'an bits that have been corroborated by modern scientific findings and observations. What concerns me in this chapter, is illuminating basic principles and methods and focusing on the production of scientific knowledge, not examining single scientific facts. With this in mind, I have chosen four verses of the Qur'an:

- 1. "Travel through the earth and see how Allah originated creation," (29:20)
- 2. "Soon will We show them Our sign in *al-afaq*, i.e. the regions of the world, and in their *anfus*, i.e. in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that your Lord witnesses all things," (41:53)
- 3. "And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13)
- 4. "Those who believe (in Islam), and those who follow the Jewish Scriptures, the Christians, and the Sabians, and who believe in Allah and the Last Day, and work righteousness, shall have their reward with their Lord: on them shall be no fear, nor shall they grieve," (2:62)

"Travel through the earth and see how Allah originated creation," (29:20)

The words of this verse are quite straightforward – there is no figurative expression to distract the reader. Any average user of Arabic can see what the words mean, even children. But with all this, Muslim scholars could not perceive what we can perceive in the verse, nor can we say that we can exhaust the possibilities of the verse. We can and do find meanings in the verse that earlier scholars did not notice, and those who come later will see in it what we are unable to see. What the verse teaches is a definite method of research of the facts of the world, both concrete and abstract. And it puts no limits to what we can discover: all the things of the universe are included, from the atom and all its particles to the galaxies. In a word – nothing in the world is excluded in this verse: from the tiniest organisms to the human, who is created as the top of creation, organically, intellectually, and socially ... The verse is also indicating where the evolution of ideas is to be sought, from the most elementary to the most complex.

The verse includes everything and anything the can be investigated by the human – it can be the thesis of any branch of science. To comply with this verse, any topic one takes up for study must have in its introduction a history of how it originated – even when discussing faith in Allah: how the human began to perceive the concept of deity ... Indeed, every topic has a conception: the point at which it entered into mankind's grasp and perception.

From the verse, we also learn that all that falls within our attention, we must investigate how it first came into being.

The traditional view of the world used to be that the universe was created as we now find it. Of course, people did have some kind of conception of how things were at the beginning, but such conception was not based on real information. They were deluded because the whole span of civilizations is only five thousand years, and mankind's life during this short period did not undergo any big change in its style of life. From this, people supposed that they had been created the same as they now saw themselves live: that what was taking place at the time they noticed things was not the result of developments that took thousands, hundreds of thousands, if not millions of years. Let us use our imaginations a little – an image that I borrow from Malek Bennabi's *Afro-Asian Idea*, not too close to our topic, but it helps. He imagined a visitor from space, who thinks like us in a way, and differently from us in another way. Now, should that visitor move around in the earth, without having previously known anything about mankind's life, and should the visitor see children, adults, including the elderly, without having known anything about their history, it would seem to that visitor that the young had always been young, the adults had never been young and that they were always as they now appear.

This image may help one to notice that any momentary observation, with no regard to the beginnings of things, will result in a mismatch with the real situation. Even at the most personal level, when you have to deal with a person that you know nothing about their past, you feel hesitant about how exactly to deal with them. And then, the more you know of their history, the

better you can adapt your style to what you know of them - Do we not have a different style of treating each person, depending on what we know about them?

Also, when you visit any location in a certain season of the year, say the summer, you feel it is difficult to imagine how it will be in another season, say the winter, unless you know enough about the different regions in different seasons. Some creatures, indeed, know nothing but one season, for they are created and they die in the same season.

Now, back to the verse of this section, and after the above reflections, we should be in a better position to see in this verse: "Travel through the earth and see how Allah originated creation,", that creation is not a one-time process, that happened and is over. It is indeed we, each one of us, who are now created, while the world has passed through states, the same as we passed through from childhood onwards, 'in stages, one after another,' as the Qur'an puts it (39:6). The universe is now at some point in its progress of creation, it has passed through certain stages and will go through more stages.

It pays to reflect more on this development: the creation of the human being began from one cell that developed into the amazing being that goes around and does astonishing actions in all parts of the earth. And though our cells keep changing, we do know that as a human being anyone of us has their distinctive character, with a permanent core. From this, it will not be too far to imagine humankind as one being, with the individuals entering and exiting, like cells that are born and then replaced with others. It is helpful to think of humanity as one being, for in this way we can imagine that one human as being at a certain stage of their growth, that they have proceeded through some stages of their childhood, and who – humanity as one collective being – has not yet gone beyond childhood or perhaps adolescence. This being is certainly not yet an adult, not behaving in the way an adult would be expected to behave, for, as the Qur'an expresses it, the human being 'by no means he has fulfilled what Allah has commanded him,' (80:23). It is in this way that Iqbal understands the verse: "And your creation or your resurrection is in no wise but as an individual soul," (31:28).

If we ponder upon the creation of the human being, how he began as a single cell, which developed into a conscious, intelligent being that walks the earth, we find that even though his cells are continuously replaced, he remains a single, distinctive being.

We can go a step further in reflecting on the verse of this section: from knowing how creation originated, and in light of the above reflections, one is in a position to say that creation as we see it may develop, rise and improve. When one knows how weak and helpless a creature the human being was when he was created, and how he then proceeded slowly in his growth, a growth that took many eons of years to take place – from these reflections on the early stages of creation, one will naturally speculate about the future of creation – not the end of people on the Day of Resurrection, but the advanced stages of life on this globe; for when we know something of the beginning, we can speculate about the advanced stages. I do realize that this concept is not in harmony with the prevalent traditional culture, but one feels driven to raise it in view of understanding Allah's signs in *al-afaq*, the world in general, and in *al-anfus*, the human world in particular, and after reviewing some scenes of the development of creation ... it does seem worth

our while to put this forward for discussion and reflection. It is exhilarating to realize that human beings will not always remain in their immature stages, that creation keeps developing, growing and advancing. We can go over the relevant verses of the Qur'an, and we can gaze with our feeble vision (feeble as compared with those who will come at a later stage) at history: we find that when Adam, and his progeny, were appointed as viceroys on earth, and when Allah announced this fact to the angels, they protested, saying: "Will You place therein one who will make mischief therein and shed blood? — while we do celebrate Your praises and glorify Your holy name?' He said: 'I know what you do not know,'" (2:30). Here the Lord does not deny the justness of their objection, but notifies them that there is something else about this new creature which the angels did not know.

It is true that what the angels expected of humans, that they would do mischief and shed blood, is still the predominant fact about humans, up to the present day, but Allah knew that they were capable of improvement and rising above that. And it is already occurring to many minds, those who have looked into the beginning of the creation of the human, that human beings are capable of changing their course. We may assert then, in view of the signs of the actual experience of humankind, that when the Lord had Adam and his progeny be viceroys of the earth, He knew that they would learn to rise and proceed to a better life; that this wonderful change would take place in this world. This is what only Allah could know, for the angels could not imagine it, and the humans had no way of perceiving it until they looked and investigated how life would proceed. It is again the signs of the events of the world, and the world of human behavior, that can open people's eyes.

The Quran sheds more light on the issue by saying 'I know what you do not know,'. The Lord reminds humans of when He sent them the animals of transport – animals like horses, mules, and donkeys: for riding and for show. The Lord adds: 'and He creates other things of which you have no knowledge,' (16:8), referring to what has already been mentioned, and also to other things entirely. And we have seen in the last few centuries means of transport that our predecessors had not seen, that the Lord created and put in the service of mankind. So, thinking of this expression in the Qur'an, and reviewing its match with things that happened before our eyes, we can learn more about the other, almost identical expression: 'I know what you do not know'. In both locations, the idea is that creation progresses, and grows towards what is better and more advanced. Anyone of course can appreciate the progress and development in the domain of transport, that human beings have been empowered to manipulate and use to their benefit the forces of the world. The fact that things have gone so far can very clearly indicate that more will be created, things that we are not in a place of predict. We need then to move from here to the other issue: the issue of doing mischief and the shedding of blood. We can say that the Almighty will create a different, tangible state, that registers this advance, the same as Allah created the new means of transport, both situations being manifestations of the Greatness of the Great Lord. We must believe that there will be a time when doing mischief and shedding of blood will decrease and perhaps disappear from the earth.

I am saying that those who are not aware of how creation began, of the stages of development of the human being, of the improvement and progress that have been achieved –

will not go far in understanding 'and He creates other things of which you have no knowledge,', or 'I know what you do not know,', or 'He adds to creation as He pleases,' (35:1) or 'then We developed out of it another [different] creature,' (23:14). In contrast, those who have acquired this perception from moving about on the Earth and getting acquainted with the origin of creation – those are enabled to rethink the words of the Lord when He says: "Say: 'Travel through the Earth and see how Allah originated creation,'" (29:20) from new perspectives, and, this will be even more significant when they read in the same verse: "so will Allah produced a later creature: for Allah has power over all things,". This 'later creature' is still confined by conventional thinking to the life on the Day of Resurrection, though there is nothing to prevent applying it to both the Last Day and this worldly life – especially when we notice that the verses before this focus on improvement and progress, especially in connection with this life.

To conclude, the verse in this section transfers the task of getting acquainted with how creation originated from searching through the verses of the Qur'an to the signs Allah created in the world generally and in the world of human life especially, by tracing the beginning of creation. I look forward to the young men and women of the coming generation, who will reveal the signs of Allah in the world and look expectantly for their research, and express our wishes that they realize the purport of the words of the Lord: "I know what you do not know," (2:30).

It shows you how slow the Islamic rise is that I have not come across even one scholar or researcher who took this verse: "Travel through the earth and see how Allah originated creation," (29:20) as their starting point or as a method for serious work, even though the first problem to shock the religious community in the modern age was that of how creation was begun. Even when Jamal al-Din al-Afghani (1838-1897) wrote his book *A Refutation of the Atheists*, he was looking backward rather than forward, although we must excuse him since he wrote this book when quite young. But then, since that time and until today, you do not find a single researcher who refers to this verse as their starting point in a problem that both students and teachers grapple with, everywhere in the Muslim world, since Darwin propounded his theory, in the middle of the nineteenth century. Clearly it has not been the case that the problem was not urgent, or that the above verse was not being recited by everybody! It shows you how when an idea is dominant, it is enough to block people noticing a fact that is so glaring and meriting attention; one would recall in this respect the Qur'an's notion: "And how many Signs in the heavens and the earth do they pass by? Yet they turn their faces away from them," (12:105).

(2)

"Soon will We show them Our signs in *al-afaq*, i.e. the regions of the world, and in their *anfus*, i.e. in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that your Lord witnesses all things," (41:53)

1. This verse very much merits devoting a book to it, the same as what I did with another verse, in my book *Until They Change What Is in Their Souls*. The verse is so rich in meaning that I feel sure it will be the basis of quite a number of theories and research by both Muslim and humanities scholars – some time in the future. This verse will prove to open quite wide horizons.

So, in the meanwhile, and while waiting for the first wave of such writings, let me be one of the first who make an opening, or at least touch on a new horizon in connection with this verse. I am sure that things will keep widening and expanding, and there will be a much better language of discussion: for really we badly need those who rid us of many shackles and ties that hamper our articulation and impede our progress towards that new world: to a future that provides an honorable place for the human being – for the human being was honored by the Lord since the day of his creation – I am thinking of that future which most people in the world seem to despair of its ever coming, and that even the angels did not imagine it to be coming: It is the future of 'world peace.'

- 2. This verse "Soon will We show them Our sign in *al-afaq*, i.e. the regions of the world, and in their *anfus*, i.e. in their own souls, until it becomes manifest to them that this is the Truth," marks a definite shift in providing proofs of the truth of religion, a shift that is announced in the Scripture itself: it is the Qur'an itself that directs us to the signs existing around the world and in the world of human life. It is evidently a shift that the world was not prepared for at the time of revelation nor is it even up till now. I say this because humankind has not yet adjusted its mind to thinking of science and religion as complementary to each other. They still think of the proofs of one to be something and the proofs of the other to be quite another thing: that science derives its support from the real world and religion derives its support from the unseen. But the verse of this section says something else: it introduces a new course in history, which has not yet been appreciated by humankind. It actually merges religion completely and decisively with real-world science, with facts within human observation.
- 3. In the book of mine mentioned above, I discuss this verse: "Verily never will Allah change the conditions of people until they change what is in their souls," (13:11). There is in this verse a total reversal of people's conception of change, for they had taken it to be solely from Allah, while this verse represents a total reversal, where it entrusts humans with the process of change. It is the trust put in the hands of people as described in another verse: "We did indeed offer the Trust to the heavens and the earth and the mountains; but they refused to undertake it, being afraid thereof: but man undertook it – he was indeed unjust and foolish," (33:72). As this last verse shows, it is out of people's injustice in appreciating their abilities, and their ignorance of the true state of things, that they have failed in using their ability: the talents and potentials given to them, to be able to shoulder this trust, which the heavens, the earth and the mountains have not had the ability to bear. So, the human has the potential to bear this trust, for otherwise the Lord would not have chosen him for this task. It is true that the humans have not borne this trust well, that they have been slow to respond to the confidence put in them, but we know for sure that the potential is there in the human. Iqbal expressed this idea in his poetic way, using allusion, and sometimes Sufi imagery, to bring it to notice. But we must go a step further, for it is no longer enough to use symbols and Sufi imagery for this crucial issue. We must transfer this task of handling the obligation enjoined by this verse to historians, and all those who move about on the Earth, and seek the earliest and later steps of creation: it is these who may discern and bring to our notice Allah's signs in the world around us and in the world of human life. Marxists are really the people who seem to be nearest to speaking with confidence that humans are the

actual agents in the creation of history, but with all their propaganda, Marxists are stating something that the verse quoted above states in crystal clear terms.

And when I take up the topic here, I cannot claim to elaborate beyond Iqbal's words. But nonetheless, I feel it incumbent on me to exhort the young men and women to put in effort, to bear the trust. This requires that they develop their qualifications to fulfill the responsibility of bringing about change as they have been directed to do. They will have to search for the qualifications they will need to bear the task expected of them, to be, as Iqbal calls it, the Divine instrument, the means of fulfilling the Will of Allah in human life: In this Iqbal is harking back to a Tradition of the Prophet in which he said of a devout servant of Allah that, when they have won Allah's love and favor, Allah will walk with them when they walk, and hit with them when they hit, and look with them when they look. They will attain this status with their perseverance in worship and in performing favored acts of worship. But we do know by now that the enjoined commands are in actual acts of worship and in acquiring the necessary science.

Another helpful image occurs in Jalal al-Din al-Rumi, who says: "When the master passes the axe to his servant, then this act is enough expression of what the master expects of his servant." This is relevant because when Almighty tells the human: "I will not change your condition unless you do the change first," then this is clear in passing the trust to them as viceroys on earth.

We may also quote another great master, al-Jilani, who says: "Most people hold back when they are encountered with the question of destiny. But not me: I actually have had a window open to me into it. And therefore, I grapple with destiny, for the sake of truth, and with support from the True One [God]. The competent human is not the one who yields to destiny, but the one who grapples with destiny." (quoted by Ibnul-Qayyim in his *Madarejul-Salikin*, Vol. 1, p. 199. Edition of Daral-Kitab al-Arabi.)

Ibnul-Qayyim himself adds in clearer words: "A competent man is not he who yields to destiny, but he who fights destiny with another destiny, more favorable in Allah's eyes." We have something further back, from Umar bin al-Khattab. When Abu Uabidah, a Companion of the Prophet, heard that Umar bin al-Khattab proposed to return without entering Syria, on account of the plague that had hit it, he said to Umar: "Are you trying to flee from Allah's destiny?" "Is that you who say this?" Umar retorted, "Yes, we do flee from Allah's destiny, but again into another destiny of Allah." It is true that the previous statements of wisdom bear each a reflection of its own age, but our contemporaries have not uttered yet something as confident; even Muslim social scientists and historians are still silent: indeed, the specialists in these fields do not show in their discourse that they believe in their domain. They have not learned to put confidence in the world they experience with their hearing and sight, the world around them and the world of human experience. We have only to hope for a coming age when young men and women learn to seek the truth in the world around them and the world of human behavior.

4. This verse, by pointing to the signs of *al-afaq* 'the world out there', and *al-anfus* 'the world of human behavior', has revolutionized the location of proofs, and source of seeking proof, in the same way as the other verse: "Verily never will Allah change the conditions of

people until they change what is in their souls," (13:11) revolutionizes the way of effecting change in our life. The verse on the source and location of proofs, when it affirms that they are not to be sought in the Qur'an, teaches us not to require the Qur'an to determine how creation originated. It instructs us instead to move around in the earth and seek, by observation, to trace the beginning and progress of creation. The verbal text of Allah contains the rulings and teachings, and the proofs are to be sought in the real world of things and people. A telling example, as indicated early on in this book, is that what brought to an end the dispute about the facts of astronomy and the bodies of the sky were not the texts, but the tangible facts of the world: it is unfair to require the Divine text to teach us astronomy, but it is the function of the Scripture to remind the human of the universe, so rich in secrets; and then it is the human's own task to go on to investigate and discover those secrets, in astronomy and all the sciences.

And when I say that gazing at the world around us and the world within us to find out the signs of Allah has not yet entered our consciousness and the domain of our effort, I do mean what I say. We are really incapable of referring to the signs of the world outside and the world within to testify that the religion of Allah is true, or to speak about those phenomena in simple terms accessible to the layman, and to speak of them as decisive proofs, when the conditions are met.

5. When you appear in court, you are expected to have witnesses, proofs, and evidence. Allah refers to two honest witnesses to testify to the truth of His Book and His religion: the two witnesses being the signs of the world around us and the world of human life. This is when the Lord says in the Qur'an: "Soon will We show them Our sign in *al-afaq*, i.e. the regions of the world, and in their *anfus*, i.e. in their own souls, until it becomes manifest to them that this is the Truth," (41:53). They are reliable witnesses, quite qualified to testify. They have the merit of being unbiased, and no one can say they fall prey to prejudice or partiality or caprice. Therefore, for one to have these two witnesses, the world outside and the world of human behavior and life, they have certainly a winning case: they have reliable witnesses, and by the Qur'an accepting these two witnesses, its authenticity is being transferred from the world of the unseen to the world of the tangible, the world of verifiable facts.

The person who contests can and does sometimes dispute the truth of the verses of the Scripture, but no one can defy the signs of the world outside and the world of human affairs. In this, and when the proof has become universal, it has become scientific: addressed to the whole of humankind. In this sense we can understand the following verse of the Qur'an: "O mankind! Verily there has come to you convincing proof from your Lord," (4:174).

6. Much of past knowledge was not well based on facts, and it was colored by the prejudice of those who upheld it: it did not refer to the facts of the world outside, and the world of human life. That is why much argument raged around the assumed knowledge. But then the evidence supporting what was assumed to be knowledge began to be drawn more and more from the facts of *al-afaq* and *al-anfus*. Chemistry, for instance changed from alchemy to be a solid and accurate science. The same is becoming true of psychology and sociology, when they came to draw their evidence from the facts of *al-afaq* and *al-anfus*: they are moving into the circle of sciences. We no longer speak of an Indian, Greek, Chinese, or Egyptian astronomy, as things

were in the past: we have just universal astronomy (and chemistry, physics, and biology). Now, religion will be the same when it becomes scientific, drawing on the facts of *al-afaq* and *al-anfus*.

The Qur'an presents religion as one doctrine, uniform for the whole of humankind, as may be noticed in the following examples: "We make no distinction between one and another of His messengers," (2:285), "The same religion He has established for you as that which He enjoined on Noah ... and that We enjoined on Abraham, Moses, ..." (42:13), "The religion before Allah is Islam," (3:19), "And who turns away from the religion of Abraham but such as debase their souls with folly?" (2:130) "And this was the legacy that Abraham left to his sons, and so did Jacob; 'Oh my sons! Allah has chosen the Faith for you; then do not die except in the Faith of Islam," (2:132). It is the same when you go to the Prophet's, peace be upon him, Traditions, as in: "Prophets are half-brothers, with one father, and different mothers." (reported by al-Bukhari).

7. About this verse, Iqbal says that it has made of the signs of *al-afaq* and *al-anfus* sources of drawing truth. This must be interesting for the science of the fundamentals of religion. In the past, the sources of drawing rulings were listed as the Qur'an, the Sunnah (of the Prophet), *qiyas* (i.e. drawing a ruling by analogy), and consensus. But the above verse indicates that the facts of *al-afaq* and *al-anfus* are reliable enough to be a source of revealing truth. People are not very impressed when we impart to them a truth drawn from the text, not for instance when we keep urging them to act on the injunction of the verse: "Travel through the earth and see how Allah originated creation," (29:20). But after people have gone some way in dealing with the phenomena of the world at large: *al-afaq* and the human world in particular: *al-anfus*, the facts of these will glow with such light that no one can dispute them: it is true then that those who lived for ages in the dark will be dazzled by the glare of facts.

I do realize that, for some, this idea will seem to trespass on religion, as they see it. But no, the opposite is right. Once this approach is adopted, the believer will acquire such an impelling presence and splendor of discovery that enhances belief in the facts of religion: Discovery will be the cause of cohorts of people entering the religion of Allah. Roger Garaudy, for instance, was often attacked on various grounds, but he belongs to this new trend, and he himself did not approve of those who believe they bore the flame of the ancestors, while they bore their ashes.

8. I often receive young men who are impatient to see the Muslims cooperate more, and to see more efficient efforts to accomplish unity or at least coordination among Muslims, or even at the level of humanity. They keep asking: "What is the way to uniting Muslims or the da'wa – the call to Islam – workers?" The conventional answer to this, and I pointed this out in a previous book of mine, is that the remedy is that we all refer to, and hold fast to, the Qur'an, the Prophet's Sunnah, (or Traditions), and the methods of the earliest Muslims. This answer, in its conventional way, is no longer sufficient. Before we can benefit from the Qur'an and the Prophet's Sunnah, and indeed from all human heritage, we need to have a reliable method of understanding. Now I can add that the method we need is to be drawn from the facts of *al-afaq* and *al-anfus*. This is the brief answer. It is the facts of *al-afaq* and *al-anfus* which will determine

what the Qur'an and the Sunnah are actually driving at, and it is from the facts of history that we determine what drove a certain person or a certain generation to understand the Qur'an and the Sunnah in the way they understood them. What I am saying here is that the facts we draw from *al-afaq* and *al-anfas* are also part of what the Almighty is revealing to us: they also are a discourse from the Lord to His servants. This new approach will open for the scholar and scientist endless possibilities.

So, I need to put this in the hand of the reader. I must entrust the reader to bring together all the bits and pieces distributed in this and other books; they need practice to begin to digest the topic. They need to go ahead to the signs of *al-afaq* and *al-anfus*. The purpose will be to open the way for religion to be scientific, and hence universal: for this is the way with knowledge: when it is more scientific, it makes its way to being universal. It is fortunate that Islam itself stresses this aspect, the Divine discourse addressed to all humankind; it is universal from the first day, as we see in the verse of the Qur'an: "We sent you not, but as a mercy for all creatures," (21:107).

This is then my answer to the young men who keep asking me: this is the way to unity among the Muslim sects and denominations, and the way to the unity of the world. And to those who deny this I say there will come a time when it becomes crystal clear, as the Qur'an teaches us to wait: "And you shall certainly know the truth of it all after a while," (39:88).

Any one may notice how jubilant Muslims are when they come across some fact in the world that supports Islam. But we need now to observe that once the signs of *al-afaq* and *al-anfus* have become an accepted method, well developed and sophisticated, and well established as the basis for dealing with the verses of the Qur'an – there will come to be established the Divine promise of humankind getting over doing mischief and shedding blood: that will be replaced with the way of peace, as promised by the Qur'an: "Wherewith Allah guides all who seek His good pleasure to ways of peace and safety, and leads them out of darkness, by His will, unto the light," (5:16)

Such progress will be possible once we let ourselves go beyond the traditional references.

We have in astronomy an example of how the signs of *al-afaq* and *al-anfus* put a decisive end to the disputes and unified minds and hearts. After the facts of *al-afaq* and *al-anfus* were resorted to, what revolves around what: the sun or the earth, in addition to the moon and the stars was no longer disputed. No more would the different sides drag the texts to their sides and try to silence others with texts; and no more would one side condemn the other side as unbeliever or heretic. This is then a good example to ascertain how the arrival of the signs of *al-afaq* and *al-anfus* gives serenity to our hearts and also to others who used to argue with us. Is it not what one sees in the verse: "Soon will We show them Our sign in *al-afaq*, i.e. the regions of the world, and in their *anfus*, i.e. in their own souls, until it becomes manifest to them that this is the Truth," (41:53).

I recall how a number of young men visited me once and spoke in all sincerity and honesty. What troubled them was making everybody see that the Messenger, peace be upon him, in all his mercy and care, would not leave the Ummah in turbulence, without naming for them the right leader, to whom they may refer and submit their problems.

I first thanked my visitors, for instead of the usual Islamic approach of raising texts to silence others, they were now discussing their question on the basis of logical thinking. So, I told the young me I would be as honest and sincere as they were, and would not use the usual reference to texts to put an end to debate. No, I would urge them to think of this religion as a world religion, a religion we were addressing to the whole world. And the world had had a lot of painful experiences, fresh in its memory, of what happened when a person was imposed on the nations, from a certain dynasty only, and regardless of their qualification and aptitude ... So, is it right, I said, to ask the world to regress to that method? Does not Islam teach us: "Verily the most honored of you in the sight of Allah is he who is most righteous of you," (49:13)? Does not this teach us that Islam directs us to choose for any position the one who is most equipped for it?

The above discussion, and this visit and my answer, are not going to put an end to a dispute that has lasted for many centuries, not only among Muslims, but among many nations. I mean only to shed some light on this approach, with facts drawn from *al-afaq* and *al-anfus*, and with all neutrality and objectivity, to illuminate our way to the satisfaction of all parties. It can really illuminate issues that have been tormenting the Ummah for centuries and that have never being discussed with reference to the facts of *al-afaq* and *al-anfus*.

But we have some reason for optimism. We do notice some new directions towards effecting a change to the traditional way of discussing issues like the above. Not many, however, are those who have parted with the inherited method, nor have they been able to make themselves heard plainly. Their efforts are also not united but diffused. But they are really the voice of the future, and the signs of *al-afaq* and *al-anfus* support their direction. They are the people who will be happy to testify to what is true and right, even if the truth proves to be not on their side, or not on the side of parents or close kin. It is persons like these who will stand for truth, with their heart free from ill-will or malice.

Let us also benefit from the way of the Messenger, peace be upon him, for he himself did not hesitate to refer to the signs of *al-afaq* and *al-anfus*, for solving certain problems outside the revealed texts. I have in mind a certain Tradition, which I keep quoting, but we need it again here, for it is really important, and has good bearing on the issue of the signs of *al-afaq* and *al-anfus*. It will be noted in this Tradition that the Prophet, peace be upon him, leaves aside his status as prophet, and does not even refer to some Qur'anic text, in arguing with a Companion of his, Ziad bin Labid. Here is the Tradition:

"In his comment on verse 63 of Sura 5, Ibn Kathir quotes a Tradition of the Prophet's from al-Imam Ahmad (and he rates the Tradition as 'authentic')

"Ziad bin Labid relates: 'The Prophet, peace be upon him, mentioned some event that is to take place in the future, and then he added: "That will be when knowledge has disappeared." "But how can knowledge disappear?" I inquired, among others, "when we learn the Qur'an, will be teaching it to our children, and our children will be teaching it to their children?" "How poorly you think, Ibn Ziad," he replied. "I took you to think as one of the best in al-Medina! Do you not see that the Jews and the Christians read their Scriptures, the Torah and the Injil, and yet they avail them nothing?""

What we have in this Tradition is quite curious: the Prophet, peace be upon him, does not resort to revealed material to persuade Ziad. He rather cites signs of al-afaq and al-anfus, to stop any argument about the Qur'an and Sunnah. This is crucial to learn that the verses of the Qur'an are not what we need in certain circumstances; therefore, the Prophet turns to certain historical events that may be witnessed by anyone in the world, and may be denied by none. Hence our confidence that the signs of *al-afaq* and *al-anfus* are so forceful on account of their universality: they soar above any conflicts among doctrines and ideologies. One may note that the Messenger, peace upon him, did not, in his bringing Ziad to see the truth, resort to his position as Messenger, did not remind him that, as a believer, he should never forget that a prophet is to be invariably and absolutely believed. It is a significant thing that we have in this tradition, a line of argument that will never lose its value: the line of the signs of al-afaq and al-anfus. It must be manifest by now that what concerns us in this book is not expressing our admiration of the above Tradition: it must be rather another step towards establishing this approach of adopting the evidence of the real world – though even after citing such texts, only those who have given enough time to delving into the events of history for their significance; who have, through careful study, developed the skill of linking causes and effects will appreciate this approach. It does not avail us to admire a text and cling to it as a sacred charm. Our actual method of dealing with problems must change.

9. In order to support our argument, we present the following quotation from Muhammad Iqbal:

"The Prophet of Islam seems to stand between the ancient and the modern world. In so far as the source of his revelation is concerned he belongs to the ancient world; in so far as the spirit of his revelation is concerned he belongs to the modern world. In him life discovers other sources of knowledge suitable to its new direction. The birth of Islam, as I hope to be able presently to prove to your satisfaction, is the birth of inductive intellect. In Islam prophecy reaches its perfection in discovering the need of its own abolition. This involves the keen perception that life cannot for ever be kept in leading strings; that, in order to achieve full self-consciousness, man must finally be thrown back on his own resources.

"The abolition of priesthood and hereditary kingship in Islam, the constant appeal to reason and experience in the Qur'an, and the emphasis that it lays on Nature and History as sources of human knowledge, are all different aspects of the same idea of finality...

"Indeed the Qur'an regards both *Anfus* (self) and *Afaq* (world) as sources of knowledge. God reveals His signs in inner as well as outer experience, and it is the duty of man to judge the knowledge-yielding capacity of all aspects of experience. The idea of finality, therefore, should not be taken to suggest that the ultimate fate of life is complete displacement of emotion by reason. Such a thing is neither possible nor desirable. The intellectual value of the idea is that it tends to create an independent critical attitude towards mystic experience by generating the belief that all personal authority, claiming a

supernatural origin, has come to an end in the history of man. This kind of belief is a psychological force which inhibits the growth of such authority. The function of the idea is to open up fresh vistas of knowledge in the domain of man's inner experience. Just as the first half of the formula of Islam has created and fostered the spirit of a critical observation of man's outer experience by divesting the forces of nature of that Divine character with which earlier cultures had clothed them." (Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*. Pub. Institute of Islamic Culture, Lahore, Pakistan, 1986. Pp. 100-101)

The idea of putting an end to the phenomenon of prophecy may also be viewed from another perspective, that it marks the end of the civilization cycles. Before Islam, civilizations used to come into being, rise and fall in cycles: they were born as feeble beings, gained more strength as they grew, and then, after reaching their zenith, they declined, got weaker, and then came to an end. But civilization is not like the human, who has a certain organic structure which must decay and decompose, and there is no way for anyone to reverse this process. Civilizations do decompose, but that process is psychological and cultural, and this means that the process of decline and disintegration can be halted, and even reversed – once humans discover the laws that control the process. We have the analogy of the arable land: In ancient times, people found a fertile tract of land, still rich in nutrients, used it for some time, and then found that it was no longer good for cultivation, and so stopped trying to cultivate it. But humans learned more and more about what made a land fertile or otherwise. After that, even infertile lands were made fertile, and the fertile ones were controlled to maintain their fertility. This is the human ability to dominate nature and manipulate it to serve their prosperity, and it shows the difference between the naturally-occurring processes and the processes controlled by the human, as Malek Bennabi once said: "Things do go according to their natural laws if left without intervention," and this is what happened to the Muslim world, when Muslims stopped taking the initiative in controlling the process of rise and decline and disintegration. But, concurrently with the phenomenon of prophecies coming to an end, by Allah's will, the civilization cycle also came to an end: the human has been empowered to take control of the life of civilization, by knowing its laws, and in this way a civilization is no longer forced to fall and disintegrate. Toynbee did take up this issue, but with a lot of hesitation, and Malek Bennabi also had something more confident to say about the civilization cycle. He pointed out that every law imposes a type of inevitability on the mind, which controls its actions within the confines of that law. - but, he adds, "now we can view the stages of the progress of history in a new way. Now we can see that stages that previously were or were not amenable to change, are all subject to change, and can be controlled. The determinism which seems to be inevitable in the progress of the life-time of a civilization, is now seen to be subject to human choice, which is a reflection of concepts and principles settled deep in the human self." (his Foreword to my book, *Until They Change What Is in Their Self.*)

The idea in these paragraphs is that putting an end to the chain of prophets is in one sense putting an end to the cycle of civilizations.

Another merit of the Prophet Muhammad, peace be upon him, is that he was sent to all humankind, as both the Qur'an and the Prophet's traditions assert. This implies the universality of

civilization, and the end of multiplicity of civilizations – though I realize that this has not yet turned into an actual fact: existing civilizations are still distinct from each other. However, for a keen observer, there are indications that the world is progressing towards a united world day by day, never stopping, although the progress happens by necessity, not by volition – though most of us do not look keenly enough to see this movement. At least we know, from the Qur'an, that 'the scum disappears like froth cast out; while that which is for the good of mankind remains on the earth,' (13:17). People will come to understand these things, under various forces and influences. There will be enough light for all to see, although things are still submerged under piles of earth. What I claim to perceive, I perceive from indications of the signs of *al-afaq* and *al-anfus*.

(3)

"And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13)

Our verse for this section is one of the honorable heights to which the Almighty raised the human being. It is a sign of honoring the human, as another verse of the Qur'an affirms: "We have honored the sons of Adam, provided them with transport on land and sea; given them for sustenance things good and pure, and conferred on them special favors," (17:70).

- 1. The verse of the section points out the true dignity of the human; it is what Iqbal expresses as 'status of Divine viceroyalty'. Everything in the heavens and the earth has been put in the service of the human being: they have just to command, as a viceroy after fulfilling the conditions of an accepted command, and the things of the world are bound to obey ... We see how the human commands a craft that they have made to travel on to a certain planet, and it does it goes, it carries out the orders given to it and, if requested, will come back. This is just an example of the meaning of manipulating the forces of the world.
- 2. Essentially, subjection as mentioned in our verse, 'taskhir in Arabic', consists in having enough scientific knowledge: knowledge of the sunnah, or law, and pushing it to its ultimate limits, to have the forces of the world help the human in the their everyday practical life. Let us return to the example of reading and writing and their development. The human has known reading and writing for about five thousand years, but they manipulated this invention better with the invention of paper, about 1500 years back, and then, with the invention of movable printing, and the computer, and the means of storing information, things kept changing, and more manipulation of reading and writing is possible. But even so, reading and writing have not done their maximum service.

In a more general sense, we may look around at the animals, rivers, and the bodies of heaven, which have been put at our disposal, and we may notice how our control of these things keeps developing and growing as time passes. Those who have studied the origin of creation can cleverly speculate about how things will be like in view of the acceleration of things from their earliest beginnings until their most advanced stages. It is as Jalalul-Din al-Rumi has said, citing the hunt for the 'musk of the deer', there is an early stage of the hunt, and then the hunters enter phases when – one step in this new phase is worth a whole stage of a previous phase.

Now to have control in the universe, a human needs a certain faculty or ability, and that faculty or ability is scientific knowledge. We know that planes have penetrated the sound barrier, so what is there to prevent the human, through scientific knowledge, from penetrating the light barrier? I say that despite Einstein's affirmation that this is a barrier that the human cannot go beyond. I like more what Muhammad Iqbal has said; he said: "One thing I learnt from the Messenger's ascent to heaven is that the human's way to heaven is open."

3. When we speak of *taskhir* 'subjection of the forces of the world to humans', we must speak of two kinds of *taskhir*, *taskhir* of the natural world, and *taskhir* of the human world. The latter is the more difficult, the more challenging; that is why many deny that it is possible – the Westerners, in particular, deny that it is possible to bring human behavior into scientific manipulation and shaping.

As it is the human domain which is the real domain of effecting manipulation and control – the most precious science which is most worthy of devoted time to, and worthy of the name science, is science that pertains to *al-nafs*, the behavior of the human being, and the control of societies. And this is really the aspect of scientific knowledge which attracts the basic attention of the Qur'an, for it handles it time after time. What happens in the current civilization is that it contradicts the objectives of the Qur'an. It really is not giving humans what they are worthy of, and the meaning of 'human' is not at all attained by the modern civilization. Here is an example: the Qur'an declares, most decisively and clearly, that having lots of money and lots of children are not conducive to winning Allah's favor, and will not draw a human closer to Allah: we read in the Qur'an: "It is not your wealth nor your sons, that will bring you nearer to Us in degrees," (34:37); and the Qur'an denounces a certain man's saying: "I have more wealth than you, and more honor and power in my following of men," (18:34). Having lots of money, as referred to in the verses, and having lots of supporters, and about which some people boast, are no different from the economy and the military forces that are deemed as the criteria of ascendancy by the modern states.

We still measure a civilization's advance with reference to the per capita income in it, and the individual's quest of necessary and luxury things. This is unacceptable as the criterion of advance. The true criterion is righteousness and piety, that the individual succeeds in curbing their *hawa*, 'i.e. their desires and partiality'. Something must be clarified, however. What the Qur'an condemns is not controlling things, nor enjoying the beautiful things of life; for it affirms elsewhere: "Say: 'Who has forbidden the beautiful gifts of Allah, which He has produced for His servants, and the things, clean and pure, which He has provided for sustenance?' Say: 'They are, in the life of this world, for those who believe, and purely for them on the Day of Judgment,'""

(7:32), and in the next verse: "Say: 'The things that my Lord has indeed forbidden are shameful deeds, whether open or secret," (7:33). Iqbal has a good rule here: "The purpose is not that one does not possess much of what the world can offer; it is that the world has not possession of the individual;" that is, means should not turn into ends. In poetic terms, Iqbal describes the believer like this:

"You see the things of this world in his/her hand,

But not a particle of it has mastery over his/her heart."

This will help us better appreciate the Messenger's, peace be upon him, saying: "It is not your being poor that worries me; what worries me is when the world is opened for you, and you vie for its possession, in the same way as past peoples vied for its possession, so that it leads you to perdition, in the same way as it led past people to their perdition." All previous civilizations committed suicide over this cliff. And not many individuals in our own time are free from this precipice, this same pitfall.

So let us pause a little here, for one needs to reflect well lest they lose track of the discussion. Toynbee said some fine things about this issue, in several locations of his *Study of History*. For instance, he discusses in a chapter entitled: "Misleading Paths", the nature of the advance of civilizations. He says: "Are we to measure a society's advance in view of the society's more and more dominance of its external environment? We have two kinds of such external environment: that the society has more and more dominance over the human environment, which usually takes the form of invading neighboring nations; and more and more dominance over the inanimate environment, which expresses itself in improvements in the material technological style." Toynbee then surveys examples to demonstrate which of these two phenomena, the political and military expansion or improving the technological style, is better; but he finds neither to be a suitable criterion of true human advance. The technological military expansion is usually the outcome of a military trend that is usually a precursor of decline. Nor do the technological improvements, agricultural or industrial, show significant correlation, or any correlation at all, with progress, true progress."

Toynbee mentions that even H.G. Wells was confused about this point: "He was misled because of mainly this reason: that Wells failed to transfer the spiritual basis, whenever he proceeded in his narrative, from the cosmological sphere to the human sphere."

Toynbee mentions the pharaohs who built the pyramids: how death let fall its cold hand on their developing civilization, at the moment that their external challenge was being transferred to the inner challenge: when they exploited their economic and agricultural, and technological, success in building the pyramids – in the same way as the economic and technological advance is being exploited today – forty centuries after that date – in establishing nucleur arsenals and the arms race. (Ch. Ten of Toynbee's *Study of History*).

Toynbee also mentions that the principles of Gandhi and Lenin have degenerated, by giving way to the way of Ford, the American industrialist. For evidence of this deterioration, he refers to the fact that, during his first visit, near the end of 1985, to some Arab states, the Chinese

Minister of Foreign Affairs used to change his European suit from time to time – in contrast with Mao and Cho On Lai, who stuck to the work uniform, with the stiff collar.

The topic of *taskhir* is important, and, as humans proceed in having better control of the forces of the world, therefore fulfilling the prediction of the verse of the section, this must necessarily increase the danger of falling down the abyss of failing to live up to the more vital criterion of being human. This is the natural way things go: the higher the position, the higher the stake; the human has been honored and raised to that level, and a great bounty was bestowed on them, as we saw in the verse: "And He has subjected to you, as from Him, all that is in the heavens and on earth," (45:13) but with this distinction there is paired the responsibility, and it is such a vast responsibility, to a point that some may say it is impossible. Toynbee seems to be of this opinion, since he affirms that it is impossible to accept Western technology without being defiled by its moral corruption: is this not very similar to the attitude of our sheikhs when they express their condemnation of Western civilization?

But I do not agree with this attitude. Allah has not ordained that the human be placed on the earth with no hope of success; the Lord's reply to the angels: "I know what you do not know," (2:30) gives us hope, that what the angels supposed about the human was not the only possibility. I have confidence, derived from the Qur'an, that humans will prove they are up to the task entrusted to them. To satisfy ourselves with tangible facts about the potential of the human, the Lord directs us to history, which is a reliable source of scientific knowledge – and history is not just the history of past events, but the future of events as well: what the predecessors failed in accomplishing does not imply that the successors will fail in accomplishing. That again is something we learn from the Qur'an, for when the past does not provide sufficient evidence for the truth, it directs people to wait for upcoming events: "Do whatever you can; we shall do our part; and you wait! We too shall wait," (11:121-122); and "Soon will We show them Our Signs in the regions of the earth, and in their own souls, until it becomes manifest to them that this is the truth," (41:53).

A major principle the Qur'an tries to establish is that of understanding the correct relationships between 2 perspectives, for example, signs of the world versus those of *al-anfus*, this world versus the Hereafter, traditionalism versus modernity, ethics versus politics, *tawhid* versus idolatry – that life has control over you, or you have control over it.

We find in Sura 89 the Almighty say: "Don't you see how your Lord dealt with the 'Ad people, of the city of Iram, with lofty pillars, the like of which were not produced in all the land? And with the Thamud people, who cut out huge rocks in the valley? And with Pharaoh, Lord of Stakes? All these transgressors beyond bounds in the lands. And heaped therein mischief on mischief. Therefore your Lord poured on them a scourge of diverse chastisements. For your Lord is as ever watchful," (89: 6-4). This is when people fail in the test of making the right choice, and this is what Toynbee is speaking about when he wrote: "The pharaohs had to face the same dilemma ... when they succeeded in bringing water and the soil under human control, but did those rulers use their achievement to improve the quality of their subjects' life, or to increase the luxury of the elite around him? ... The masters of Egypt erected the pyramids, and their retribution was that the cold hand of death fell on this developing civilization. At that moment,

their external challenge was replaced with an internal challenge," i.e. from technology, to the psychology of justice and good deeds.

Hence the Qur'an's comment on those people: "How many were the gardens and springs they left behind, and corn-fields and noble buildings, and wealth and conveniences of life, wherein they had taken delight! Thus was their end! And We made other people inherit those things! And neither heaven nor earth shed a tear over them: nor were they given a respite again," (44:25-29).

(4)

"Those who believe (in Islam), and those who follow the Jewish Scriptures, the Christians, and the Sabians, and who believe in Allah and the Last Day, and work righteousness, shall have their reward with their Lord: on them shall be no fear, nor shall they grieve," (2:62)

The world in which we live is getting smaller and smaller, in a way that people are more in contact with each other. They find that their interests are becoming more interchangeable, and ideas spread, unrestricted. Interests and risks seem to unite humankind ... it is reminiscent of a baby's birth, when it assumes a life independent from its mother's, with all the hazards this involves, and the many successive circumstances it needs to adjust to – everything is new and unexpected. It faces all that with piercing cries, and this is its reaction to the many crises. It used to live in a most secure and cozy home, its mother's womb, in the perfect temperature it needed, without the need for breathing or eating ... and then there is the labor and delivery, forcing the baby to pass through much pain and unprecedented difficulty and pressure. It goes out into the cold world, and its umbilical cord is severed, then it has to use its lungs for the first time ... many babies do not even make it alive, and child mortality was often the outcome of this passage.

Human beings face today something like this ushering into a new world: they are forced and driven into coming face to face with the new conditions; they need to adjust, and they are forced to acquire the knowledge required for such adjustment, to get over the risks on the way, and to keep down the cost of ignorance – for the less we know about the new conditions, the higher the cost of adjustment; the cost can be quite exorbitant, incredibly so, that some or all of humankind will have to pay. We used to have a certain set of relationships, conditions of stability that prevailed for many centuries – but all that was like the embryonic life in the womb, and it is no longer sufficient. If it was science that helped the baby enter the new phase of life, and decreased child mortality in an admirable way, the new stage of humankind's life will likewise not happen without the assistance of scientific knowledge.

There was a similar transformation in history: it was when humankind started to depend on agriculture for living. Before that, they were hunters-gatherers, and they did not have real homes nor villages or settlements, nor did they barter for exchanging goods. They were few in number, and they lived in this Garden of Eden, eating and drinking ... and no fruit or tree was

prohibited ... All was permitted to all. But then agriculture was discovered, and it revealed both the human's ingenuity and failure. This is really the usual response of human beings. Every time they receive a bounty from their Lord, they are too slow to adjust to the necessary change in circumstances; they seem to start by denying that the new element meant a change in circumstances. Denial is the first reaction; stressing that nothing new had happened, nostalgia to the past, when responsibilities were less, holding tight to the ways of preceding generations, the same nostalgia of the baby to the cozy and secure womb. It is denial of the new, denial of Allah's addition to creation. Even the new tree which the human had planted and cared for was something new, and the human wanted not to change their ways, clinging to the old ways. The tree put the human to a hard test, and the tree proved to be the criterion for the human's advance, for there was no escape from the need to adjust to the changes that were coupled with the growth of the tree. And when the tree was a new tree, unlike any other tree, the human failed to deal with it on its terms, and that led to their exposing their nakedness.

The human being's failure to adjust to the legal and moral circumstances imposed by the new life of agriculture exposed their weakness: they fell prey to *al-hawa*. With agriculture, there appeared the need for division of labor, and the division of labor blurred the human's vision, for they failed to appreciate the value of hard work. Humans were now divided into factions and denominations, and there appeared the human's injustice and oppression in treating other humans. Some individuals enjoyed living on the toil of other humans. It may be said that, up to the present time, the human has not adjusted to the crisis of the tree. They have not managed to have control of themselves, by not forbidding themselves from yielding to *al-hawa*. It is right to apply to this human what the angels predicted, as the Qur'an reports: "Will you place therein one who will make mischief therein and shed blood?" (2:30); the human had not yet proven what the Lord knew to be his potential. Whenever a new prophet was sent to the humans, commanding them to comply with justice, they failed to heed this, and this is what we find is in another verse "Alas for My servants! There comes not a Messenger to them but they mock him!" (36: 30).

Agriculture is the symbol of a society that may not survive without the dominance of law, without the permissible and the prohibited; in a word: without strict justice that curbs desires and *al-hawas*. The Prophet Muhammad taught this in an eloquent Tradition: "Past peoples were led to perdition when they forgave a noble person if they committed theft, and punished a common person if they committed theft."

With the taming of the horse, the humans entered a new state, with its own crisis, without having yet solved the older crisis, that of agriculture and the tree. With agriculture, the human entered the age of the village, the city, and the swarms of humans, which led to civilizations, and also the age of mischief and bloodshed. But we enter now the age hinted at with the verse: "and He creates things of which you have no knowledge," (16:8), and humans are under unprecedented pressure to effect the unity of the world, the unity of civilization, with one destination, in a way that it is absolutely impossible for the individual or the small units to survive on their own.

We have in the Qur'an a number of verses relevant to this issue, one of which having been chosen for this section: "Those who believe (in Islam), and those who follow the Jewish Scriptures, the Christians, and the Sabians, and who believe in Allah and the Last Day, and work righteousness, shall have their reward with their Lord: on them shall be no fear, nor shall they grieve," (2:62) – verses that may help for a smoother entrance to this new stage, a stage which requires adaptations that were not required in the human's past experience. It is new that the human being is treated with respect for the first time, not because they did not deserve respect in the past, but because unless the human being is given the respect they merit, humankind is threatened with perdition. Such adaptation the human needs today exceeds that of the baby getting out into the world: it is now getting beyond a human's usual selfishness and self-centeredness, getting out to a stage of love and altruism, and getting into the age of justice and good deeds. The human is urgently called on to practice this new ideal, and to adjust to the new stage. It is abandoning the age of mischief and shedding blood, and the crave for revenge and hatred.

The verse of the section, and other similar verses, urge people to adhere to the traits that make a human a human. But we need effort to learn the nature of this unique creature, how to bring out the best they can give: it is through justice, compassion, love, and altruism, that the human will offer all they can offer; you can never bring out of the human the best they can offer through oppression and overpowering. The transformation required is so new that it is like breathing with a new organ: that is why we feel nearly suffocated at the attempt to breathe the new atmosphere and move into the new life. The prophets had one after another had to face the denial and threatening when they called on their peoples to enter a new life. The latter said, as the Qur'an reports: "We see you are an imbecile!' and 'We think you are a liar!'" (7:66); or "Be sure we shall drive you out of our land, or you shall return to our religion," (14:13).

In encountering the new crisis, humankind clings until now to the old, violent, ways. The oppressors imagine that they can sustain their oppression with more violence. But they are deluded: they have not awakened to the fact that the old method no longer works in dealing with a new phase in human existence; they have not yet perceived that coercion will not improve a situation but will bring harm and rancor. How can the human, when there is nothing in their repertoire but unforgiveness and ill-will, how can they react to hatred with love, to injustice with justice and compassion? Maybe most people would find facing death less ghastly than entering a world governed with these new rules. "Are you asking me, with all my noble place," the haughty would think or declare, "to be on a footing with that insignificant, base creature?" or "Are you in earnest when you urge me to grant justice, or maybe compassion, to the colored, the ignorant and low-birth people?" Is not this what some prophets were told, as the Qur'an relates: "nor do we see that any follow you but the meanest among us, in judgment immature," (11:27). To the mind of the haughty, a person who opts for justice and equality is a fool, a simpleton, a helpless goodfor-nothing person who resorts to illusions; they say of a person of this type that they have not really known the facts of life, and do not know the nature of people. They say, and have said that so often, that to attain real peace, you need violence. So, there is a long history of disregarding the bright side of the human, and those who refuse the transformation call fall back on a long legacy of resorting to violent means.

But the verse of the section presents an optimistic view, a tolerant approach; it reflects the perspective of a religion that is addressed to the whole of mankind, a universal religion. Maybe some will assume at first that this approach will perpetuate the fragmentation we complain of today, but the basis for this policy is that it is human nature that a human will do their best, and put in their best effort, when you preserve and enhance their dignity, and that will certainly not come by oppressing and harassing them. The Qur'an acknowledges this, as we observe in verses like: "Let there be no compulsion in religion," (2:256); and the actual history of humankind indicates it: is it not most satisfying to the anxious people that Islam has proved over history that people enter it and do not desert it, that there have been almost no apostates from Islam! But I do realize that many are still not more tolerant than that Bedouin who said in the presence of the Prophet: "O Allah, have mercy on me and on Muhammad, and only the two of us!"

The positive attitude we adopt here is in harmony with verses like: "We make no distinction between one and another of His messengers," (2:285); "We shall accept the best of their deeds and pass by their ill deeds," (46:16); and: "Repel evil with what is better: then will he between whom and you was hatred, become as it were your friend and intimate!" (41:34). It is the policy of those who know what they have in hand, and proceed with strength and confidence, not those who are narrow-chested and anxious to find everybody beaten and shamed. It is in harmony with those who have rich material that they come out into the world to put forward and share, not those who are internally defeated, for they possess poor and unmarketable materials. Tolerance and open-mindedness are a very urgent need in the world today; and there is every indication that it is this direction which is primed to win the upper hand in the future, for it is in harmony with verses like: "And no one will be granted such goodness except those who exercise patience and self-restraint – none but persons of the greatest good fortune," (41:35). But that is our hope for the future. What we have at present is that the cultures and relations in the world are still governed by narcissism, selfishness, and the 'Elect, the Chosen People', as the Devil thought of himself when he declared, as the Qur'an reports: "I am better then he," (38:76). Yes, maybe you are better, but show your superiority in being tolerant and egalitarian; be liberal in appreciating others, and stress the best in them, not the most negative. See how the Messenger, peace be upon him, the leader of prophets, behaved when a Jew and a Muslim came to him, after the latter treated the Jew roughly for his saying that Moses was the best of all humans, while the Muslim insisted that Muhammad was the best. When the Prophet heard their dispute, he said, addressing the Muslim, in the hearing of the Jew: "Do not raise me above Yunus 'i.e. Jonas'. You see how he chooses this prophet, Jonas, commonly ranked as less than Moses, and the one who in another location of the Qur'an is mentioned like this: "So wait with patience for the command of your Lord, and be not like the Companion of the Fish, 'i.e. Jonas', (68:48). How properly the Prophet behaves: in perfect harmony with the policy of liberality and openmindedness, always a tolerant attitude to others; not by oppressing and debasing them: it is a position of both pride and modesty, and loftiness mixed with lowliness; it is a mark of those who know the reality about the human being: for the human being will be in your hand once you do them kindness, and once you turn a blind's eyes to their mistakes and stress and bring out their best points. This is a universal law that anyone may put to use.

I must put my confidence in Muslims, that these principles and approaches be made the rule rather than the exception. As it is, only some individuals here and there practice the principle of accepting the best in others and conniving at their slips: it is not groups or nations. But I have confidence that as Muslims gain more prestige and success, they will see to it that these principles gain ground. I say this because as long as Muslims accept this abject place, they will not be the tolerant and open-minded side. If We said above that there are no apostates from Islam, let us add that there are no missionaries to Islam: no individuals who importune you until you are disgusted. Yes, Islam is careful to see Allah's faith spread everywhere, but it also respects people's right to choose: there must be no faith-begging, no abject importuning of potential proselytes.

Tolerance, altruism, and compassion are some of the traits of a rich intellect, a confident character which derives from a solid base of faith: it is such people who soar to a high altitude of tolerance, altruism, and compassion. You see the really superior person so shy that they hide any virtue of theirs and shed light on any virtue of the others: they would never stress what they have to rise above others... And it is such traits which the world needs – certainly not thinking the worst about others, nor accusations, despair, ploys, and resorting to material force and armies and money. None of that is what counts with Allah, as we find in the Qur'an: "It is not your wealth nor your sons that will bring you nearer to Us in degree," (34:37). We see people vying for things which tear hearts and drive people apart, and it is not that competition which will give hearts contentment and serenity: it is rather compassion, altruism, love, and justice – it is with this that people will overcome their tension and anxiety. Be sure, then, to look into your heart, and examine your positions ... ask yourself what exhilarates you and uplifts your spirit: is it not humbleness, love, compassion and altruism? If you have not started, start now to dig deep for the truth inside you, and it is best that you discover the reality about your innermost sentiments. Make the decision of not acting in reaction to other people's coarse ways ... the foremost of martyrs is the person who goes forth in bringing out the truth which everybody else ignores. This is real life: its kernel is in forging ahead, out of what is inherited, and out of the traditions and fashions. It is when the individual has a criterion for determining truth that is their own, and not borrowed from others. Refer, if even for once, to your own assessment and scale, not the scale of others. It is very precious, this life, so do not let others choose your path – why do not you bring out the potential the Creator has given you? This is the essence of tawhid, and it will give you a great happiness in the heart ... but Oh, how far we are from experiencing these sensations ... Can we see? Can we hear? Can we understand? For we seem as slaves to society, slaves to tradition. Where are the writers who can write something to shake off our sleep? Those who have their own voice, not an echo of other voices? Not being of those who are described in the Qur'an as: "Truly they found their fathers on the wrong path; so they too were rushed down on their footsteps," (37:69-70).

In fact, we still cling to a world that is shattered up, theoretically and practically; so let us stop clinging to a kind of life that is only suitable for the time when the means of transport were the mules, the horses and the donkey. Why do we not try to adjust to the new creation ... It does Muslims a lot of harm that they are passive imitators of the others, mimicking every step of the

other (the Prophet had actually warned us against this abject mimicking). They look up in admiration to the others, even those who inflicted on them the cruelest treatment.

There are wide worlds waiting to be discovered, great abilities and aspirations to be tapped. Indeed, what will elevate the humans is not discovering more material energy, for this may be a source of danger unless the human knows more of the *sunan* 'or laws' of the self and its forces. All Allah's bounties, in fact, will be detrimental when they are not crowned with the *sunan* and abilities of the human character. Let us remember for how many centuries people assumed that the sun orbited the earth before they discovered that it was the earth which orbited the sun: this must be a great example to awaken us to the delusions people may entertain for eons of time: one of which is assuming that the human will serve you better by your resorting to oppression and compulsion and severity. The verses of the Qur'an say otherwise: that the human being will respond best to justice, love, altruism – that you love for others what you love for yourself. Over the centuries, what drove people is more the power of love than the material forces. Iqbal goes in this farther than anybody else when he says in a couplet:

A believer will be triumphant through love,

Indeed, a believer without love is a disbeliever!

One may notice how, by wielding great control of material means, nations suffered a lot of difficulty. It is indeed strange how the nations which we take to be bright are still vying for attaining more might, on the assumption that in that they would be superior. But they really go in the wrong direction! Are you blind, leaders? I borrow this from the Bible. It says: "Woe to you, teachers of the law and Pharisees, you hypocrites! You give a tenth of your spices—mint, dill and cumin. But you have neglected the more important matters of the law—justice, mercy and faithfulness. You should have practiced the latter, without neglecting the former. You blind guides! You strain out a gnat but swallow a camel." (Matthew, 23:23-24)

That is why Einstein said in his observation about this age: "As for equipment, we have it perfectly. As for aims, they are vague. That sums up our age." (Quoted in Muhammad Arkoun's *Islam Between Yesterday and Tomorrow*. P. 95)

I am trying my best to refer frequently to the Qur'an, to help in pointing our new directions, to be starting points for unprecedented innovations, and to be the themes of topics that have not yet attracted the eyes of researchers. What I have put forward in this book are topics that cannot be developed without a wide and systematic survey of the progressive advance of history, history in the most comprehensive sense – with a view to generating a creative view of the future.

More specifically about this section, we need to think of the 'People of the Book' as people who believe in the Creator of the world, who believe in revelation from the God to His messengers; that the messengers bore messages to guide to good deeds; and who believe in resurrection and the Last Day. We must recognize these great bases in which they are our partners, with all the consequences and functions of these bases. It is a mistake to keep the

Ummah of the Prophet estranged from the People of the Book, who believe in Allah and the Last Day.

Let us not lose view of the great roots of faith in which we and the People of the Book are partners: the common bases must be employed for the good of the two sides, rather than be lost in narrow perspectives and prejudiced *hawas*. Let those who believe in the truth not be distracted or provoked by those who have lost the basics: the Qur'an teaches us that the rule adopted by the 'Servants of the Rahman' is, "when the ignorant address them, they say: 'Peace,'" (25:63). Let it sink deep in our consciousness that those who ward off bad deeds with good ones are the ones who inherit the paradise of this world and Paradise of the Last Day. I do realize that many take this attitude of tolerance as a mark of weakness, but it is not so; it is only that many have not yet understood the facts of life. The fact is what the Prophet, peace be upon him, taught: that to forgive will only increase one in dignity and raise them to a higher position.

It is about time I concluded this discussion. Let me choose to wind up with an incident related by al-Asma'i: He once met a boy who seemed to be bright, and to test him he asked: "Would it please you, boy, that you are granted a hundred thousand dinars but on condition that you be a foolish person?" "No," the boy replied, "by Allah no! My folly will waste the hundred thousand dinars and I will still be foolish." The idea is that an ignorant person is foolish, and to acquire knowledge, the written stuff is the source. That is the point. And so, let me leave it there by saying: praise be to Allah, Lord of the Worlds.

CONCLUSION

Like anybody who has written something, I look back at my work, and find things to please me and things to displease me. The issues I have handled are most important and vital for life, but I am aware with what little ability I handle them: there is no doubt that my expression is not on a level to fit the topics discussed. It can be said that I misrepresented the issues I wished to present, or that I even betrayed my own case. Take for instance the issue of reading: despite the extreme importance of this issue, I have not given it justice; I have not developed the argument to its required maturity, and left many baffled. I have not shown the way among the many illusive paths; I have not put in the hands of my reader the light that enables them to see the way. It is certainly not adequate what I have written to illuminate the progress of my reader among all this darkness; nor can I say that they have now in their hand the scale to weigh right and wrong, or the conclusive test to sort out the healthy matter from the contaminated one. This is not an exaggeration: for the present wilderness to clear, no ordinary amount of effort can bring us through. What we really need is emergency equipment, many times the amount of effort we usually put in. You see how for a machine to start running, we need special force. And this is true of our condition, for with the ordinary effort we at present apply we have the results that we see, and nobody would say it is acceptable what we experience at present.

Writing was invented about five millenniums back, the paper fifteen hundred years back, and printing five hundred years back. But where is the real writer who can benefit from these inventions, and put us on the right way through effective writing?

You see how all governments of the world, and all families, anywhere in the world, are keen to see that their children go to school to master reading and writing. But it is right to wonder: where are those who turn those efforts to account, by writing things that are worth reading by the rising generation? This really continues the mission of prophets: it is the task of scholars and workers to follow in the footsteps of prophets by spreading light. Homer used to say: "There are many heroes, but, unfortunately, there are no poets to sing their achievements and feats!" So, I now say the means and instruments are all there, but there are not persons who can write what is worth writing and reading: and in accessible style. It means that the inheritors of poets have not appeared on the scene. This is what Iqbal meant when he said: "The pipe needs someone to blow through it, so do you have the breath?"

Why is it, I ask myself, that I have misrepresented, or abused the idea? The answer is my lacking the effective expression. And what is it that supplies one with effective expression? It is knowledge, and knowledge develops through effective expression. Indeed, it is effective expression that distinguishes the human, as the Qur'an tells us: "He has created man: He has taught him speech," (55:3-4). For this reason, I say that I have taken up vital and important ideas, but I have not brought them from darkness into light. Was not electricity there in existence, for eons of time, everywhere around the human, and then the human was not able to put it to innumerable uses until they brought it out of its hiding and harnessed it? There is in the Qur'an a

hint to that process of the secret forces hidden in the world and how they wait for the human's awakening to them: "And how many Signs in the heavens and the earth, do they pass by? Yet they turn their faces away from them!" (12:105). We need ability like this in writing, ability that, by the power of the word, will revive the dead. It is people who, as the Qur'an tells us, "contemplate the creation in the heavens and the earth, with the thought: 'Our Lord! You have created all this not for nothing ..." (3:191) who can write such reviving stuff. The heavens and the earth possess the forces of the dominance of the human, still in embryonic phase, waiting for the human to find them and bring them out. And when this takes place, the human will move on to another stage, as expressed in the verse, "then We developed out of it another creature," (23:14).

I also took up for discussion the intellect and scientific knowledge, but I should offer them my humblest apology: for I left them as I had taken them up for discussion, in their neglected nook, not consulted when they must be consulted, though they are so close. And even until today, the intellect and scientific knowledge are treated as juniors, so that they are not allowed to attend social occasions, unless they confine themselves to flattering and cajoling, saying what others require them to say, falsehoods and not the truth, and then go away. The *hawa* would gloat at the good service of the intellect and science, and swell great in its throne as master of history. It still reigns after all the advance in material knowledge. Therefore, I apologize to the intellect and scientific knowledge for my feeble defense of them. Is there no writer who will revive the intellect and scientific knowledge until they flourish at their hands? And until the dominance of *al-hawa* diminishes at the power of their words?

Then also, how I just touched on the issue of *tawhid*, its scientific and intellectual role, and its relation with the individual responsibility on the Last Day. I have left these as not really grown plants, just seeds, and there will be those who bring them to fruition sometime in the future. That no one has given them their due value does not mean that they are not worthy enough.

Another forgotten topic is that of the mental images and the independent facts in existence, and how the latter are the real reference to guide us to truth, though we still give priority to the images borne in the mind.

Nor have I done any real service to the issue of ancestor-idolization, and the world of persons. It was like pointing to something in passing, not effective enough to rouse people from their slumber. And I evoked names and works, meaning to support my case, but maybe I further established the position of ancestor-idolization: it is so for going in the steps of ancestors has two sides, a positive one and a negative one, and the correct path is between the two extremes.

I say this because to completely repudiate the ancestors means that we go back to the cave, and to hold on to where the ancestors stopped is to halt history. The right policy in this is always to take the best that is already achieved and then move on. But I find no way of shaking off the world of persons except by resorting to persons. I do know that the persons I refer to have their bright side, but have I done enough to help the reader get over the world of persons?

But after this self-examination, I do feel that the seeds I have sown here will sprout and grow, and they will do the part of life boats at the time of deluge. This is so in history, that the toll it imposes on those who go astray is not a kind one: it is really most painful, and the Qur'an alerts us to this: "Such is the chastisement of your Lord when He chastises communities in the midst of their wrong: grievous indeed, and severe is His chastisement," (11:102).

Let us not think, however, that the harsh lessons of history are inevitable – no, they are avoidable. The Merciful and Compassionate will not let the only way of opening a door be by breaking it. But we are paying the toll of being fascinated by the steel of weapons more than the tip of the pen. But I have tried my best in this book to be calm, not to agitate or vex: this I chose with the hope of inducing the reader to think calmly, with the minimum of emotion, and intending to address as many readers as possible. I could have said, but I did not: We need a new epistemology to be borne by our intelligentsia, in hope of ridding society of debased dogmatism and deep-seated mythology or suffocating theologies. But I opted not to resort to sophisticated terminology, and I am in this aware that it helps more to be within the reach of the reader. Why should one use involved style when much simpler style delivers the idea?