The Solar System

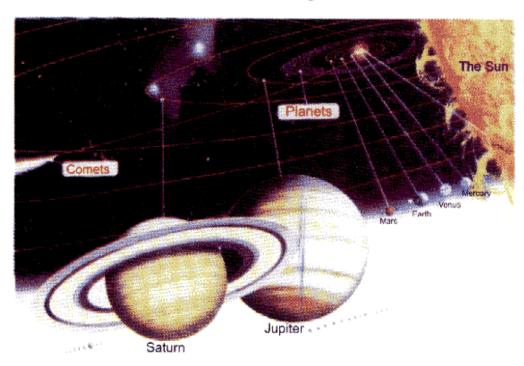


Figure "56"

The way to thinking and reflection – focusing the mind for that purpose

Reflect then on the orbiting bodies, the sun, the moon, the stars and the constellations; think how they spin around the world incessantly until the end of time, controlled by an exact system; think of the consequences of all this, the difference of day and night, the seasons, and the heat and cold; what benefits all that realizes for the animals and the plants in the earth. Is it possible that a person with insight should remain ignorant that all that is the making of the Maker, the Wise, and the designing of the Proud, the Knowing? It is for this that the messengers of Allah addressed their peoples in a tone that admits no doubt about Allah; they spoke directly of confining worship to Allah alone; they did not mention admitting His existence, for it is self-evident. They said, as the Qur'an recounts:

"Can there be doubt concerning Allah, the Creator of the heavens and the earth?..." (14: 10).

The existence of the Almighty and His Lordship and Power are absolutely the most evident thing; they are more obvious to the insight than the sun is to the eyes, clearer to the minds than all that they can comprehend and admit. No one denies Him but someone who is contradicting his tongue, heart, mind and innate nature; all those organs renounce him as liar. Let's read concerning these concepts the following verses from the Qur'an:

"Allah it is Who raised up the heavens without visible supports, then mounted the Throne, and compelled the sun and the moon to be of service, each runs unto an appointed term; He details the revelations, that haply you may be certain of the meeting with your Lord.

"And He it is Who spread out the earth and placed therein firm hills and flowing streams, and of all fruits He placed therein two spouses (male and female). He covers the night with the day. Lo! herein verily are portents for people who take thought.

"And in the Earth are neighbouring tracts ..." (13:2-4).

﴿ إِنَّ فِى السَّمَوَاتِ وَالْأَرْضِ لَآيَتِ لِلْمُؤْمِنِينَ ۞ وَفِي خَلْقِكُمْ وَمَا يَبُثُ مِن دَابَةٍ ءَايَثُ لِقَوْمِ يُوقِنُونَ ۞ وَأَخْلِلُفِ ٱلْيَلِ وَالنَّهَارِ وَمَا أَنزَلَ ٱللَّهُ مِنَ ٱلسَّمَاءِ مِن رِّزْقِ فَأَخْيَا بِهِ ٱلْأَرْضَ بَعْدَ مَوْتِهَا وَتَصْرِيفِ ٱلرِّيَئِجِ ءَايَئَتُ لِقَوْمِ يَعْقِلُونَ ۞ يَلْكَ ءَايَتُ ٱللَّهِ نَتْلُوهَا عَلَيْكَ بِٱلْحَقِّ فَيِأَيِ حَدِيثٍ بَعْدَ ٱللَّهِ وَءَاينِهِ عَلَيْكَ بِٱلْحَقِّ فَيِأَيِّ حَدِيثٍ بَعْدَ ٱللَّهِ وَءَاينِهِ عَلَيْكِ فَالْحَقِّ فَيَأْتِي حَدِيثٍ بَعْدَ ٱللَّهِ وَءَاينِهِ عَلَيْكِ فَيْ الْحَقِّ فَيَأْتِي حَدِيثٍ بَعْدَ ٱللَّهِ وَءَاينِهِ عَلَيْكِ فَيْ الْحَقِّ فَيَا عَلَيْكَ عَلَيْكَ اللَّهِ وَءَاينِيهِ عَلَيْكُ مِلْ الْعَلَيْ فَيَا لَيْتُ عَلَيْكُ مِلْ اللّهِ مَا لَكُولَ اللّهُ عَلَيْكُ عَلَيْكُ عَالِمُ اللّهِ عَلَيْكُ عَلَيْكَ مَا يَعْتُ اللّهِ وَءَاينِيْهِ عَلَيْكُ مِلْ اللّهِ عَلَيْكُ عَلَيْكِ مِنْ السَّهُ اللّهِ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ اللّهِ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلْكُ اللّهِ عَلَيْهِ وَمَا لَكُولُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ اللّهِ عَلَيْكُ عَلَيْكُ اللّهُ عَلَيْكُ اللّهُ عَلَيْلُ لَكُونَ اللّهُ عَلْمُ عَلَيْكُ عَلَيْكُ عَلَيْكُ عَلَيْكُ مَل

"Lo! in the heavens and the earth are portents for believers. And in your creation, and all the beasts that He scatters in the earth, are portents for people whose faith is sure.

"And the difference of night and day and the provision that Allah sends down from the sky and thereby quickens the earth after her death, and the ordering of the winds, are portents for people who have sense. These are portents of Allah which We recite unto you (Muhammad) with truth. Then in what fact, after Allah and His portents, will they believe?" (45: 3-6)

﴿ حَكَقَ ٱلسَّمَوَتِ بِغَيْرِ عَمَدِ تَرَوْنَهَا ۗ وَٱلْقَىٰ فِي ٱلْأَرْضِ رَوَسِى أَن تَعِيدَ بِكُمْ وَبَثَ فِيهَا مِن كُلِّ دَابَةً وَأَنزَلْنَا مِنَ ٱلسَّمَاءِ مَآءُ فَأَنْبَلْنَا فِيهَا مِن حَكِلِّ زَوْج كَرِيدٍ ۞ هَذَا خَلْقُ ٱللَّهِ فَأَرُونِ مَاذَا خَلَقَ ٱلَّذِينَ مِن دُونِدٍ عَبِ ٱلظَّلِلْمُونَ فِي ضَلَالٍ ثَبِينٍ ﴾ [لقمان: ١١،١٠] "He has created the heavens without supports that you can see, and has cast into the earth firm hills, so that it quakes not with you; and He has dispersed therein all kinds of beasts. And We send down water from the sky and We cause plants of every goodly kind to grow therein.

"This is the creation of Allah. Now show me that which those you worship beside Him have created. Nay, but the wrongdoers are in error manifest." (31: 10-11)

"He has created man from a drop of fluid, yet behold! he is an open opponent. And the cattle has He created, whence you have warm clothing and uses, and whereof you eat." (16: 4-5)

"Is He then Who creates as him who creates not? Will you not then remember?" (16: 17)

Observe how He focuses on a single theme in this verse:

"He it is Who sends down water from the sky, whence you have drink, and whence the trees on which you send your beasts to pasture!" (16: 10)

while He concludes the same verse with a reference to the thinking group. The single note in the verse is because the point of interest is single, the water which falls from the sky, by which all that is mentioned in the verse grows from the ground; all the mentioned plants with their variety have a single germinator and are born of the same mother, so they are all one type of His signs.

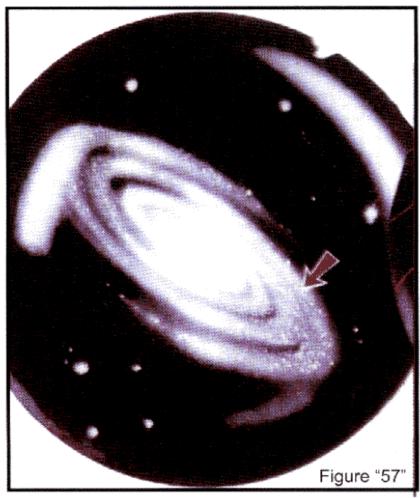
As for confining the benefitters to the thinking group, that is because the creatures mentioned are thoughtful beings, that it, they contemplate by the heart and not mere spectators; a looker on does not benefit by mere looking with the eye, unless it is coupled with the attention of the heart, which ponders the wisdom of what it sees, the splendour of creation, and its pointing to the Creator and Maker. This is the core of thinking. As for this clause in the verse quoted above:

"herein verily are portents for people who have sense," (13: 4) it covers all the preceding verses, because they refer to the day and night, the sun; the moon and the stars; all of which are different, varied signs in their structure, their creation and their qualities; the setting of the sun and the resultant darkness of the atmosphere embody manifest signs; the coming of the night, which covers the world like an apparel worn by it, bringing tranquillity to the creatures it covers, is a glowing sign; the arrival of the army of light, heralded by the harbinger of morning, when the army of dark is defeated, animals spread, and all dimness is removed, is another sign; the moon, the miracle of night, is another sign; the stars embody other signs as detailed above. There are besides other signs associated with this above and beyond the previous ones, including the winds with their variation and all that they cause of other signs. It is here fit to bring together the major portents of creation, and these portents are directed to the thinking people, because the signs mentioned in this context are more compelling than the preceding ones, and are more physically massive; the previous ones are preparatory to these, so those who find in them guidance and give them their due of significance are worthy of being described as persons of thought, which is the mind. Because the status of intellect subsumes thought, those who are guided by the earlier signs to exercise thought are promoted in the next sign, which is more impressive, to the status of intellect, which is higher than thought. So, here is something for you to think over.

As for the following words from Surah An-Nahl, a little further down from the part quoted above:

"Therein is indeed a portent for people who take heed" (16: 13), the discussion is in singular terms, and at the same, time it addresses those who remember. Its singularity is identical with the previous one; what Allah has spread in the ground in its variety, precious stones, plants, minerals, and animals are all on the same place; they all are the same type of sign despite the diversity of their apparent shapes and types. Reserving it to the people of remembrance alone is in line with the Qur'anic method of using Allah's signs for thinking and remembrance; as we read in a similar context in Surah Qaf:

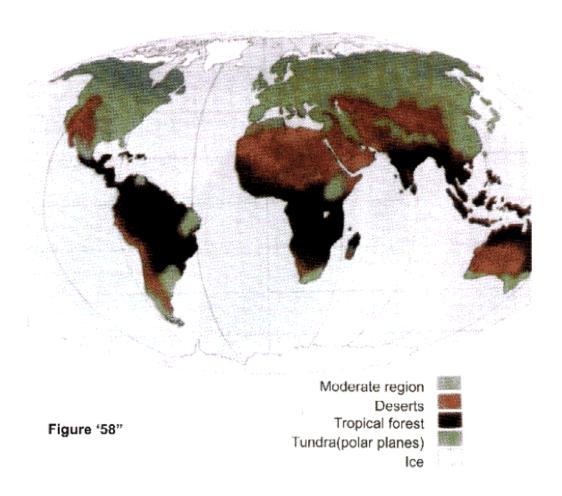
"And the earth have We spread out, and have flung firm hills therein, and have caused of every lovely kind to grow thereon. A vision and a reminder for every penitent slave," (50: 7-8). Vision is reflection and remembrance, and thought is the means to that and the first stage of it. If one thinks, he will gain insight; when he gains insight he will remember. In the above verse, remembrance is mentioned as a stage following the intellectual effort, and the latter is based on thought. Thought is given as the first stage, as being the first stage and the means, intellect occupies a middle ground as being the fruit and result of thought, while remembrance is kept to the end, since it is the aim of thought and intellect. So, here you have food for good thought.



The arrow points to the place of our solar system in our galaxy, our world being just a particle of dust in it.

Stellar radiation

Various stars have their specific types of radiation; many of those types are fatal to all known living beings. Radiation varies also as to intensity and amount by a range of thousands of times. As for our sun, if its radiation were to diminish to half its present amount, we would freeze. If it increased by half its present amount, we would have burned to ashes a long time ago. From this it will be manifest that our sun is the single sun among the millions of suns that is fit for our life. Do you not think that these facts are worth pondering?



The earth comes into being

If it is right the temperature of the earth at the time of its separation from the sun was about 12,000 F, the same as the surface temperature of the sun, all elements were free, which means that no significant chemical reaction was possible. When the earth, or its components, started to cool down gradually, reactions started to take place, and the world as we know it began to take shape. Oxygen and hydrogen would not

have combined until the temperature fell to 4000 F. At this point, these two elements combined to form water, but it was in the form of vapour engulfing the earth. It must have been of immense volume at that time; all the oceans were still in the sky; all the elements had not yet combined; they were gases in the atmosphere. After water formed in space, it began to fall on the earth; but it could not reach it at first, as temperature close to land was higher than it was thousands of miles away. The time came, however, when floods did reach the earth, but they rose again as vapour. As all oceans were still suspended in the sky, the floods that took place with progressive cooling were unimaginable. The turbulence was accompanied with fragmentation, and a state of infinite chaos reigned for millions of years. But during this state of unthinkable disorder, oxygen was combining with many of the other elements; it combined for instance with available hydrogen and in this way oceans came into being. No doubt, enormous amounts of hydrogen escaped from earth gravity before this process of cooling down; otherwise the mass of water would have been so colossal that it would have drowned the earth several miles deep. It seems that things calmed down and settled about a billion years ago, and this paved the way for dry land and oceans, and the atmosphere, that close-to-earth layer that we call air. The combination of elements was so complete that what was left, i.e. air that consists mainly of oxygen and nitrogen, consists no more than one millionth of the earth's mass.

Remembrance and thought

What is the difference, you may ask, between remembrance and thinking? Recognizing the difference is beneficial to those who realize it. In answer to this I say: Thinking and remembrance are the basis of guidance and success, the two poles of happiness. That is why we expatiated on thinking because of the great benefit connected to it and the great need for it. It is as Al-Hasan said: People of knowledge have always based remembrance on thought and thought on remembrance, and they addressed hearts until they came to be articulate, and they acquired hearing and vision.

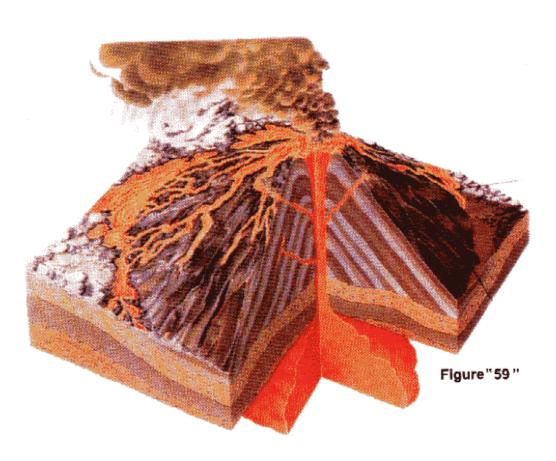
Let it be known, then, that thinking is the search by the heart to acquire from the knowledge already attained. knowledge that is not yet acquired. This is the reality about thought, because if there is no objective to be sought by thinking, then thinking will be impossible; thinking without a focal destination is not possible; and the means to it is the facts that are already acquired. If those means are employed to acquire that which is already known there will be no thought. Realizing this, we may go on to say that a thinking person proceeds from premises and assumptions he already knows to the concept he seeks to unveil. Once that is attained and acquired, he remembers on the basis of that, and perceives what to seek and what to shun; what to hold as dear and what to avoid. Remembrance, then, is the eventual fruit and outcome of person has remembered, that thinking. Once a remembrance enhances thinking, and so he can make inferences that he was unable to make before. This reciprocal relationship goes on, from thinking remembrance and from remembrance to thinking, as long as reflection lasts: knowledge and the will have no limit to stop at, and a person can progress indefinitely drawing on knowledge and will. If you realize that the Lord's signs operate as eye-openers and reminders, enlightening one to overcome the heart's blindness and to awaken it from its forgetfulness, it will then be clear that the opposite of knowledge is either the heart's blindness, and the remedy for this is enlightenment, or its forgetfulness, and the remedy for this is remembrance. The idea here is to

awaken the heart from its forgetfulness by invoking some of Allah's signs. To try to follow that up to its end, we would have to devote all our life to it, and even then we would not be able to exhaust even the details of one of His signs comprehensively. But if the whole is not feasible, it should not follow that the matter should be dropped completely. The noblest employment of time and effort is the reflection on the signs of Allah and the wonders of His creation, to go on from there to linking the heart and will to Him rather than to any of His creations.

Ask, then, the denier, the annihilist: What do you say of a water-wheel spinning over a river, a water-wheel of perfect parts, exquisitely manufactured, most delicately and sophisticately made, in a way that an observer can see no loophole in matter or making, efficiently irrigating a spectacular orchard that contains all kinds of plants and fruits; the orchard being well cared for, pruned, weeded, served in every way; so that nothing is left missing or ignored, no fruit is left to rot; and then its product is estimated by the harvester and the money gained is distributed to the various parties concerned according to their needs and requirements, each getting what is right for them, and all the above is done every time would you say that all this might happen by coincidence without an agent who has will and resolution? Would you that the wheel and the orchard are there by coincidence, with all that goes on there without an actor who has will and resolution? What would your mind say of that? How would it solve the riddle? What would it lead you to? Of such a person we say it is of the wisdom of the Proud, the Wise that He created blind hearts that have no vision, so that they do not perceive those compelling signs except the way they are sensed by the senseless animals; He created eyes that do not see; the sun, the moon and the stars are moving by His will, but they do not see them; so why should one blame them if they deny their existence and fail to believe in them? They would say of the daylight 'it is indeed night, but the sighted are deluded.' It is just as a poet put it:

Suppose that I say of the morning it is night, will the sane be blind to the broad day light?

Reflect, again, upon the Power that holds the heavens and the earth, He who preserves them from falling apart, from crumbling or from some of their bodies going astray; Who is that Holder? Who oversees all that? Who is their Keeper? If some parts of that great wheel mentioned above are broken or some parts of the orchard fail to produce who will maintain them? Who among all the creation has the power to put things back on track? If the Keeper of the heavens and the earth and the sun holds back some of His sustenance, and lets the night last forever, who can cause the sun to rise again and can bring the day back? If He holds the sun in the horizon and keeps it there without moving, who can bring it to move so that the night should come? If the sky and the earth should fall down who but He can keep them in their place?



Volcances appear as conical mountains. Lava and extremely hot gases may erupt from the mantle an inner layer of the earth, through faults and fractures that it erupts exist between layers. Once the lava reaches the surface of the earth it erupts upwards. Earthquakes are also a result of the movement of blocks. If violent, earthquakes are also a result of the movement of block. If violent, earthquakes can destroy entire cities. Shaking may, however, be just a tremor.

Chapter Three

Animals

﴿ وَٱلَّذِى خَلَقَ ٱلْأَزْوَجَ كُلَّهَا وَجَعَلَ لَكُمْ مِّنَ ٱلْفُلْكِ وَٱلْأَبْعَكِمِ مَا تَرْكَبُونَ وَ لِلَّمْ عَلَى ظُهُورِهِ عَثَمَّ تَذْكُرُواْ نِعْمَةَ رَبِّكُمُ إِذَا ٱسْتَوَيَّتُمَّ عَلَيْهِ وَتَقُولُواْ سُبْحَنَ ٱلَّذِى سَخَّرَ لَنَا هَنذَا وَمَا كُنَّا لَهُ مُقْرِنِينَ ﴾ عَلَيْهِ وَتَقُولُواْ سُبْحَنَ ٱلَّذِى سَخَّرَ لَنَا هَنذَا وَمَا كُنَّا لَهُ مُقْرِنِينَ ﴾ [الزخرف: ١٢، ١٢]

"He Who created all the pairs, and appointed for you ships and cattle whereupon you ride.

"That you may mount their backs, and may remember your Lord's favour when you mount thereon, and may say: Glorified be He Who has subdued these unto us, and we were not capable of subduing them."

Al-Qur'an (43:12,13)

The creation of animals

Ibn Al-Qayyem says:

One class of the signs of the Almighty is the creation of animals, with all their qualities, species, appearances, uses and services, colours, and other unseen wonders. Some creep on their belly, some walk on two feet, some on four; some have their defence in their feet, the claws; some in the beaks, like the eagle, the Egyptian eagle, and the crow; some in their teeth; some have horns by which they ward off those who seek to subdue them; some, the lion for have enough power to defend themselves without arms, their power being their weapon; some use defecation for defence, as does a certain species of bird which if an enemy approaches it with the intent of subduing it, it defecates on it and destroys it in this way¹. I propose here to present a brief selection of depictions. There will be some overlap and no particular order. It is, however, one of the most important chapters of this book, since it will discuss some of the most vital issues raised by the Qur'an. The Qur'an reiterates many of the signs, stresses them time and again, exhorting humans to reflect on them with insistence. This is in fact one of the most

Insects are approximately 800, 000 species

Fishes are 30, 000 species

Birds are 9000

Reptiles are 6000 species

Mammals are 4000

There are in addition, the bacteria (a unicellular creature), and viruses (another unicellular creature), the smallest organisms; it would take a quarter of a million viruses, for instance, to cover a dot like this. So glory be to Him who created the whale and the virus, arranging for each to obtain its food.

¹ The species of animals are so numerous that their number exceeds a million, insects being the majority. Here are some details:

basic of the Qur'anic themes. Let us review just a few of the general statements in the Qur'an concerning this:

"Say: Behold what is in the heavens and the earth!" (10: 101)

"Lo! In the creation of the heavens and the earth and the difference of night and day are tokens of His sovereignty for men of understanding." (3: 190)

"Will they not regard the camels how they are created? And the heaven, how it is raised? And the hills, how they are set up? And the earth, how it is spread?" (88: 17-20)

The subduing of animals

Consider the impressive wisdom invested in the Lord's bestowing on animals hearing and vision to enable them to go about their interests and, eventually, to give their services to man. If they were blind or deaf they would not be of use to man. On the other hand, He denied them the intellect that man has, despite their big bodies; this is of course how they can be domesticated by man, who guides them and directs them wherever he likes. If they had intellects, with their extra size, they would for sure have disobeyed man, and would have defied his control. As it

is, they have been given such understanding and perception as would serve to realize their needs, and eventually the needs of the species they are destined to be controlled by; on the other hand, they have been made to lack the intellect and understanding that gives man superiority over them; and this also underscores the priority and prestige of man. Observe how man leads them and subdues them despite their bulk, while he would not have been able to control them without that subduing. Let us refer now to some verses of the Qur'an in that connection:

"And (He) appointed ships and cattle whereupon you ride. That you mount upon their backs, and may remember your Lord's favour when you mount thereon, and may say: Glorified be He Who has subdued these unto us, and we were not capable of subduing them." (43: 12-13)

"Have they not seen how We have created for them of Our handiwork the cattle, so that they are their owners, and have subdued them unto them, so that some of them they have for riding, some for food?" (36: 71-72)

You see how the camel, with its great bulk, is led by the little boy, humble and meek. If the camel were to attack the boy it would crush it like an egg and tear its limbs apart! So ask the denier: Who subdued it and subjugated it and led it with all its strength to a weak one of the weakest of creatures. By such employment, the human species can devote their time to their worldly and other-world interests. If man had to do the work the animal does, and carry loads that the animal carries that would consume so much of his time, he would not be able to do the constructive work he does: instead of one camel, he would need a group of people to carry his burdens; indeed not even a group of people can carry what one camel carries; besides, it would take up their time and not leave them time to attend to their interests. Those animals have been created to do hard work for humans. besides the countless ways in which they serve humans: providing food, drink, medicine and clothing; stuff from their bodies are used for making containers, machines and utensils; they are means of transport and plowing; and they provide many other benefits; add to the beauty of some animals.

Providing tools of manipulation

Consider the wisdom embodied in the provision of tools of manipulation to animals and man. Since man was created to practice many industries like masonry, sewing, writing and so forth, he was provided with a flat round hand and fingers that enable him to hold, spread, fold, unfold, gather, scatter, join something to another; the animal, on the other hand, was not destined to practice similar industries, and so it was not provided with a hand and fingers similar to a human's. Because some animals, like wild animals, are carnivorous, they were provided with slender, close-built hands with claws or talons adapted to the catching of preys, not for industries. This is so in carnivores; herbivores, on the other hand, are destined not to catch other animals, nor do they have an industry; and so some have hooves that protect them from the roughness

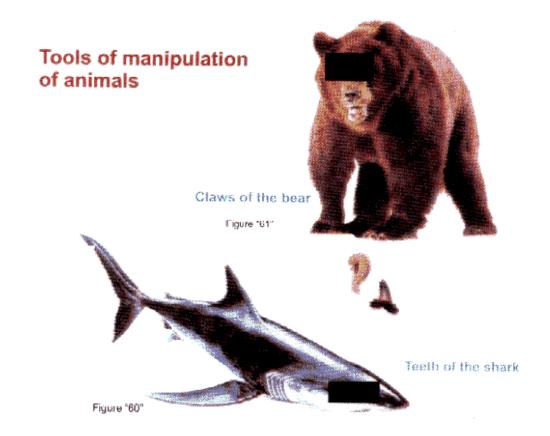
of land while they are roaming the meadows grazing; some have close-built hooves with an arch like human feet, so that they may be placed on the ground; they are destined to carry and transport, and do not need claws or canine teeth for obtaining food, and so they do not have them.

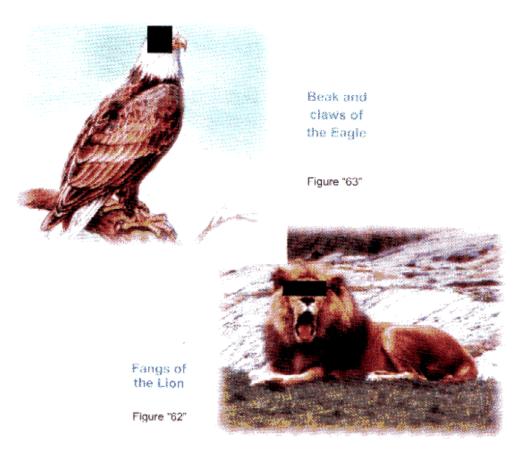
Providing canine teeth and claws

Consider the creation of carnivorous animals, the wisdom embodied in their having sharp teeth, strong claws and large mouths. They have been provided with arms and tools that are adapted to catching preys and eating. That is why you see the birds of prey with sharp beaks and talons like hooks. That is also why the Prophet 🖔 prohibited eating all beasts with fangs and all birds of prey2, due to its being offensive, aggressive and destructive. As an eater takes on qualities from the stuff he eats, man would take on the traits of the birds of prey were he to eat their meat, and would be aggressive and destructive like them. That is why the Muslim ummah (nation) is forbidden to eat that flesh. The hyena, on the other hand, though having canine teeth, is not forbidden to eat, as it is not considered by any nation as a predator: prohibition is confined to animals two qualities of having fangs and being a with the predatory animal. It is not said that this is conversely applied in the case of predatory animals without fangs, as they are absolutely non-existent.

May peace and blessing be on the Prophet who spoke with concise statements, who made plain the teachings and expounded the permitted and the prohibited.

² As in a tradition reported by Muslim and Ahmad, among others.



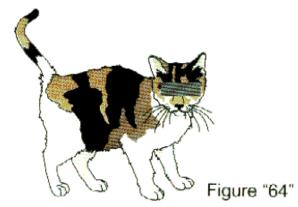


The wisdom of commandment and the wisdom of creation

Reflect on the wisdom of the Almighty Allah in His creation and commandment, in what He created and in what He decreed; and you will discover in all that a great source of wisdom that speaks of a foolproof system that never fails, nor does it have any loophole. Some people perceive the wisdom of commandment more than they notice the wisdom of creation - these are the select among Allah's servants, who have well comprehended what Allah ordained of injunctions and religion, and realized His wisdom in what He excelled in designing. Their minds and intellect testify that the basis of what they see is deep wisdom, mercy and benefit for the humans in their worldly and hereafter lives. This class of people, however, are of countless levels that only Allah can reckon. Some humans notice the wisdom of creation more than they notice the wisdom of injunctions, and of this class are the majority of physicians who dedicate their thought to the extraction of the benefits and uses of animals and plants, their potentials and what they can serve, individually and in combinations. Their share in perceiving the wisdom of commandment is equal to or less than the jurists' share in perceiving the wisdom of creation. Another class are blessed with noticing creation and commandment in accordance with their potential and ability: They notice in what they see the exceeding wisdom that overwhelms minds; and as they observe creation and the many aspects of wisdom it implies, they increase in faith, knowledge and endorsement of what messengers taught. When they consider His commandments and the exceeding wisdom they imply, their faith and submission to the Lord are increased. They are not like those who have been blinded to the Maker by what He made, or blinded by the stars from realizing the star-Maker; those whose vision is blinded, who are barred from the Lord with a thick veil. If these last-mentioned put their knowledge good use, they would be among the most staunch of believers, having witnessed Allah's wisdom, His most stunning signs, the wonders of His craft that point to Him, to His knowledge, power, and wisdom that is not available to others. It is, however, of Allah's wisdom that the minds of the majority of this group do not avail their privileged place; they are barred from knowing Him, are stopped at the external aspect of the worldly life, unmindful of the hereafter. These minds are unworthy of being acquainted with Him, His names and Attributes, and the secrets of His religion and legislation, being of base interests, mean and petty. But bounty is in the Hands of Allah, and He extends it to whoever He wills, for Allah is the expender of great bounty. But in this regard, what humans have access to is infinitesimal as compared to what is hidden from them. Indeed, what each and every single human has acquired of knowledge, relative to what they ignore, is equal to the sip of a little bird, relative to the sea. But even so, this is no reason for turning our backs to what we can learn and being desperate about it: a thinking human will find in what he perceives an indication of what lies beyond.

The legs of animals

Consider also the legs of animals and the great wisdom they represent. How the Lord destined that they are in pairs, two or four, not odd. An animal can walk and run, and in this way can go about its interests, which would not be possible had its legs been odd. A walker lifts some legs and supports itself on others; a biped animal lifts one leg and supports itself on the other, and a quadruped lifts two and supports itself on the other two, the two on the opposite side, because if it were to lift two legs on the same side and support itself on the other, it would not be steady on the ground at the moment of lifting its legs, and it would be hopping like a bird, which is harmful and tiring to the animal, though not to the bird. It is clear that if man walks this way for some distance he will be exhausted and fatigued, unlike his normal walking which is the appropriate way for him. Wisdom has determined that he moves his right arm with his left leg and holds back his left arm and his right leg, then he shifts to the other side, which is the easiest and most convenient way of walking for the biped.



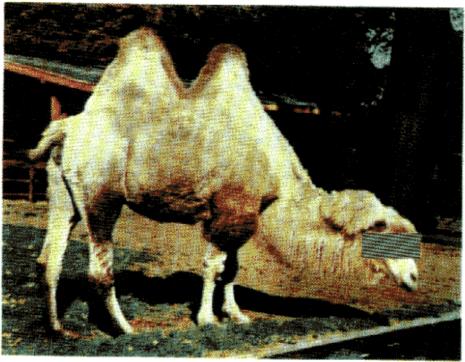


Figure "65"

Bactrian Camel, with two humps

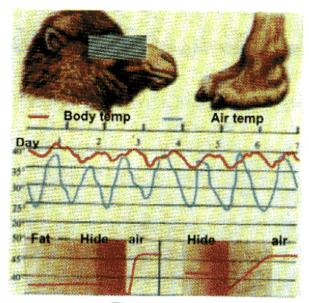


Figure "66"

The engineer beaver

The dwelling of beavers is a marvelous achievement in both architecture and execution. The beavers take a long time and spend a lot of effort to build a dam across a stream or river which they have selected for their habitation; they need a stream that is deep and clean. They first cut some trees with their sharp, incisive teeth; then they drag them or float them to the appointed spot, where they fasten them. Once the framework of the dam has been built, it is filled with pieces of boughs, rocks and mud. A beavers' dam can be as high as three and a half metres, and as wide as thirty metres.

After they have accomplished building the dam, and water has risen to the suitable depth, beavers build their distinctive habitations; they make islets in the water, surrounded with the deep water, barricade them with a fence, and build over them a roof of twigs and mud. When the weather is freezing, as happens in Canada and northern Europe, where beavers live, the habitation is frozen; in this way it hardens and radiates warmth on the inside. As for the entrances to the habitations, they are provided through bores below water. Such habitations are very secure against the assault of enemies.

The backs of animals

Regard also the deep judgement behind having the backs of transport animals level like a roof built on columns, which is convenient for riding, and for carrying loads. Camels, in contrast, are different, for their backs are humped, having that arched form; for they are designed for extra heavy loads and are provided with special strength. It is known that domes endure weights that level roofs do not endure – it is even said that the idea of making domes came from the backs of camels. Observe also that as the camel is provided with long legs, its neck is also made correspondingly long, so that it can reach grass while the camel is standing. The camel would not have been able to graze if its neck were short. Another reason its neck was made long is that its length balances the burden on the back once the animal starts to go ahead. The situation is somewhat similar to the one you see in the length of the bar of the bar-scale – it is even said the bar-scale was invented in imitation of the camel, by observing the length of its neck and the weight of its burden: you see how it extends its neck as it goes ahead with the burden, as if it were deliberately balancing it.

Men's coat and Animals' coat

Consider how the bodies of animals of lower species have been covered with that hairy, furry, woolly skin; how birds have been covered with feathers, and how some animals have been provided with a strong and tough shell, like the tortoise ³; some have feathers that are like spears; and see how in every case the covering is adapted to the animal's need for protection from heat, cold, and from enemies that seek to harm it. Since animals are unable to obtain clothes, manufacture garments and coats of arms, they have been supplied with clothing and covering that are permanent, with tools and arms that they can use in self-defense, with hooves, pads and cloven feet in place of shoes and sandals, so that they have their permanent shoes and drinking vessels. The horse, the mule and the donkey were

³ The Florida tortoise is said to smell the smoke of a fire at a long distance; and since it is very slow-moving, the Almighty Lord guided it to what ensures its safety: it digs a hole for itself, and lets the blazes go above its shell-covered back without being harmed.

privileged with hooves because they were created to trot, run and race; hooves are also used as weapons, in place of talons, claws and fangs, when these animals want to revenge themselves against their adversary. Reflect, then, on this kindness and mercy: since they are dumb animals that are senseless and have no hands that are adapted for manipulation and defence, and have no share in what humans have of fabrication ¹, knitting and subtle skills, they have been provided with their natural cover, so that it accompanies them as long as they live; and have been provided with weapons and tools that help them defend themselves, so that they can fulfill the wise purpose of their creation.

As for man, he has skill and a hand that is adapted for industry, so it can knit and spin; he can wear apparel that he can change at will, and that is advantageous in several ways:

- He can rest once he has put off his clothing, and can later put it on when he likes; he is not obliged to wear it all the time.
- He can choose different clothing for summer and winter, as the summer's clothing is unfit for winter, and winter's clothing unfit for summer; so man can use in every season what is suitable in it.
- His clothes are chosen to suit his taste and pleasure.
- He can enjoy the various fashions of clothes in the same way that he enjoys various foods. His clothes have been left to suit his choice in the same way as his foods are. He chooses what he prefers of fabrics, some from plant

There is, in fact, a species of birds, called the tailor, which builds its nest from two tree leaves, which it pricks with its beak, then uses twigs or leaves of grass as a thread to sew them, the way a tailor sews clothes.

origin, like cotton and linseed; some from animal origin, like fur, wool, and hair; some from insect origin, like silk; and some from metals, like gold and silver. Such wide variety is open to the human so that he indulges in his pleasure and gratifies his wish for adornment and pruning. That is why the paradise dwellers have their clothing separate from their bodies, clothing that can be worn and removed at will, the same way as it is in this world; not part of their bodies, as is the case with the animals; and this proves that this arrangement is the more favoured, superior, and more generous blessing.

- Clothing is a distinguishing mark that sets man apart from the lower animals, in the same way that the Lord distinguished man in nutrition, dwelling, expression, mind and comprehension.
- Apparel and body-covering vary in accordance with the variety of situation and occasion; as dictated by industry, peace and war, settling and travelling, health and illness, sleep and wakefulness, and luxury. For every aspect of these, a distinguished apparel and body-cover are used, peculiar to it, adapted only to it. There is no apparel that fits all those aspects, that does not vary with the variation of situation. In this, man has been honoured and raised above all other animals.

The faces of animals

Regard now the exceeding wisdom represented in the particular shapes of the animals' faces. Observe how the eyes are in front of the face; that enables an animal to see in front of it more than any other direction, which helps it protect itself and its rider, avoid running into a wall or falling down a hole. Animals' eyes are in a position similar with that of a standing person, because eyes function as scouts of the animal. Their mouth is a slit below the nose, which helps them bite and hold the fodder. If it were at a

level with the nose and above the chin, as it is in man, they would not be able to pickup anything with it from the ground: do you not see how man picks up food with his hand not with his mouth? As an animal does not pickup its food with its hand, its mouth is a cut at the bottom of the head, which enables it to put it onto the fodder, pick it up and then masticate it. Its lips are like man's, but adapted to its particular needs; they help it reach things near and far. The functions of the tail are a mystery to some people; they do not perceive any of its many advantages. It is in fact like a lid over the anus and a covering to the animal's genitals, covering them and hiding them. In addition, the line along an animal's belly, between the anus and the upper part, is a filthy place, where flies and mosquitoes swarm and annoy the animal; and the tail performs here the part of a whisk or a fan that scares the insects away. Another function is that a beast has relief in wagging it to the right and left: It stands on all fours, and its legs are busy carrying the weight of the body, so that they cannot budge or shuffle, and hence it find relief in wagging the tail. There might be, besides, that humans' minds fall short of other functions discerning, and the reader might deny them unless he sees them at the critical time; there is for instance the animal's wallowing in the mud, when nothing helps to get it out more than taking it by its tail.

The multiplicity of animals

There is also a very curious wisdom associated with domestic animals, wild animals, predatory animals and animals in general: that you do not see anything of the remains of their dead despite their great number. They are not so few as to be hidden from sight; scarcity is definitely not the cause. They are said to be more numerous than humans. You may take example from what exists in the wilderness, antelopes, deer, cows, wolves, tigers, all kinds

of reptiles and insects in their abundance, the many species of birds which are many times as numerous as humans; but you hardly ever come across their carcasses in their dens, habitations, burrows or meadows; along their tracks, near their drinking-places, hiding places or resorts, or places of ambush; except if any of them gets assaulted unprepared, devoured by a wild animal, or shot by a hunter, in a way that it does not have the chance, nor any of its group, to hide itself at death, to have its carcass concealed. This is a proof that when an animal feels the approach of death, in contrast with sudden demise, it lies where no one can reach its body, and buries its body before death occurs. Otherwise, the desert would be filled with the carcasses of dead animals, the air would be polluted with them, and they would be a great source of trouble to people and a plague would spread among mankind. It is in relation with this that the Almighty recounts in the course of the incident of the son of Adam:

﴿ فَبَعَثَ اللَّهُ غُرَابًا يَبْحَثُ فِي ٱلْأَرْضِ لِيُرِيكُم كَيْفَ يُوَرِف سَوْءَةَ أَخِيدٍ قَالَ يَنُويْكُنَ أَعَجَزْتُ أَنَّ أَكُونَ مِثْلَ هَلَذَا ٱلْفُرَابِ فَأُورِي سَوْءَةَ أَخِيٍّ فَأَصْبَحَ مِنَ ٱلنَّادِمِينَ ﴾ [المائدة: ٣١]

"Then Allah sent a raven scratching up the ground, to show him how to hide his brother's naked corpse. He said: Woe unto me! Am I not able to be as this raven and so hide my brother's naked corpse? And he became repentant." (5: 31)

As for animals that live with humans, like the cattle and sheep and transport animals, they do not behave the same way as wild animals, because the human skill is involved here which is man's ability to ward off harm from these animals. This should give you food for reflection, how this behaviour that humans sometimes fail to apply properly, defending what is entrusted to them, is part of the instinct of animals, and see how birds can teach it to humans.

Consider, then, the wisdom of the Almighty embodied in His sending to the son of Adam the raven (whose name in Arabic 'ghuraab' indicates the estrangement of the murderer from his brother, his estrangement from Allah's mercy, his estrangement from his father and family, his evading of them and their evading of him). The raven is a bird that humans shun and they shun its croaking; it annoys them. The Lord sent that particular bird to be a kind of teacher and tutor to the son of Adam, and the latter was here a kind of learner and pupil. That we associate here the name, ghuraab, to the wisdom embodied in it should not be disputed; one may cite in this connection the Prophet * when he said:

"If you send me a messenger let him be agreeable in looks, agreeable in name." He used to ask about the name of the land that he decided to stop at and the name of the messenger sent to him. When Suhail bin Amr was sent as negotiator during the Hudaibiah clash the Prophet \$\mathbb{x}\$ said addressing the Companions:

"Your affair has been made smooth" (referring to the name of the envoy Suhail, meaning in Arabic facilitation).

² Rated by Al-Albanee to be an authentic tradition in view of the collective routes of reporters, as in "Al-Saheehah" (3/281, tradition 1186).

Reported by Al-Bukharee (5/331).

When he decided to change a man's name from Hazn (rough) to Sahl (easy) he said:

"The meaning of his name will always remain with him and his descendants."

Umar bin Al-Khattab once asked a man about his name, his father's name, his home and where it was. The man said his name was Jamrah bin Shihaab (Arabic: Cinder, son of Comet), that his home was called That Ladha (ablaze) and that it was located in Hurqah (burning). Umar's response was: "Go home at once, for it is on fire!" And indeed it was so.5 There are in fact more instances in support of this observation than is fit to list here, which is a very curious and interesting phenomenon, that of the correspondence or associations of names and the name-holders. People have been obsessed from the oldest times with the cawing of crows, associating it with estrangement and separation, associating it to bad omen, fleeing from it and inducing others to flee from it; in a way it was fit that Allah should send this particular bird to the murdering son of Adam; it is a reminder of the augury that every human being will have fastened to his neck on the Day of Judgement. It should not be assumed that the sending of the crow was just a coincidence without any good reason. If the wisdom of such deeds slips one's mind, he should not assume that it is nonexistent. It should be realized that the imperceptibility of the wisdom is just a proof of its subtlety and refinement. The Almighty Allah has so many aspects of noble wisdom, often glaringly conspicuous, that humans fail to perceive.

The mercy of animals

Regard first the quadrupeds. See how their young follow the mothers walking, not being in need of carrying about and not needing constant care as in the case of human

⁴ Reported by Al-Bukharee (10/574)

⁵ Reported by Malik in his Muatta'.

babies. Since the mothers of lower species do not possess what the human mothers possess, the skills of care, soothing, and showing kindness, and the natural and manu- factured devices, the Gentle and Knowing provided the animal offspring with independence and self-reliance soon after birth. You see how the babies of many birds, like poultry, pheasants, and soft-feathered eagles, walk and pick up food as soon as they come out of the egg. As for those that come out weak, the Lord, in His Providence, gave their mothers more affection, compassion and care, so that they masticate food and then bring it out from their draw and insert it in the mouths of the babies. It is stored in the safest place and then brought out through their mouths into the mouths of the fledglings. They go on doing that until the fledgling grows enough to rely on itself. All this is fortunate for these animals, although the collective mercy of all animals is part of the one hundredth share of mercy that the Lord allotted to living beings in this world 6 Once it gains independence and develops the ability to fly, its parents continue to train it to improve its ability most carefully, and they do that most kindly and willingly, until it is able to leave its nest, and get its food, and eat from where they eat. At this point they send it off from the nest as if they never knew it, and it never knew them; they no longer allow it to share their habitation or their food, but rather let it know in a language that it can

The author is referring to this tradition:

[﴿]إِنَّ للهِ مِائَةَ رَحْمَةٍ أَنْزَلَ مِنْهَا رَحْمَةً وَاحِدَةً بَيْنَ الْجِنِّ وَالإِنْسِ والْبَهَائِمِ، فَبِهَا يَتَعَاطَفُونَ، وَبِهَا يَتَرَاحَمُونَ، وَبِهَا تَعْطِفُ الْوَحْشُ عَلَى وَلَدِهَا، وَأَخَّرَ اللهُ تِسْعًا وَتِسْعِينَ رَحْمَةً، يَرْحَمُ بِهَا عِبَادَهُ يَوْمَ الْقِيَامَةِ».

[&]quot;Allah has divided mercy into one hundred parts, one part of which he allotted to the Jinn, humans, animals and beasts. It is by this that they have affection among each other; it is by this that a mother animal has mercy for its baby. The other ninety-nine parts of mercy Allah has reserved to have mercy on His servants on the Day of Judgement." Reported by Muslim (6840).

comprehend: "Find yourself perch and food, for there is no longer a perch or food for you here."⁷

So ask the denier about this: Is it all haphazard? Who inspired them to behave like this? Who made them have all that affection for the baby-birds when they were quite young and in vital need of the parents' care; and then withdrew that sentiment exactly when the fledglings were able to do without their mother's care, and the mothers badly needed relaxation from that exertion and to be able to look after their interests? If the mothers had to continue giving the same care to the fledglings, that would cause them harm, would distract them from striving to take care of their own life, considering the great deal of food their young need; the Lord inspired them with affection, compassion and selflessness out of mercy for the fledglings, and withdrew that later out of mercy for the mothers. Can all this be without the disposition and care of a Wise Disposer? Can it be without the compassion of the Almighty Lord? There is ample evidence of His Lordship, proofs of His Divinity, indicators of His Wisdom, and signs of His Power, in a way that no mind can rationally deny. It is only an outward denial when any stubborn miscreant denies. It is well expressed in the Qur'an:

"Can there be doubt concerning Allah?" (14:10)

Doubt is legitimate in matters whose proofs are vague and the evidence is debatable; but in the case of the One Lord there is a proof, even proofs, in every concrete or abstract thing, that confirm and assert that He is Allah, and there is no true god but Him. So how can there be doubt concerning that?

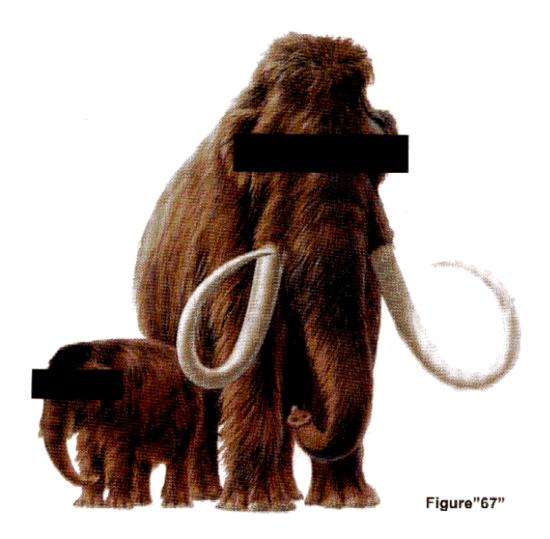
babies to secure their survival, sacrificing their own life.

The penguin's parental sentiment is also prominent in the behaviour of one of its sub-species called 'the emperor', in such a degree that penguins that have no babies fight among themselves to adopt a baby.

There is also a kind of geese that, when they cannot find food for their babies, they pore their own entrails with their beak, to cut from them food for their babies to secure their curriival sacrificing their own life.

The elephant⁷

Regard now the trunk of the elephant and the amazing aspects of wisdom it embodies. It does for the elephant the work of a hand by collecting fodder and water and delivering them inside. Without that,

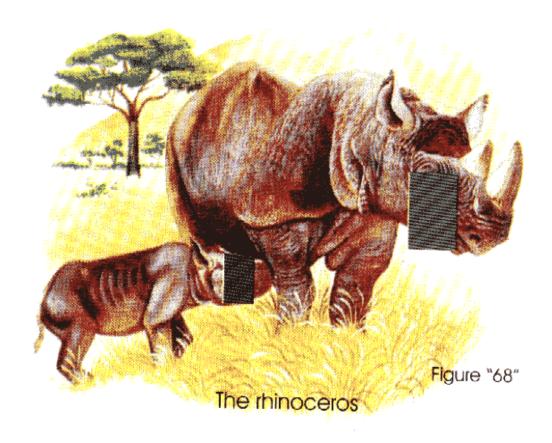


Ancient, extinct type of elephant

⁷If two elephants meet at a certain place to eat, they do not fight, but on the contrary they greet each other by each lifting its trunk high. After they have finished eating, each raises one of its front legs, and bows to the other. (Quoted from: 'Instinct or Divine Will?')

it wouldn't have been able to obtain anything at all from the ground: it does not have a long neck to reach the many other animals, and so the trunk like performs for it the job of the neck, an efficient replacement of it. The Lord enabled the elephant to lower it, raise it, fold it, and do with it whatever it likes. He made it to be a hollow vessel, smooth to touch; it catches with it what it needs, delivers with it what it wants to its mouth, holds inside it what it likes, and can cause harm with it to anyone if it wants; it gives with it, and collects what is offered to it. So ask the denier: Who endowed the elephant with this compensation? Who replaced for the organ it missed with something that can do its job? Who but the Compassionate? Who but the Merciful to His creatures; Who takes care of their needs, who is Kind to them? How can this happen if it were a universe without a Power to take care of it, a universe without its Tender, its Originator, Creator and Maker? There is indeed no true god but the Most Mighty the Wise.

To the question: Why did not the Lord provide the elephant with a neck like the rest of animals? What is wise about that? The answer is - though it is Allah who knows the wisdom of His handicrafts - because its head and ears are of such huge mass and heavy weight, that if it had a neck like most animals, it would soon be exhausted with the weight it carried and would not endure it. So the Lord had the head attached directly to the body, so that it does not suffer and struggle with the weight it bears; He created for it, in place of the neck, that long trunk with which it can pick its food. In contrast, as a camel's neck is long, for good reasons, its head was made small relative to its bulk, so that it does not exhaust it and tire it. So glory be to the Him, whose acts of wisdom are beyond the reckoners and the comprehension of calculation of thinkers.



The diversity of creatures points to the wisdom of the Maker

Our sheikh Abul-Abbas Ibn Taymiyyah, may Allah bless his soul, was once asked about a donkey that mated with a mare and impregnated it, would the mare's milk be legally permitted or prohibited to drink? ⁸ His answer was that it was permitted, since the male's part is not recognized in this case, unlike the verdict in the case of humans: the

The question is justified, since the horse's meat is permitted to eat, as supported by authentic traditions of the Prophet, while the meat of domesticated donkeys is prohibited to cat.

mare's milk is the result of fodder, so that it is formed from the mare's flesh, and the male donkey's mating had no part in the formation of the milk; there is nothing forbidden that applies to the milk. In the case of humans, on the other hand, the male's part is recognized in the milk, as breast feeding is a reason for the banning of certain marriages. In the present issue, no prohibition is transferred through the male except to the baby itself, since both parents are responsible for its formation, and so a baby donkey is equal to the parent in being prohibited to eat. The milk is not the consequence of the male's mating, but results rather from fodder, and so it is not prohibited. That is the purport of the sheikh's argument.

Our purpose here is to refute the claim put forth by many that the giraffe is the outcome of the mating of many animals which meet at the places of drinking such claims are a lie about the giraffe and a lie about creation. To refute this lie, one only needs to observe that when the male donkey and the mare mate, or the wolf and the she-hyena, or the sheep and the she-goat, there will not be in the offspring an organ from the father and another from the mother; not like the giraffe's having an organ similar to a horse's and another similar to a camel's; it is rather a mixture and compromise of the two, as you see in the mule: its head, ears, back, and hoofs are midway between the organs of its father and mother and a joint outcome of both. Even its braying is a mixture of the horse's neighing and the donkey's braying. This proves that a giraffe is not the descendant of parents of different species, as is assumed by some. It is rather an exquisite creation and a wonderful making, a creation of Allah, Who originated it, as a sign and an evidence of His power and wisdom which is without limit; so that His slaves should witness that He is the creator of various animals, Who diversified them as He wished and made them in the shapes He willed. Some are symmetrical, with balanced

organs, some are asymmetrical, with different shapes, structures and looks. Similarly, he shows His servants His perfect power by creating the human species in four different ways, which point to their being created by the Lord's power and will and their being subordinate to Him. The four divisions are as follows: the human who was created without male or female, the father of the human species; the one created from a male without a female, the mother of humans who was created from a rib of Adam's; the one who was created from a female without a male, Jesus son of Mary; the one who was created from a male and a female, all the rest of human beings. He is thus showing His servants His signs and revealing Himself to them with His favours and power, that if He wills something to be He will say: Be, and it will be. Why the giraffe has that long neck is, according to those who observe its life and living place, because its home and grazing place is among tall, extremely tall trees; by having a long neck, the giraffe can reach the ends of branches of those trees to eat of their leaves and fruits. This is the extent of what those people know, although the wisdom of the Gentle, the Knowing is far deeper and superior to that.

The animal and tricks

It is an amazing instance of the smartness of animals that if the fox fails to obtain food, if it does not succeed in catching a prey, it fakes death and bloats its belly, so that a bird thinks it is dead and alights on its body to eat of its meat. Then the fox suddenly pounces on the bird and catches it. Another remarkable trick is that the giant fly called 'the lion-fly' when it sees that a fly has alighted nearby it, it stays motionless for some time, as if dead, until it thinks that the fly is content and no longer pays attention to it; it creeps softly, until it is close enough to have the fly within reach, and then it jumps on the fly and catches it.

One amazing trick of the spider 9 is the queer net it spins as a trap for hunting, inside which it lurks, until some gnat or fly falls in it; then it bounces at it and sucks its blood. In this we have the origin of catching by snares and nets; at the same time, the practice prior to the last is the origin of catching with dogs and leopards. One should not underestimate the lesson drawn from the bug and the mosquito, as the most precious lesson can be adopted from the humblest facts. To despise such lesson is the practice of those whose minds were outraged by Allah's setting for example the fly, the spider, the dog, and the donkey, about whom the following verse of the Qur'an was revealed:

[البقرة: ٢٦]

"Lo! Allah disdains not to coin the similitude even of a gnat." (2: 26)

Many rich morals can be drawn from the life of those animals which you despise and underestimate! Many a sign in them exists about the Creator's kindness, mercy and wisdom. One may well ask the denier: Who inspired them with those tricks and subtle ways of catching their preys, which is their sustenance? Who

There is a subspecies of spiders that bores for itself a vertical hole, and makes for it a door from its saliva, that it mixes with mud, so that the door is several layers, alternating silk and mud; then it digs a secret entrance to this hole, covering it with another door. If attacked, it enters the hole through the secret entrance, and closes the door behind it, so that the enemy finds nothing when it searches. So glory be to Him who taught the animal! There is also a subspecies of crab, called 'spider of the sea', which has its peculiar way of camouflage. As it moves along, it picks up things that happen to be on its way, and carries them on its back to camouflage itself. If placed in an aquarium with pieces of sponge, it uses a piece of the sponge to cover itself. If transferred to another aquarium with green herbs, it throws off the sponge, and replaces it with herbs. If it is transferred to a third aquarium with red herbs, it again throws off the green herbs and replaces them with red ones. In all these tricks, it seeks to take on the colour of its environment.

provided them with those tricks as a compensation for their lack of strength and ability. Who but the Gentle, the Knowing compensated them with cunning for their lack of strength and ability?

How birds fly

Regard now the shape of a bird's body. Since it was destined to fly in the air, its body was made light and streamlined; it was provided with two legs not four, its fingers were made four not five, and its outlets for urination and excretion were united into one for both. Its chest was made narrow to enable it to penetrate the air wherever it turned, in the same way that a ship's bow is narrow11, to split the water easily and slide through it. Some of the feathers of a bird's wings and tail were made long and strong in order for it to rely on them for taking off; and its whole body was covered with feathers, so that the air should penetrate through them and lift it. As its food was destined to be meat and grains that it swallows whole without chewing, it was not provided with teeth, while it was provided with a solid beak that helps it pick its food, without cracking from picking grains, or breaking from munching meat. As it does not have teeth, and swallows the grains whole and the meat raw, it was provided with extra heat in the belly to grind grains and process the meat. Because of this heat, it can do without chewing. To compare the high temperature that the bird has been provided with, you need just observe the seeds of raisins and such things as they come out of the human body whole, while they are disintegrated in the bird's belly in a way that they completely lose their texture. Another aspect of wisdom is that the bird, rather than delivering a baby, it lays eggs, so that it can fly. If it were to conceive a baby, and it would remain inside its belly until the end of

And so is the nose of a plane and a rocket.

its term, the female bird would be big with the extra weight of pregnancy and prevented from flying. Regard, too, how great is the mercy of inspiring the bird, which is usually a roaming flying creature, with patience after laying the egg, opting to sit still on the egg ¹¹ until it incubates, enduring the difficulty of detention. After the chicks have come out, it bears the hardship of picking for them, and then gathering the grains in its craw, later to insert them in the mouths of its chicks – although it does not have reflection and foresight of the future, like a human, to expect from its offspring assistance, loyalty and gratitude. This well illustrates that the bird is made to have this compassion for the chicks for a purpose that it itself does not realize, nor does it reflect on the continuation of the species.

The egg

Think about the egg, its thick yellow yolk, and its thin white; the former being the matter from which the chick develops, and the latter for its nutrition until it comes out of the egg. Reflect on the implication of this: as the chick is to grow in that enveloped shell where nothing can reach it from outside, it is provided with nutrients that will last it until it comes out.

Allah has created a bird's wing as a miracle that bewilders thinking minds, combining lightness, strength and flexibility.

Tell me, then, Has man ever built a plane that accomplishes this level of engineering sophistication?

A hen sits on the egg for 21 days. Not only that, but it turns the egg every day for the fetus to mature, so that the egg would not crack before that, and so that the vessels of the chick at the bottom should not puncture, if they remain at the bottom of the egg.

Man learned to apply this method only from imitating the hen; he learned to turn the egg over, to produce chicks in his man-made incubators. So glory be to Him, who taught the animal, so that it taught man!

The diversity of the feathers of the wing is designed to fit the different functions feathers must fulfill. Some feathers, the side ones, are designed to help a bird rise to a higher altitude; some are designed to cope with sudden maneuvers; and so forth. A bird might dispose of some of its feathers while flying to maintain balance; it may spread some to counter the turbulence of air currents.

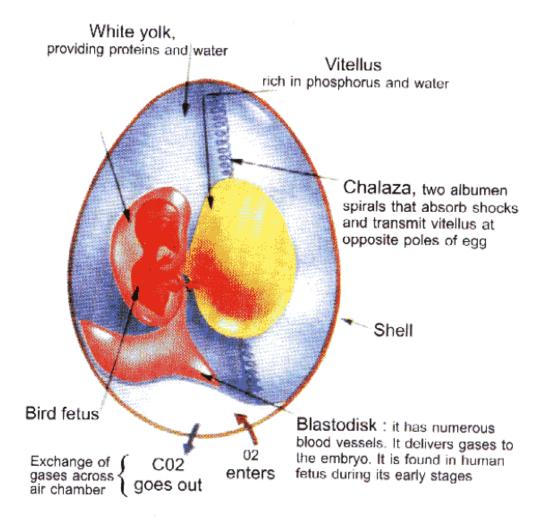
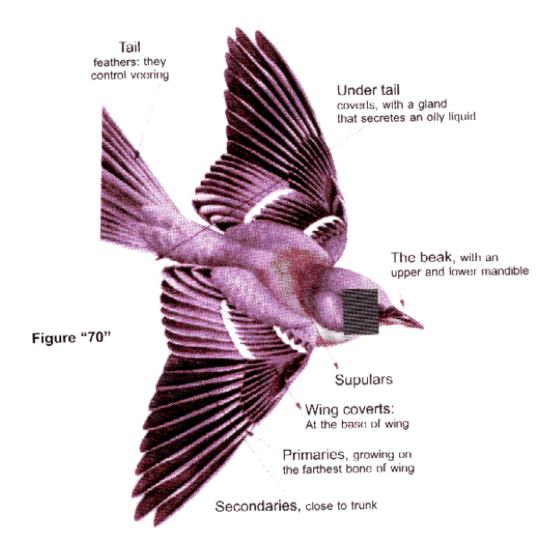


Figure "69"



The giraffe 12

Consider now the case of the giraffe, its different organs, and their resemblance to various animals: its head resembles a horse's, its neck a camel's, its hooves a cow's, its skin a tiger's; this has led some to the claim that it is a hybrid resulting from impregnation of a female animal by several males of different species. They say that various

When the giraffe is surprised with a possible danger from some fierce animal it resorts to a wood of thorny bushes that does not harm it, because of its long legs, while it ensures its escape.

land species come to drink at the same place, and that the wild male animals mate with domesticated ones and the outcome is this mongrel, which is like a human crossbred that is the hybrid of different humans. In my view, a person who makes such a claim is lying about the giraffe and lying about the creation. Animals do not impregnate females of different species: the camel does not fertilize the cow, nor the cow the she-camel, nor the horse the cow or the camel, nor vice versa, nor do other beasts or birds do that. It is true that some similar species do mate with their closely related species: the wild cow and the domesticated cow; the sheep and the goat; the horse and the donkey; the wolf and the hyena, when the mule, the mongrel sheep-goat or wolf-hyena result.

Some jurists' discussion of what 'zakat' (poor due) should be levied on the hybrid from a wild and a domesticated animal is pointless in most cases. In the cases when it happens, there will be certain regulations about the resultant animals connected with zakat, the retribution for hunting, and sacrifices. In every one of these regulations precaution should prevail: in the case of sacrifices, a mongrel does not fulfill the requirement; in the case of the person in a state of ihram, and in the area of the haram (Makkah), retribution should be imposed; in the case of animal foods, prohibition should prevail; as for zakat, there is a well-known debate.

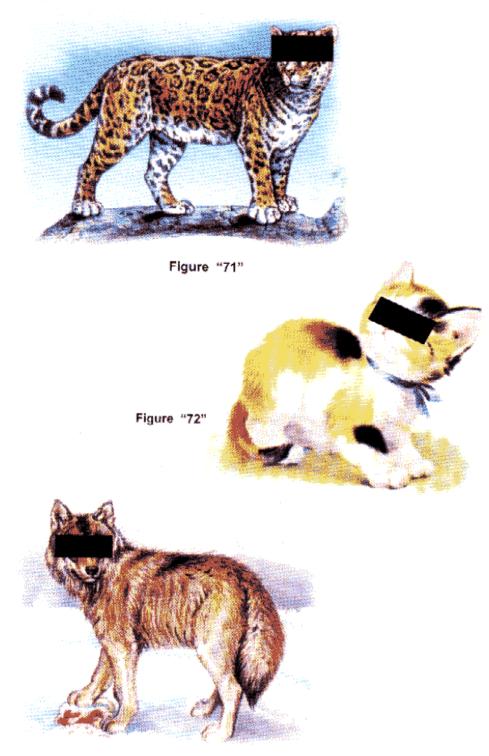


Figure "73"

Allah has endowed animals with sharp teeth and claws to defend themselves and to attack their prey

Bird's craws

Regard also the wisdom embodied in the craw of the bird and the functions it performs. The passage to the stomach is quite narrow, and only a little food can reach it. If the bird could not pick a grain until the previous one had reached the stomach that would take an unduly long time. When would the bird in this case finish its meal especially as it out of caution only snatches its pickings. The craw is provided so that it can use it as a pannier in which it temporarily stores the food it has picked in haste, and then it can take its time to transfer the swallowed food to the stomach. The craw has also another function, as some species of birds need to feed their chicks chewed bits, and so they find the craw handy to regurgitate the food fast.

Birds' feathers1 and the diversity of their colours

Reflect then on the widely different colours, hues and shades of many species of birds, like the peacock, the pheasant and others, which would beat the beauty and precision of any human art, no matter how carefully and finely painted. How can nature produce such exquisite art which no human art can match?

Observe the peacock's colour and its intricacy! You can see that it matches the weaving of very delicate fabric, woven from very thin threads, and spun together, in the way a thread is intertwined with thread, or hairs with hairs. Try to pull apart the fibres of a feather, and you find that they spread bit by bit, hardly admitting even the passage of air. They are designed to carry the bird in its

The Almighty in His Power created the duck with feathers that do not get wet. This is made possible by the fat glands surrounding the roots of feathers, which lubricate the duck's feathers. You often notice the duck on the bank tidying its feathers with its beak, when it is in fact reaching with its beak for some of the fat glands near the tail to use the fat for rubbing parts of the feathers on its body.

flight, and you see in the middle of the fibres a strong stout column, overlaid with that mantle that resembles hair to give it firmness with lightness: this is the mid-rib in the middle of a feather; it is hollow, filled with air to allow the bird to float in the air. What nature could have that wisdom, knowledge and kindness? Even if it were nature that accomplished these wonders, as they say, that would be a compelling proof and convincing witness of the Power, Knowledge and Wisdom of its Maker and Originator. The proof the denier uses to deny the Lord is in fact a strong proof and sign that increases the believer in faith. The truth is that by the same signs of Allah, He misleads whomsoever He wants and guides whomsoever He wants.

Some birds' long legs

Observe this bird with long legs,² and try to discover the benefit of the length of its legs. It seeks food in shallow water, and it stands on its legs like a forecastle upon a boat, peering on the creatures that move in the water; when it sees something that suits its need, it moves softly until it catches it. If it were short-legged and moved in the water towards the prey, its belly would touch the water and disturb it, which would scare the prey and drive it away. The two columns it was provided with help it achieve its purpose, and not ruin its attempt. In every bird balance is maintained between the length of legs and the length of neck to help it pick up its food from the ground. It may be helped in addition to its long neck with the length of its beak which makes it even easier and more handy to obtain its quest.

²The stork with its long legs flies in the winter for about 6 thousand kilometres from Germany, Holland and Austria to the middle and south of Africa seeking locusts, its food of choice. (So who guided it to travel those vast distances to do that?)

Seeking a living

Look at birds seeking their food throughout the day; they neither fail to find it, nor find it gathered and ready. They rather find it by searching and seeking in different directions and places. So, glory be to Him who created the food and put it within reach! See how He did not make food too hard for birds to obtain, while He willed at the same time that they need to strive to get it. See how He made it fairly available to them at all times and everywhere; they find it even in walls, in ceilings and on roofs. They pick it at leisure, not challenged in their pursuit by other species of birds. If all the food they needed were gathered in one place, all ready to be picked, they would all converge on it voraciously and greedily, not giving up even after they had their fill, until they were satiated and killed themselves with overeating. 3 This is so with humans too. If their food were made obtainable without the least effort or toil, that would be conducive to avarice and greed; mischief would spread, vice and extravagant behaviour would abound. So glory be to the Gentle, the Knower, Who did not create anything in vain or without good reason!

The multiplicity of insects

Observe those nocturnal flying creatures, the owl, the bat and similar other animals. Their food is found in the air; it is not grain or meat, but mosquitoes, moths and such flying creatures. They snatch of those what they need and then seek shelter at their habitation, not coming out except by night; because those mosquitoes, moths and the like are spread everywhere, and there is hardly a place

³Migrating birds travel seeking food over continents and go on flying for weeks; man just wonders where and how they sleep. To unravel the mystery, some scientists fixed tiny devices on some of these birds. They found that the birds take turns in sleeping, while staying with the flock that goes on in its journey that takes ten days.

devoid of them. To confirm this, put a lantern by night on a roof or a yard, and you see swarms of such insects flocking to it. Creatures likes bugs and moths are low of wit, not much capable of fending for themselves, the least gifted in this respect of all flying creatures and the most foolish - you have a manifest evidence of this in their flinging themselves in the fire even if you try to scare them away until they get burned to death. So the Lord made these creatures food for those birds, which come out by night in search of those insects, and feed themselves on them. During the day, they confine themselves to their habitation. For them, night is like the day for other birds, and their day is like the others' night. Even so, He Who undertook to give all creatures their living sends them what they need in the air, not neglecting to feed them despite their weakness and unresourcefulness. This reveals one benefit and function in creating moths, grasshoppers 4 and mosquitoes. Many groups of species that glorify the Lord find their living in those creatures! Otherwise they would have multiplied and proliferated until they would have caused mischief to humans and deprived them of their peace. Regard then the remarkable craftsmanship and management of Allah; they oblige the minds to testify to His Lordship, Power, Knowledge and Wisdom; what is revealed to men's eyes is not the result of coincidence or blind chance, as is confirmed by every kind of proof that no innate nature can deny at all.

⁴A grasshopper is a species of insects that skips in the fields. It can change its colour, adopting the colour of the exact spot where it happens to be.

^{*} Another species of insects, the female hornet, anticipated man in manufacturing paper. It gathers wood fibers and some plant constituents with its strong jaws, then it brings them out and mixes them with a liquid that it secretes, then it leaves them to dry. Once they have dried, they become a thin layer, similar to the brownish paper that shopkeepers use for wrapping. From that paper the female hornet builds its habitation. We do not know whether the Japanese who build their houses from paper adopted this idea from that species or not!

The bat

Having mentioned the bat, we should note that it is a unique and remarkable species that the Lord created, having common features with birds, and common features with quadrupeds, though it has more in common with the latter; it has two sticking-out ears, teeth and an anus. It delivers babies, breast feeds, walks on four legs, having all the characteristics of the quadrupeds. On the other hand, it flies with wings like birds. Since its vision is too week to encounter sunshine, its day is like other creatures' night. After sunset it sets out. Hence a weak-sighted person is compared in Arabic to a bat, and the word 'khafash' in Arabic means weakness of vision. Having to seek its living by night, it is similar in this to weak birds which do not fly except by night. Some of those who describe the lives of animals have claimed that the bat eats nothing, and that its only source of nutrition is cool breeze. This is a falsehood about this species and about nature, since this animal urinates. In fact, jurists have discussed whether its urine is lawfully clean or not. The point of the discussion is: is it the urine of a non-edible animal, and therefore unclean, or is it unclean but little droplets of it are pardonable in view of the difficulty of avoiding them? Both verdicts have legitimacy, and both have been attributed to Imam Ahmad. There is a third view, that no quantity of it, small or big, is unclean, and this is the most correct view, since there is no text (from the Prophet) concerning it, so it may not be likened to unclean urines, in the absence of a strong common quality and in view of the evident difference. This is, however, not the place to pursue the arguments of the different parties. What concerns us here is that if the bat ate nothing, there would be no point in its having teeth, since teeth are of no use for a creature that eats nothing. The infant, for instance, is not provided with teeth as long as it does not eat. When it

grows and needs to eat, it is equipped to do that with incisors that cut food and grinders that grind it. There is nothing in creation that is done haphazardly, or is devoid of wisdom, or without reason. As for the benefits and uses of the bat, physicians have enumerated such of these that they were able to detect. Even its urine is used as an ingredient in certain eye powders. And so, if the urine, that is furthest from being of use, is useful, one may use his imagination to think of the rest of its benefits and uses.

The Maker's Guidance

A person whose truthfulness is well known to me tells me that he saw that an Egyptian vulture, which is a well-known bird, had built its nest in a tree. Once it saw a huge snake approaching toward its nest gaping with the intent of swallowing its eggs. It looked frantically for a way to save its nest, and saw a bone in the nest; so it carried it and shoved it in the snake's mouth. The latter started to twist in pain until it perished.

The ants 5

Regard now the ant, this fragile creature, and the amount of shrewdness or planning it was provided with in the matter of collecting food, storing it and preserving it from contamination. By observing it, you can learn many lessons and signs. You can see how when the ant tribe seeks food, they leave their holes in search of it. Once they have come upon it, they go in files from their holes to it,

⁵The ants have some habits in common with man. They build cities and roads, dig tunnels, store food, and plant gardens and crops. They have armies ready for war and defence. They take prisoners-of-war, they have trials, and so forth.

There is a subspecies of ants called the 'milkers', which subdues kinds of worms and maggots and raises them in special places and farms, feeding them and taking care of them; it extracts from them a sweet stuff called the 'honey dew'.

and start to transfer it. You see them in two files, one loaded with food and heading home, and the other going from home, not mixing with the other file, the two files constantly distinct and separate. They resemble two groups of people, one going to a place and the other returning from it. If the load is too heavy, a group of ants take part in carrying it, in the same way that a group of men take part in carrying a stone or a trunk of wood. If it is a single ant that has found the heavy thing, its companions assist it in carrying it to its habitation, and then leave it to its owner. On the other hand, if a group have come upon something together, they work together to transfer it, then share it at home.

An experienced person told the following remarkable account:

I once saw an ant that found a half locust; she tried to move it, but she failed to carry it from the ground. So she moved a little distance and called a group of ants. The narrator adds: I took away that half locust from the ground, so that when the ant and its companions came she went around and they went around, but could not find it, so they went back. Then I replaced the half locust, and when the ant came, she saw it, she tried to carry it but failed. So she walked a little distance, bringing her group. They came and went round the place, and when the group did not find anything, they made a circle round the ant, attacked it and cut it limb from limb. I sat there observing all this.

An amazing aspect of the shrewdness of ants is that when they transfer a grain to their habitation they break it into pieces so that it does not sprout. If it is a two-lobe grain, each lobe capable of sprouting, they break it into four pieces. If it is damped with dew, and they worry that it might rot, they bring it out into the sun, and later bring

it back into their habitation. That is the reason you often see outside their habitation a lot of broken grains, then if you come a short time later you find nothing left at all. Another token of their wit is that they do not dig their habitation except on an elevated piece of land, lest the flood should drown it. You never see the ants' village in the bottom of a valley, but raised to a part where the flood does not flow. It is enough to illustrate the ants' shrewdness to cite what the Almighty related in His Book concerning the group of ants when one of them addressed its companions at the approach of Sulaiman (Solomon), peace be on him, and his troops. These are the words of the ant as reported in the Qur'an:

"O ants! Enter your dwellings lest Solomon and his armies crush you unperceiving." (27: 18)

In this exhortation, it has used ten styles of speech: calling, alarming, naming, commanding, attributing, warning, specifying, expounding, generalizing, and apologizing. Despite its brevity, its exhortation employs all these ten styles. That is why Sulaiman admired its statement, smiled delightedly at hearing it, then asked Allah to inspire him with thanking His favour at hearing its words. Such shrewdness is not to be wondered at in a species that glorifies the Lord in gratitude. It is as described in an authentic tradition of the Prophet \$\mathscr{*}\exists:

«نَزَلَ نَبِيٌّ مِنَ الأَنْبِيَاءِ تَحْتَ شَجَرَةٍ فَلَدَغَتْهُ نَمْلَةٌ فَأَمَرَ بِجِهَازِهِ فَأُخْرِجَ، ثُمَّ أَحْرَقَ قَرْيَةَ النَّمْلِ، فَأَوْحَى اللهُ إلَيْهِ: مِنْ أَجْلِ أَنْ لَدَغَتْكَ نَمْلَةٌ أَحْرَقْتَ أُمَّةً مِنَ الأُمَمِ تُسَبِّحُ، فَهَادًّ نَمْلَةً وَاحِدَةً».

"A prophet was resting under a tree when an ant stung him, so he ordered that his belongings should be removed from there, and that the ants' village should be burned. Then Allah revealed to him: You burn a whole group of a species that glorify the Lord. Why not a single ant?"

Bees

Turn your attention now to the lives of bees, and the lessons and signs they involve! Think of them in their painstaking effort to produce honey and build their hexagonal dwelling, one of the most well-shaped figures and the most rounded and carefully crafted! As they join one to another they leave no gaps or looseness between them, and all this is achieved without devices or compasses or measurements. It is all by the inspiration of Allah and His guidance and teaching, as is explained in the Qur'an:

﴿ وَأَوْحَىٰ رَبُّكَ إِلَى ٱلغَيْلِ آنِ ٱتَخِذِى مِنَ ٱلِجْبَالِ بُيُوتًا وَمِنَ ٱلشَّجَرِ وَمِمَّا يَعْرِشُونَ ۞ ثُمَّ كُلِي مِن كُلِّ ٱلثَّمَرَاتِ فَٱسْلُكِى سُبُلَ رَبِّكِ ذُلُلاً يَخْرُجُ مِنْ بُطُونِهَا شَرَابٌ ثُخْنِيَفُ ٱلْوَنُهُ فِيهِ شِفَآةٌ لِلنَّاسِ إِنَّ فِي ذَلِكَ لَآئِيَةً لِقَوْمِ يَنَفَكَرُونَ ﴾ [النحل: ٦٩]

"And your Lord inspired the bee, saying: Choose thou habitations in the hills and in the trees and in that which they thatch;

"Then eat of all fruits, and follow the ways of thy Lord, made smooth for thee. There comes forth from their bellies a drink diverse of hue, wherein is healing for mankind. Lo! herein is indeed a portent for people to reflect." (16: 68-69)

Observe their complete compliance and observance of the direction of their Lord: they build their habitation in

those three places, in the hills and mountains, in the trees and in people's houses. You never see the bees building their habitation except in those three places. Observe how most of their habitations are in mountains and hills, in trees and in people's dwellings, never anywhere else; the place mentioned first in the verse is the place most frequently used, trees are next in frequency, and people's dwelling come last. These last are the smallest in size, while in mountains and trees their hives are enormous: and huge amounts of honey are collected from them. Regard how the bees, in their perfect compliance, first settle in a habitation, and only after they have settled they leave it, to suck and eat from the fruits, and then return to their habitation. This is in compliance with their Lord's directive to find a habitation first, and to feed themselves after that. And once they have eaten, they follow the way the Lord made smooth for them to suck and return.

amazing fact about bees is that they have a queen, without whom they do not fly about, do not work, and do not suck. They obey her, give heed to her, and work upon her commands. The queen has the right of directing them, ordering them and forbidding them. They are her subjects, obedient to her, and abiding by her pleasure. She directs them in the way a king directs his subjects. As they enter their home, the queen stands at the door, not letting any bee shove another or precede it in passing in. They pass in one by one, without crowding, colliding or clustering; it organizes their entering in the same way as a leader does when his troops arrive at a narrow passage where there is no room for more than one at a time. While observing the bees' management of their affairs, good policy, guidance, unity of intent, organization, handling of their rule, and the assigning of each individual's work, one would have no end of wonder! It will be plain to the observer that it is not on their own that bees can accomplish those acts, or achieve control and management

most perfectly. If you observe the worker bee, you will see that it is among the weakest of Allah's creatures, utterly ignorant about its own affairs, and the least capable of going about its interests, to say nothing about the amazing achievements it performs. One puzzling fact about bees is that they never have two queens at one habitation, commanding the same group. If two groups are formed commanded by two leaders, one of the two is killed and cut into pieces, and they agree on giving their loyalty to one queen, without showing hostility among themselves, or trying to cause injury to one another. They unite as one group having one army.

The production and benefits of honey

A bewildering thing about the bee, something that most people do not realize or notice, is the way the bee reproduces, whether it is by way of delivery or by transformation. Very few people imagine how it happens or get to know it! Indeed it reproduces by neither of the above two methods, but by the most mind-boggling method! As a bee goes to the meadows it picks nectar, the purest stuff on leaves, petals, flowers, grass, etc.; it sucks it, and this forms the essence of honey. Then it presses the condensed bits of that stuff on the face of a leaf, and sticks it on its leg, forming it in the shape of a lentil; then it fills with it the empty hexagons made of honey. Later on, the queen makes a round beginning with its habitation, breathes in it, and goes on to the other habitations and breathes in all of them. From this, life emerges in them by the will of Allah the Almighty, and so they come out as flying creatures by the will of Allah. This is a curious miracle and a sign that few get to know; it takes place by Divine inspiration, which guided the bees and taught them living, constructing travelling, management, production.

You may well ask the denier: Who inspired the bee to do what it does and implanted that in it as a natural habit? Who made its way smooth so that it could obtain what it sought without obstruction or hardship and without losing its way despite the remoteness of its destination? Who guided it to perform what it was made for? Who created that nectar which, after being consumed, would turn into pure multi-coloured honey, perfectly sweet, tasty and beneficial? A variety of honey is so white that you see the reflection of your face in it better than you see it in the mirror, as described by a person who brought some of it to me: he described it as the choicest honey that is known to mankind, the purest and most delicious. Its taste was indeed the most deliciously sweet. Other varieties are red, green, pink, black, tan and many other hues in between, with flavours that vary with the variety of the sucking plants and the original substance of it.

It is worth your while to reflect on the benefits and healing properties that the honey confers. Honey is a constituent of most medicines, in such a degree that the ancients did not know sugar, nor is it even mentioned in their books. What they used with their medicines was honey, and that is what you see mentioned in their books. Indeed it is more beneficial than sugar, more effective and more purifying of humours, more ameliorating and alleviating and supplying with resistance to injury. It is more strengthening for the stomach, raising of spirits, lifting of the soul, enhancing the catalytic medicines and assisting in tracing ailments in the furthest reaches of the body. It is on this account that sugar was never mentioned in the traditions of the Prophet \$ nor was it even known to his contemporaries. If the world were without sugar, it would not be missed, while if honey were lacking, there would be a great demand for it. Some towns have so taken to using sugar that they have given up honey, and they

prefer the taste of sugar to that of honey; they find the former less sharp and intense than the latter. They do not realize that the honey's benefit lies in its very sharpness and intensity. If somebody finds it not fit for his body, he is recommended to soften the honey's sharpness with other foods, and in this way it will be more beneficial than sugar. I shall devote a chapter to this issue, ¹ Allah willing, in which I detail honey's superiority over sugar, supporting this in many undeniable ways, and listing many irrefutable proofs. Have you ever seen sugar clearing phlegm, melting a humour or healing from an illness? The utmost sugar can do is to ease the passage of medicine in vessels because of its mildness and sweetness.

Conditions for healing with honey

As for healing by the use of honey, Allah has denied some people benefiting from the healing power in it, in such a way that they speak ill of it, dreading its unfavourable effects, because of its heat and sharpness. We have no doubt about honey being a healer; or, for that matter, about the Qur'an being a healer, prayer being a healer, remembrance of Allah and supplication to him being a these do not benefit each and every one and healer – all each and every disposition. Take the case of the Book of Allah, the sublime healer, the greatest of healers; but how few are those who seek healing in it! It indeed gives people with poor dispositions nothing but worsening of their plight, and only increases the ruin of the evil-doers. In the same way, the remembrance of Allah, taking refuge in Him, coming close to Him, and taking refuge in prayer have healed so many suffering people, and eased the sickness of so many sick people, and have taken the place of so many medications, which never rival it in their

Not included in the present work.

curing power. Nevertheless, you see how many people, indeed the majority of people, do not have any hope of finding remedy in such means. I did see, though, in the medical books written by Muslims, under the lists of single remedies, mention of prayer in its alphabetical place, where the writers mention several physical ways in which prayer represents a remedy, and many psychological and spiritual benefits as well.

heard our also Sheikh Abu Al-Abbas Ibn Taymiyyah, may Allah bless him, recounting the conversation between him and a physician concerning an ailment that he had. The physician said: 'Nothing aggravates your case like scholarly discussions and thoughts, and the supplication and remembrance of Allah.' Ibn Taymiyyah retorted: 'Don't you claim that if the morale is raised and one has high spirits there will result an internal power that assists the physical power of resistance so that it overcomes the disease, since a disease is an adversary that the organism needs some internal power to defeat?' 'Yes, it is so,' said the physician. 'When my mind is concentrating on remembrance of Allah, supplication to Him, and scholarly discussions, and I accomplish some success in untangling some of the problems in that direction, I feel elated and have internal power, which assists in defeating the ailment.' This is the essence of his account.

What we are trying to say is that if many people ignore healing by honey, it does not make it less possessing of the property of curing, in the same way as most people's abandoning of the use of the Qur'an for healing from the heart's diseases does not make it less possessive of the property of healing them. It is a remedy for what besets hearts, even if most patients fail to benefit from this power. This may be supported by the following verse from the Qur'an:

﴿ يَتَأَيُّهَا النَّاسُ قَدْ جَآءَتَكُم مَّوْعِظَةٌ مِن رَّيِكُمْ وَشِفَآهٌ لِمَا فِي الصُّدُورِ وَهُدُى وَرَحْمَةٌ لِلمُؤْمِنِينَ ﴾ [يونس: ٥٧]

"O mankind! There has come to you an exhortation from your Lord, a healing for that which is in the breasts, a guidance and a mercy for believers." (10: 57)

We notice here that the Qur'an offers preaching and healing to people at large, while it confines guidance and knowledge to some. This means that it is a healer in itself, whether a human helps himself to this capacity of it or not. Nothing is described by Allah in His Book as being a healer except the Qur'an and honey; they are the healers, one a healer of hearts, healing them from misguidance and aberration, their doubts and caprices; and the other is a healer of bodies from many of their diseases, complications and ailments.

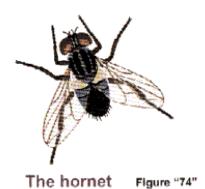
While I visited Makkah, I had many ailments. There was no physician there or medications as in other towns; so I sought healing from honey and the Zamzam water, and I discovered in them an amazing source of healing! Regard how the Almighty Lord describes the Qur'an as a healer in itself, while He said of honey

"In it there is cure for people." (16: 69). What is a healer in itself is more effective than what has a healing power. This is not the place, however, for exhausting the benefits and uses of honey.²

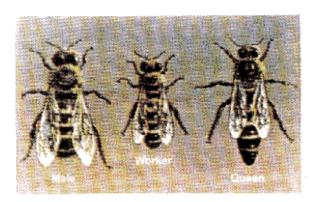
²See Volume Four of Ibn al-Qayyem's "Zad al-Ma'ad", chapter on the Prophet's % tradition of treatment with drinking honey, cupping and cautery.

Milk

Turn your attention, also, to the message embodied in the cattle, the milk that Allah has given us from their bellies, a pure delicious, wholesome, soft drink that emerges from between the refuse and blood. Regard how they swallow food through their mouth down to the stomach, where some, with the will of Allah, turns into blood, and then the blood runs through its vessels, organs, flesh and hair. As the vessels deliver it to the different parts, each organ, nerve, cartilage, hair, hoof and claw transforms it to its own composition! Then the blood stays in those stores that are reserved for it, since the animal cannot survive without it; and then the refuse of the blood is pushed out to the intestines where it is transformed to dung, while the rest turns to pure white milk, smooth for the drinkers, emerging from between entrails and blood. If the ewe or another animal is overmilked, the milk will be reddish in colour. The Almighty Allah filtered the softer part of the chime with the first processing, being blood when it was conducted to the liver; then it was mingled with the four humours. Next, the Exalted and Majestic Allah caused each of the four humours to pass toward its store and location, which is prepared for it: the gall bladder, the spleen and the kidney. The rest of pure blood runs along the liver's vessels, pouring from there to the breast, where Almighty, transforms its bloody shape, Allah. the composition, and flavour, to the milky shape, composition and flavour. This is how it is extracted from between and blood. So ask the denier: Who managed things this way? Who designed them with this design? Who did things that carefully? Who showed so much kindness? Who but the Gentle, the Knower?







The wondrous world of bees Figure "75"

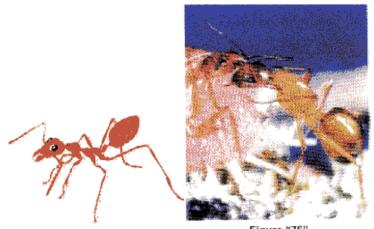


Figure "76"

The wondrous world of insects

The carpenter ant, seen in this picture belongs to a genus of insects that is widely spread in the world. Some of its species cause great ruin to wooden buildings.

The Fish³

Think now of the fish, and the message embodied in it, the way it was created! That it was created without legs, as it does not need to walk, since it lives in water. It was not provided with lungs, as lungs are for breathing, and the fish are immersed in water. In place of the legs, it was provided with sturdy fins, which it uses to row on its sides. in the same way as a boatman uses his oars to row on the sides of the boat. Its skin is covered with scales that are overlapping to protect it from injuries in the same way as a chest is protected in other organisms. It was endowed with the sense of smell to compensate for its weak vision, and the water blocking its sight. However, it smells food from a far distance and moves towards it. It is mentioned in some books on animals that a fish has a canal that connects its mouth to the outer ear canal, so it takes water in its mouth, and passes it out through that canal, which gives it relief, in the same way as a land animal inhales a cool breeze into its nose, then exhales it, to refresh itself. A sea animal is similar to a land animal. The sea and the land are in fact two oceans, distinguished from each other in the extra softness of one in comparison with the other. The ocean of the atmosphere is the place for the land animal to float, and the sea is the ocean for the sea animal to swim in. Each would die if transferred to the other ocean. A sea animal would suffocate with air in the same way as a land animal would suffocate in water. So glory be to Him whose wonders are beyond the calculation of all creation. nor can any creature encompass the marvels of even a single wonder. If we get to know some miracle, we still are ignorant of others!

There is a species of fish, called, the 'electric', which kills its prey with an electric charge. It even has control of the intensity of the electric charge, lights its way in the dark, and turns it off at will. Some red Indian tribes even used this kind of fish in treating certain varieties of rheumatism, employing the electric power of that fish.

Reflect, then, on the compelling wisdom embodied in the fish breeding more than all other animals! You see in the abdomen of a fish more eggs than one can count. The wisdom in that is to produce enough for the many animals that seek it for nutrition. Most animals eat fish, even wild animals; they prowl on the edges of jungles, in proximity of clean water, and if they fail to catch land game, they lie in ambush for the fish to snatch them. And so, since wild animals eat fish, birds and humans eat fish, big fish eat fish, land beasts eat fish; all by the will of the Lord Almighty are given fish as food; He willed in his judgement to provide fish in that abundance! If a human were to see what the sea contains of diverse animals, precious stones, and other things that none but the Lord can keep count of, and which humans know only a scanty number of, nothing compared with what they ignore, he would be overwhelmed with what he had seen, and would realize the expanse of Allah's kingdom, and the multiplicity of His troops, which none but Him can keep count of!

The locusts

Consider the locusts, some of the legions sent by Allah, fragile of physique, amazing of structure, a composite of the structure of seven species! You can see how their troops advance, irrepressible and countless. No king can stop them from invading his territories for all the cavalry, infantry, beasts or armour that he might mobilize! See how they swoop on the lands like a torrent, invading plains and hills, the suburbs and towns, in such swarms that they block the sun's rays and veil the surface of the sky with their wings. They soar to such height as cannot be reached by birds of bigger wings. So we ask the denier: Who sent those weak troops – which cannot resist an animal that assaults them – during a night to swoop against an army in all its power, equipment, numbers and

plans, unable to stop their progress. Humans just watch passively as the locusts snatch their provisions and turn it to waste, leaving the land a bare stretch, while the owners are incapable of withstanding them or blocking their attack. This is an illustration of Allah's wisdom, letting the weak unarmed creatures overpower the strong, by which He takes revenge on the latter, and visits on him that which He had always warned them against, a revenge that they are incapable of withstanding or resisting.

The right of the oppressed

We read in the Qur'an:

"And we desired to show favour unto those who were oppressed in the earth, and to make them examples and to make them the inheritors.

And to establish them in the earth, and to show Pharaoh and Haman and their hosts which they feared from them." (28: 5-6)

Oh for righteousness with Allah and giving priority to His pleasure every time the oppressed and downtrodden is repaid so that the oppressor may realize that the oppressed is closer to Allah and His Apostle than he is. But as it is, Allah, the Most Mighty, the Most Wise, has willed in His wisdom that the tyrannical oppressor should persist in his oppression protected by the sins of the oppressed and the maltreated. The latter's misbehaviour is a great cause for mercy in regard to the oppressor; he is forgiven some of his sins on that account; this situation also relates to the beggar and the begged one: when the begged one declines to help the indigent, the begged one is forgiven

some of his misdeeds, because of the beggar's falsehood; but if the beggar were truthful, the begged one would be a real loser to deny him help. Other similar instances are those of the burglar and the robber who are partly justified by the money-owners' failure to fulfill what they are supposed to do in the eye of Allah. If they were to observe what is ordained by Allah in connection with the money, Allah would preserve it for them. This also is a glaring example of the wisdom of Allah! It enables an observer to discern one of the mysteries of destiny and the hierarchy of dominance in the world; how hierarchies of dominance are allowed to stay, and the oppressors and bullies to have their way! Glory be to Him Whose every deed bespeaks of His wisdom and embodies compelling evidence of His mercy! Even when animals trespass on people's property and provision, they are behaving in retribution for humans' misbehaviour; otherwise no such aggression would have occurred.

This digression might prove, for those who reflect on it, more useful than many of the above chapters, but only for those who contemplate it and ponder over it. It will be a very rewarding exercise, but guidance comes from Allah.

It is recounted that a cattle owner used to mix milk with water before selling it, claiming that it was unmixed. So Allah sent on his sheep a flood that killed them. He was puzzled. So someone came to him in his dream and explained: Are you puzzled over the flood's drowning your sheep? Well, the cause is those drops of water which you used to mix with milk! They multiplied until they were a flood! By taking a lesson from this parable you can apply it to your and others' conduct, and it will dawn on you that Allah stands for truth, that He keeps a watch on each living soul to see what it earned, that He does not wrong even as little as the weight of an ant!

Regard also the wisdom of Allah, the Most Mighty, the Exalted, in holding rain from His servants, and penalizing them with draught after they have failed to pay zakat (money due), by which they deprive the needy of their right! For holding from the indigent what is due to them, observe how they are deprived and cut off from the source of food (i.e. rain)! In this way Allah is telling them, by deeds rather than words: "You have failed to fulfill what you are supposed to do, and so you are deprived of rain. So why do you not invoke rain by offering from what you possess in your hands that which is due to Allah!"

Reflect now on the Allah's wisdom as implied in diverting guidance and faith from the hearts of those who drive people away from guidance and faith! He drove them away from that which they drove His servants away from, misguidance for misguidance, and deprivation In the same way, observe the wisdom deprivation. embodied in cursing the riches of usurers and letting loose financial disasters on them, the same as they did to the possessions of others, bringing them to nothingness and destroying them with usury! They were penalized with destruction for destruction! You seldom see a usurer but his destiny one day is destruction, lack of funds and destitution.

Allah's ways with creation

Consider now the wisdom of Allah as illustrated in letting loose an enemy of His to attack His creatures if the powerful persecute the weak, and the maltreated are not backed to get even with the oppressor. See how He sends on people enemies that do to them as they did to the weak and to their subjects; it is exactly tit for tat! This is the way of Allah, from the day He created the world to the day He folds back the earth, and brings it back to its first state. Regard His wisdom when He deems that the kings, rulers

and governors of humans should exactly correspond to people's behaviour! It is as if their deeds materialize into governors and kings! If they behave well, their kings will be upright, and if they misbehave, so will their kings. If they persecute others, their rulers will persecute them, and if they are crooks, so will be their rulers; if they hold back the due of Allah and behave miserly concerning that, their kings and rulers will hold back what is due to them and behave meanly concerning it. If they extort from the weaker people what is not their right to take when offering their services, their kings will extort from them what is not right for them to take, tributes and tolls will be levied on them. Whatever they extort from those weaker than them will be extorted from them by force at the hands of kings. Their rulers have been the crystallization of their behaviour. It is not right that wisdom should appoint as a ruler of the sinful and crooked, one who is different from them. For instance, in the case of the early Muslims, they were the leading generations in devoutness and righteousness, and so were their rulers. And then, when they declined, their rulers declined. In our own time, the wisdom of Allah denies us rulers like Mu'awiah and Umar bin Abdul-Aziz, to say nothing of Abu Bakr and Umar bin Al-Khattab. Our rulers are rather of our own character, and the preceding generations had rulers of their own calibre. In both cases wisdom is maintained and realized. If the shrewd reader makes a mental survey of these facts, he will discover such aspects of the Divine wisdom and its manifestations in the operative destiny, both visible and concealed, exactly the same in both creation and commandments! So never the folly of assuming that any of Allah's manifestations of destiny is done for anything other than absolute wisdom. Indeed, all forms of judgements and fate realized for utmost wisdom and are from Allah But feeble minds are veiled by their justification.

feebleness from perceiving the truth, in the same way as feeble eyes, like the bat's, are too weak to look at the sun. The feeble minds come upon falsehood and find it compatible with their activity; and so they forge ahead, uttering and chattering, in the same way as a bat would find in the night its chance to fly and roam. It is in fact as expressed by a poet:

Bats which blink during the daylight, Find their chance in the dark of the night.

The wisdom of transforming some humans to animals

Reflect on the wisdom of Allah as demonstrated in the punishment of past people, whose penalties were made to fit their sins. Read for example the following verses from the Qur'an:

﴿ وَعَادًا وَثَمُودًا وَقَدَ تَبَيِّ لَكُمُ مِن مَسَكِنِهِمْ وَزَيِّ لَهُمُ الشَّيْطُنُ الْمَسْتَظِينِ وَعَادُا وَتَعَرُونَ وَفِرْعَوْنَ وَهَا مَنْ أَعْمَلُهُمْ فَصَدَّهُمْ عَنِ السَّبِيلِ وَكَانُوا مُسْتَضِينِ وَوَقَدُونَ وَفِرْعَوْنَ وَهَا مَنْ أَعْمَدُ فَلَا أَعْنَ وَمَا كَانُوا سَيِقِينَ وَهَا كَانُوا سَيِقِينَ وَلَقَدْ جَآءَهُم مُوسَى بِالْبَيِّنَتِ فَاسْتَكْبَرُوا فِي الْأَرْضِ وَمَا كَانُوا سَيِقِينَ وَكَلَّا وَلَقَدْ جَآءَهُم مُّوسَى بِالْبَيِنَتِ فَاسْتَكْبَرُوا فِي الْأَرْضِ وَمَا كَانُوا سَيِقِينَ وَكَلَّا الْمَدْنَا بِذَلْهِ فِي الْمَانِينِ فَاسْتَكُمُ وَالْمَا عَلَيْهِ حَاصِبًا وَمِنْهُم مِّنَ أَخَدَتُهُ الصَّيْحَةُ وَمِنْهُم مَن أَرْسَلْنَا عَلَيْهِ حَاصِبًا وَمِنْهُم مِّنَ أَخَذَتُهُ الصَّيْحَةُ وَمِنْهُم وَلَا عَلَيْهِ حَاصِبًا وَمِنْهُم مَن أَخَذَتُهُ الصَّيْحَةُ وَمِنْهُم وَلَا كَانَ اللّهُ لِيَظْلِمَهُمْ وَلَاكِن مَا خَدَانُهُ لِيَظْلِمُهُمْ وَلَاكِن اللهُ الْمُونَ وَمِنْهُم مِّنَ أَعْرَفْنَا وَمَا كَانَ اللّهُ لِيَظْلِمُهُمْ وَلَاكِن اللهُ اللهُ وَكَانَا وَلَاكُونَ اللهُ اللهُ وَلَاكُمُ وَلَا الْعَنْمُ وَلَاكُن اللهُ اللهُ اللهُ وَلَاكُن اللهُ اللهُ الْمُونَ فَي اللهُ اللهُ وَلَاكُنُ وَلَا اللهُ اللهُ وَلَا اللهُ اللهُ اللهُ اللهُ اللهُ وَلَا الْمُؤْلِقُونَ اللهُ اللهُ وَلِي اللهُ اللهُ وَلَا اللهُ الللهُ اللهُ اللهُ ال

"And the tribes of 'Aad and Thamud! Their fate is manifest unto you from their ruined and deserted dwellings. Satan made their deeds seem fair unto them and so debarred them from the Way, though they were keen observers. And Korah, Pharaoh and Haman! Moses came unto them with clear proofs of Allah's sovereignty, but they were boastful in the land. And they were not winners in the race.

So We took each one in his sins; of them was he on whom We sent a hurricane, and of them was he who was overtaken by the Awful Cry, and of them was he whom We caused the earth to swallow, and of them was he whom We drowned. It was not for Allah to wrong them, but they wronged themselves." (29: 38-40)

Consider how the Lord, in His judgement, willed that certain people should be transformed into various forms, corresponding to their sins. As a certain people let their hearts be transformed to the dispositions and natures of a kind of animal, it was just right that their forms should be transformed to that of the same animal, so that there is correspondence and complete fit, and this is quite just. Apply this to people who were changed into apes or monkeys, how they had justified that by adopting the qualities, behaviours and dispositions of the respective animals. If you are of the careful examiners you can find an affinity between those ancient peoples and the features of their modern successors; you will see the qualities plain despite the disguise of human form. Observe the affinity of apes in the features of the fraudulent and crooked who have little sense. They are even the least endowed intellectually and are the perpetrators of fraud, guile and wrong-doing in their grossest and crudest form. If you fail to read that in their faces, then you are not one of the careful examiners. Observe also the affinity with pigs in the features of other people, as sinful as the above ones, especially those who are antagonistic to the righteous servants of Allah, who are next only to messengers in status. They are the Companions of the Prophet %. You can

see that affinity plain on the faces of the Rafidah, 4 plain to every believer, literate or illiterate. It shows or hides in accordance with the degree of piggishness and wickedness of the heart. The pig itself is the basest among animals and the worst-behaved. It is unique in declining to eat healthy food, and when a human defecates, a pig hastens to the excretion. Think of the similarity of such behaviour to that of the adversaries of the Prophet's Companions; you will see it justly and rightly applicable to them. They took a hostile attitude to the purest and most righteous of Allah's servants and announced their renouncing of them, while they were loyal to every enemy of the Companions, such as the Christians, the Jews and the idolaters. Throughout history, they sought the support of disbelievers in their fight against believers who were loyal to the Companions of the Messenger 囊, even declaring that they themselves were better than the Companions. So what is more apt and fit than likening them to pigs. If you fail to see the affinity in their faces, then you are not among the clear sighted.

As for the traditions of the Prophet & concerning the metamorphosis of certain individuals of the above category into pigs at the time of their death, they are as numerous as to be of absolute authenticity ('mutawatir' in the terminology of scholars); those traditions are too many to be listed here. We refer the reader to a booklet on the subject by Al-Hafedh Abdul-Wahid Al-Maqdisi.

Consider also the wisdom manifested in exterminating some previous nations by catastrophes despite their usual longevity, physical strength, and boastfulness in challenging Allah and His messengers. In contrast, after life-spans got shorter, and bodies became less resistant to the torture of natural disasters, they were

⁴ An unorthodox Muslim sect who are hostile to many of the Companions of the Prophet. They are also known as Shiites.

stopped, and from then on disbelievers were tormented by the hands of believers. And so wisdom is maintained in both cases, each proper at its own time.

Wisdom of sending of messengers

Consider the wisdom of Allah reflected in sending messengers to the various peoples in constant succession. each succeeding his predecessor after his decease; this is to the peoples' need for frequent messengers and prophets, as their minds were weak; and they did not take the message of the previous messenger in earnest. Things had changed, however, by the time of the prophethood of Muhammad bin Abdullah, Allah's Messenger and Prophet, 囊. The Lord sent him to convey the message to more enlightened intellects, to keener minds and betterinformed nations. The message revealed to Prophet Muhammad 🐞 was the maturest from the earliest days of mankind to his own time. So Allah blessed the Muslim ummah (nation) with the perfection of its messenger, the perfection of its religion, the perfection of its minds, the rightness of its intellects, so that they are in no need of a messenger to succeed Muhammad 囊. Instead, Allah chose from the Muslim ummah devout scholars who guard the Prophet's shari'ah; He entrusted them with preserving the shari'ah, with transmitting it safely into the hands of their successors, to implant it into the minds of like-minded persons, in a way that they did not need another messenger or a new prophet. It is for such aspects that the Prophet 紫 said:

"There were amongst the past peoples inspired people. If there is one in my ummah, it would be Umar." Here, the Prophet, # speaks in affirmation in the case of previous

Reported by Al-Bukhari and Muslim.

peoples, that there were inspired persons amongst them; while he makes the existence of such persons in his ummah conditional, using the subjunctive 'if'. This should not, however, be construed as a proof of inferiority in this ummah in comparison with the earlier peoples; it is on the contrary a sign of the superiority of this ummah. It is because of its perfectness, the perfectness of its Prophet and the perfectness of his shari'ah that this ummah is not in need of an inspired person. If such a person does appear, he will be fit to assist and enlighten, rather than to be followed. This ummah finds its contentment in the message of its Prophet 紫without the support of dreams, inspiration, introspection or clairvoyance. Previous peoples, on the other hand, needed such clairvoyants, and so inspired persons were raised among them. You should not assume that the selection of Umar, may Allah be pleased with him, to be an inspired person rather than Abu Bakr implies a preference for the former over the latter. On the contrary, it is that Abu Bakr, because of his perfect saturation with the message of prophethood, his being thoroughly steeped in its tenets, is in no need of additional clairvoyance or inspiration. So reflect long on this aspect, and give it its due of contemplation; think over its implication of the overwhelming wisdom of Allah, the Wise, the Knowing; think in its light of the Messenger of Allah 紫 as the most perfect of His slaves, the bearer of the most perfect message, his ummah being likewise the most perfect of peoples.

Though this section is a diversion, it is one of the most beneficial sections. Had I not been guarding against boring the reader, I would have expounded on the subject, adding a lot of evidence and examples. It has been the bounty of the Generous Lord that He guided me to the truth concerning the matters raised here. It is to Him I turn to fulfill His favour. All power is from Allah, the Most High, the Most Great.

Chapter Four

Nature

﴿ وَٱلْأَرْضَ فَرَشَّنَهَا فَيْعُمَ ٱلْمَنْهِ أُونَ ﴾ [الذاريات: ٤٨]

"And the earth have We laid out; how gracious is the spreader thereof."

Al-Qur'an (51:48)

Creation of the world

Ibn Al-Qayyem goes on to say the following:

Reflect on the creation of this world, the composition of its parts, its organization having the best system; all that inevitably points to the perfect ability of the Lord, His omniscience and the infinity of His wisdom and kindness! If you regard the world you will find it like a constructed house, well-equipped with all its appliances, provisions and supplies. The sky is its roof, raised above the world; the ground is its floor, mattresses and carpets; welladapted for the convenience of the dwellers; the sun and the moon are glowing lights above it; the stars are sparkling over it like decorative lamps, signals for the traveller around this world. The minerals and gems stored beneath it are like treasures and hoards, or like wellstuffed storages prepared for any who needs them; the plants in their variety and abundance fulfill man's requirements, the animals in their diversity offer him so many services; some are riding-animals, some milk-giving animals, some meat-providing animals; some animals provide clothing, furniture and tools, some guard man as they are ordained to do, guarding him while asleep, set against what may cause him harm or danger. Were it not for the control of man over certain fierce creatures that repulse other creatures, there would be no hope of survival for the human being. Man is given a royal status in the world; he is authorized to dominate those creatures, to employ them in carrying out his orders and directions. In all this we can witness the most evident indication that the world is the creation of a Wise, Omnipotent and Omniscient Lord, Who designed it to the best design, ordered it to the most perfect discipline; we can perceive that the Creator is impossible to be more than one, that He is the One God, with no god but He, exalted is He above what the evil-doers say. It is manifest that if there were another god in the heavens or the earth their system

would be ruined, and their system would be thrown out of order, and their habitability would come to a stop. If the body is impossible to admit two equal and coordinate souls, which is a concept contrary to the simplest mind and the innate nature, how is it conceivable that the great universe could have two sovereign Lords. It is as is well-expressed by the Qur'an:

"If there were therein [the heaven and the earth] gods beside Allah, then verily both [the heaven and the earth] had been disordered." (21: 22)

"Allah has not chosen any son, nor is there any god along with Him; or else each god would have assuredly championed that which he created, and some of them would assuredly have overcome others. Glorified be Allah above all that they allege." (23: 91)

This should be a compelling evidence that challenges all men, past and present, to refute in any sensible way, or to give a better explanation. It is only those who have failed to fathom it who try to criticise this evidence. It is only my caution against boring the reader that prevents me from elaborating the two proofs in the verses and unveiling the amazing mystery and glaring evidence they imply. But it is my intention, Allah willing, to write a separate book on the proofs of the Oneness of God.



Figure "77"

Distribution of human beings: Another sign of the Lord's Wisdom

The Seas

One of the most striking signs and capturing miracles of the Lord is the seas which surround dry land, in the form of inlets and bays from the great ocean which engulfs the entire land. It is so extensive that the exposed land with all its mountains and cities is, in comparison with the water body, like a small island in the midst of a great sea. The rest of the land is submerged under water. It is only the Power and Will of the Almighty Allah that holds water from submerging land and rising over it - to rise like this is in fact in the nature of water, and that is what puzzles the more sensible naturalists who are baffled by the reason that causes the rising above the sea of a certain part of land, though it is in the nature of water to rise over it and submerge it. They have no explanation of this but to attribute it to divine wisdom and the eternal mercy of the Lord who willed that circumstances should be smoothed for the land animals to exist. This is a truth, but it should lead one to submit to the Ability of the Lord; to His Will and Destiny; to His Knowledge, Wisdom and all His Attributes of perfection. The proofs are compelling in that respect.

A tradition of the Prophet's is relevant here. Imam Ahmad reports in his Musnad that the Prophet 紫 said:

"Not a day passes but the sea asks the Lord whether He permits that it drowns mankind." Some have taken this to be the interpretation of the Qur'anic verse:

Reported by Ahmad (1/43), but rated by Sheikh Ahmad Shaker, in his editing of the Musnad, as of 'weak' authenticity (See 1/33).

"And the sea kept filled." (52:6) Ibn Attiah, among others, states that it is the held-back sea. This group supports this with a reference to the word 'masjoor' mentioned in the above verse. Another derivative of that word, 'sajoor', denotes a leash, made from plant or metal, used to control a dog. By affinity, they continue, if Allah had not held back the sea and restrained it, it would flood the land. The land, relative to the sea, is like a house relative to all dry land.

It is a source of exceeding wonder to observe the sea and all the wondrous creatures in it, displaying a very wide diversity of species, shapes, sizes, functions, benefits (and harm) and colours. There are in the sea animals that seem like mountains, so huge that nothing on earth compares with them. Some of these seem to voyagers like an island; the similarity is so close that they actually land to rest there, and start a fire; and when the animal feels the heat it moves, and it is only then that the travellers realize that it is an animal. There is no species on land but it has a counterpart in the sea, even man, the horse, the camel and so forth. There are, besides, so many species that have no counterparts at all on land. In addition to that are its precious stones, pearls and corals. You see how a pearl is encased in a casket, the shell, that serves as a nest for it, providing it with protection and safety. Some pearls are hidden, never touched by hands. Observe how the coral has grown at the bottom of the sea out of solid rock below water, similar to a tree. The sea also contains other things like amber and valuable things that are thrown out by the sea, or are fished out.

Observe also the miracle of the ships which sail the sea, cutting their way through it without the need for leader or driver – their leading force being only the wind that Allah directs to run them. If that leading force were held back, then the ships would stay idle on the surface of

water. In this respect, Almighty Allah tells us in the Qur'an:

"And of His portents are the ships, like banners on the sea;

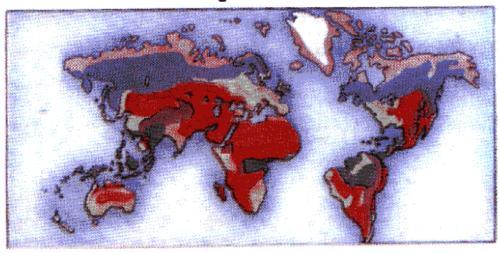
If he wills, He calms the wind so that they keep still upon its surface – Lo! herein verily are signs for every steadfast, grateful heart." (42: 32-33)

"And He it is Who has constrained the sea to be of service that you eat fresh meat from thence, and bring forth from thence ornaments which you wear. And you see the ships ploughing it that you, mankind, may seek of His bounty, and that haply you may give thanks." (16: 14)

Such a sign is this and such evidence! It is for this reason that this blessing is so often repeated in Allah's Book. On the whole, the sea's wonders and marvels are so numerous that no one but Allah is capable of making an inventory of them. And in this light we can understand a verse like the following:

"Lo! when the waters rose, We carried you upon the ship, that We might make it a memorial for you, and that remembering ears might remember." (69: 11-12)

Figure"78"



Dusty Plain Regions. Some grass and palm trees due to occasional rain.

Desert Regions. Very hot climate but cold nights. Very little rain.

Mountains.

Leafy Forests.

Hot in summer, cold in winter.

Tropical forests.

High temperatures year round. Lots of rain.

Ice lands.

Tundra. Extreme cold with fierce winds.

Pine forests.

Low temperatures all year round.

Grassy Meadows and Pastures.

The Earth

If you regard the earth and its creation, you will see that it is one of the most striking of the Lord's miracles and wonders. He made it a resting place, spread out for mankind, constrained it to serve His servants, supplied it with their provisions, food and means of survival. He provided it with ways that allow them to move around seeking their needs and manipulations; stabilized it with

mountains, which act like pegs that hold it, so that the earth does not sway with its inhabitants. He stretched it, paved it, levelled and flattened it and spread it out, extended it in all directions, made of it a receptacle for living creatures that will last as long as they last; made it a shroud for the dead that envelopes them in its belly once they are buried – its surface is for the living and its interior is for the dead. Its vital importance may be attested by the frequency of its mention by the Almighty in His Scripture. He urged His servants to contemplate it and reflect on its creation. Some of the verses concerning the earth are the following:

"And the earth have We laid out; how gracious the Spreader thereof." (51: 48)

"Allah it is Who appointed for you the earth for a dwelling-place," (40: 64)

"Who has appointed the earth a resting-place for you," (2: 22)

"Will they not regard the camels, how they are created? And the heaven, how it is raised? And the hills, how they are set up? And the earth, how it is spread?" (88: 17-20)

"Lo! in the heavens and the earth are portents for believers." (45: 3)

And many similar verses. Observe, then, the land when it is barren, neglected and dead; and see then how, once the Lord lets down rain, it will quiver, sprout, rise, and become resplendent with growth, growing all kinds of marvellous crops. It brings out plants wondrous in appearance and quality, plants that please observers, and give liberally to the extended hand. It produces provisions diverse in quality, amount, shape, colour, and benefits; fruit, vegetables, medical plants, grazing plants for animals and food for birds.

You see how He causes the same rain to fall on various tracts of land, but each grows plants that are diverse in colour, shape, ordour, taste and benefit, despite the identical supply and locale. This fact is pointed out in a verse of the Qur'an:

﴿ وَفِي ٱلْأَرْضِ قِطَعٌ مُّتَجَوِرَتُ وَجَنَّتُ مِنْ أَعْنَبِ وَزَرَّعٌ وَنَخِيلٌ صِنْوَانٌ وَغَيْرُ صِنْوَانِ يُسْقَى بِمَآءِ وَلِحِدٍ وَنُفَضِّلُ بَعْضَهَا عَلَى بَعْضِ فِي ٱلْأَكُلِّ إِنَّا فِي ذَلِكَ لَآيَاتِ لِقَوْمِ يَعْقِلُونَ ﴾ [الرعد: ٤]

"And in the earth are neighbouring tracts, vineyards, ploughed lands, and date-palms, like and unlike, which are watered with one water. And We have made some of them to excel others in fruit. Lo! herein verily are portents for people who have sense." (13: 4)

How is it that those diverse germs grow from the same place, from the belly of the same mother, fertilized by the same substance? It is indeed the making of Allah, Who excelled in everything He did, beside Whom there is no other god. Had this not been one of His most compelling signs, He would not have called to it the attention of His servants, urging them to contemplate it!

He did that, for instance, in the following words of the Qur'an:

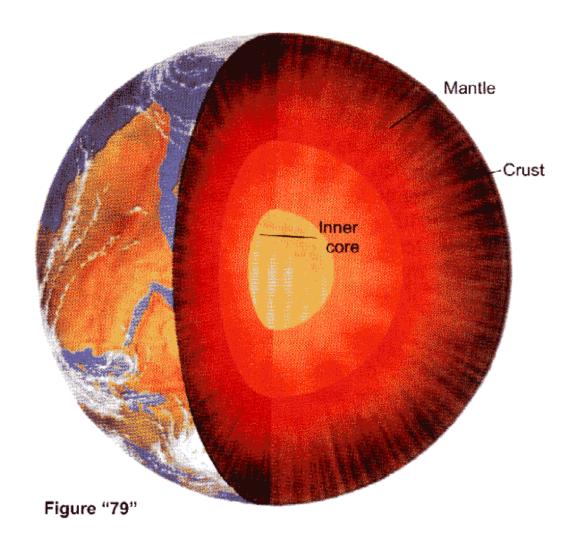
﴿ وَتَرَى ٱلْأَرْضَ هَامِدَةً فَإِذَا آَنَزَلْنَا عَلَيْهَا ٱلْمَآءَ ٱهْتَزَنَّتَ وَرَبَتَ وَأَنَّبَتَتْ مِن كُلِّ زَوْجٍ بَهِيجٍ ۞ ذَلِكَ بِأَنَّ ٱللَّهَ هُوَ ٱلْحَقُّ وَأَنَّهُ يُخِي ٱلْمَوْتَى وَأَنَّهُ عَلَى كُلِّ شَيْءٍ قَدِيرٌ ۞ وَأَنَّ ٱلسَّاعَةَ ءَاتِيَةٌ لَارَبْبَ فِيهَا وَأَنِّ ٱللَّهَ يَبْعَثُ مَن فِي ٱلْقُبُورِ ﴾ [الحج: ٥-٧]

"And you see the earth barren, but when We send down water thereon, it does thrill and swell and put forth every lovely kind of growth. That is because Allah, He is the Truth. Lo! He quickens the dead, and lo! He is Able to do all things;

And because the Hour will come, there is no doubt thereof, and because Allah will raise those who are in the graves." (22: 5-7)

This sign and the preceding one concerning the embryo, are used by the Lord as evidence of the five matters listed in the verses, and a binding proof of taking heed of them.

Regard, too, how the Lord stabilized the earth with the high-rising, solid, established, and hard mountains. He established them well, elevated them, and destined them to be the most solid part of the earth; so that they do not erode over the ages and by the work of successive rains and winds. He crafted them well, placed them carefully, and provided them with diverse and ample benefits, minerals and springs; then he guided men to discover those minerals, inspired them to extract them, taught them how to make from them coins, jewelry, decoration pieces, clothes, arms and the various other useful tools. Without guidance from the Almighty, men would never have had the knowledge of that or the ability to manipulate it.



Cross-section of the earth

As the sketch shows, the inner temperature of the earth is as high as 4000 centigrade! This is a main reason for making life possible on the earth.

The atmosphere

One of the Lord's wondrous signs is the air, suspended between the sky and the earth, perceived by contact when it moves, its physical existence sensed but not seen. It exists between the sky and the earth, with birds soaring in flapping their wings in it, in the same way as sea animals swim in water. Its waves sometimes roll violently the same way as a sea's waves do. When the Lord wills, the air moves mercifully, a harbinger of favour, plenty, and auspicious portent for humans, an impregnating factor for clouds, causing them to bear water, in the same way as a male impregantes a female to bear a child. Such mercybearing winds are called: heralds, winnowers and emissary winds. Winds of torture, on the other hand, are called tempestuous, hurricane (in the sea), fatal and fierce (in land). When the Lord wills, He causes the winds of torture blow, bringing devastation and suffering, a scourge against whomever He wills of His servants. It may bring destruction, bad omen and havoc wherever it passes. Winds blow from different sources, east wind and zephyr, southern and northern; all vastly varied in their benefits and results - some winds are soft and humid, bringing revival and refreshment to plants and animals; others cause drying; some ruin and ravage; some strengthen and solidify, others weaken and enfeeble. It is for this reason that the Almighty speaks of the winds of mercy in the collective, because varied benefits of their consequences: a certain wind drives clouds, another fertilizes them, another bears them, another nouri-shes plants. And since winds are varied in their directions and quality, He created for each its coun-terpart that softens its intensity and harshness, leaving its softness and mercy. The winds of mercy are multiple, while the wind of torture has a singular strength: it blows from a single direction to destroy whatever it is destined to destroy; there is no wind to counter it, to soften it and resist its force. It is like a huge army that advances unresisted until it destroys all that is in its way.

Regard now the words of the Qur'an in that connection, how sublime and expressive, how they always refer to the wind of the land in the plural, while they refer to the wind of mercy of the sea in the singular. Here is an example from the Allah's words:

"He it is Who makes you to go on the land and the sea till, when you are in the ships and they sail with them with a fair breeze and they are glad therein, a storm-wind reaches them and the waves comes unto them from every side," (10: 22)

That is because ships sail in a specific direction by the force of wind; if winds that push them were of varied and opposite directions, the ships would have difficulty going ahead. From this it would be clear that the purpose of winds in the sea is diff- erent from those in the land. In former, an auspicious wind should be unified, unresisted by another wind, and so it is made a single wind, in contrast to the many winds of the land. It can be further observed that this ethereal creature, the wind, which the Almighty Lord has endowed man-kind with, be split and pierced by the weakest creature; notwithstanding its force and might that can weaken bodies; solid invincible displacing fragmenting them, and bearing them on its surface. See for instance how a water-skin, when filled with water, may not be pushed down and sunk by even a strong man, despite its own weight, and the man's weight and strength-

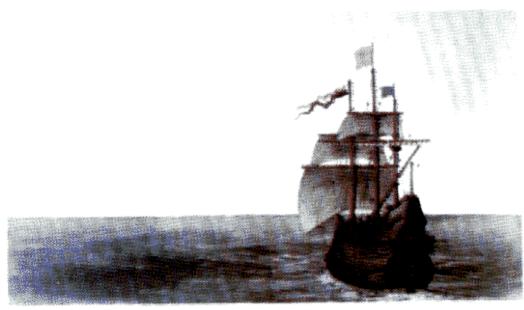


Figure "80"

Sailing ship

that in spite of all the water's softness and lightness. This weak thing, the water skin, resists water, whereas water overcome solid, strong bodies. By this wise arrangement, the Lord maintains ships on the surface of water, despite their great weight, and the huge loads they carry. Likewise, all hollow bodies, filled with air, resist sinking, because air resists sinking in water, and so it holds up weighty ships with all their freight. It gives one food to think how this impressive, huge body, the ship. borrows its ability to float from the soft, ethereal body, the air, to save it from sinking. It behaves in the manner of a man who fell in a well, but catches the edge of the clothes of a strong man, and thus gets saved from falling. So glory be to Him who let this bulky vessel maintain its floating by the work of the soft air, without any visible link or attachment.

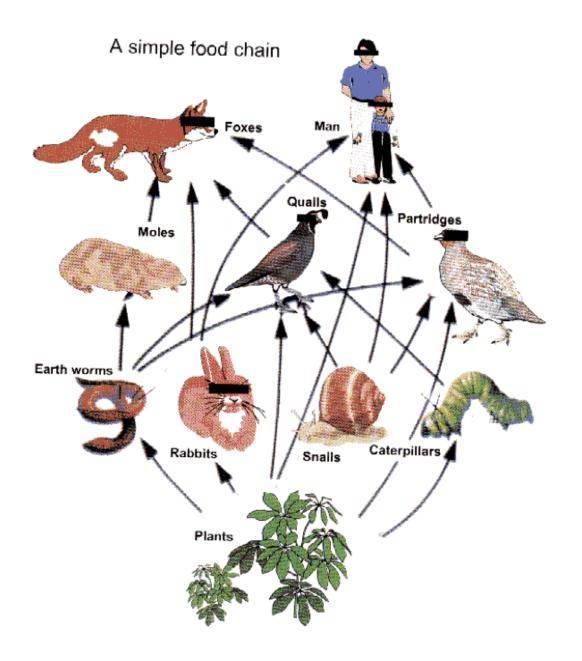


Figure "81"

Reflect now on the following verse from the Qur'an:

"and the clouds obedient between heaven and earth," (2: 164).

Have you observed how the Almighty Lord causes the cloud to form, by effect of the wind, at first still thin and fragmentary, then He brings together portions of it, gathers them, then causes winds, called fertilisers by the Lord, to fertilize them; He then moves that cloud, borne on other winds, to be above such land that is in need of it. Once it is above that land, it pours its load of water on it. Then the Lord sends the wind to scatter water and atomize it, lest it should cause harm if it descends in its bulk. Once the land has taken its fill, and what it needs, it stops falling, and departs from that spot. Such clouds are a quenching of the land's thirst, borne on the winds. The Prophet ** said regarding some clouds, as reported by Al-Tirmidhi and others:

"These clouds of the land are driven by Allâh to people, though they fail to remember the Lord or thank Him." Clouds, then are a bearer of provision for humans and others, and a supplier of their food.

When Al-Hassan Al-Basri saw the clouds he used to say: "By Allâh, those clouds have provisions for you, but you prevent that provision by your sins and misdeeds."²

There is a tradition reported in Sahih Muslim, in which it is narrated

² Meaning that water is the germ of life, as described by a verse of the Qur'an

[&]quot;and We made every living thing from water," (21: 30). When Al-Imam Al-Hassan Al-Basri describes water as men's provision he means it is the basis of their life, since man cannot survive without water for more than three days.

«بَيْنَا رَجُلٌ بِفَلَاةٍ مِنَ الأَرْضِ إِذْ سَمِعَ صَوْتًا فِي سَحَابَةٍ: اسْقِ حَدِيقَةً فُلَانٍ. فَمَرَّ الرَّجُلُ مَعَ السَّحَابَةِ حَتَّى أَتَتْ عَلَىٰ حَدِيقَةٍ، فَلَمَّا تَوسَّطَتُهَا فُلَانٍ. فَمَرَّ الرَّجُلُ مَعَ السَّحَابَةِ مَتَّى أَتَتْ عَلَىٰ حَدِيقَةٍ، فَلَمَّا تَوسَّطَتُهَا أَفْرَغَتْ فِيهَا مَاءَهَا. فَإِذَا بِرَجُلٍ مَعَهُ مِسْحَاةٌ يَسْحَى المَاءَ بِهَا، فَقَالَ: مَا السُّمُكَ يَاعَبْدَاللهِ؟ قَالَ: فُلَانٌ. لِلإسْمِ الَّذِي سَمِعَهُ فِي السَّحَابِ».

That once, while a man passed through a wilderness, he heard a voice coming from a cloud, which said: 'discharge your rain on so and so's orchard.' So the man moved with the cloud, until it was over an orchard; and when it was just above it, it rained all the water it bore. Then he saw a man with a rake, directing the water with it. So he asked him: 'What is your name, O servant of Allah?' 'It is so-and-so,' he replied (the same name the first man had heard from the sky.) ³

You do well to observe the clouds when they are thick and black, overlaying a pure and bright sky! See how Allah causes the clouds to form whenever He wills, and not before! See how the clouds, though soft and light, carry heavy loads of water, suspended between heaven and earth, until the time Allah wills that they empty their loads of water on the ground! When it falls, it falls in drops, every drop measured accurately by destiny, controlled by the Lord's mercy and judgement. Clouds sprinkle the water, letting it fall in separate drops, not a drop mixing with another, not a drop falling before its time, nor after it; each following the track predetermined for it, never swerving from it; until they reach the earth, each drop reaching the point determined for it, not any other spot. If all the creatures of Allâh converged to create one drop of these, or to count the number of drops for just

³ Reported by Muslim and Ahmad.

one moment, they would fail to do so. So think how the Lord sends clouds to nourish men, beasts, birds, tiny insects and ants: He drives the cloud assigned to supply the specific animal at its particular place, next to the determined mountain; and it would reach it at its time of dire need and thirst, at the precise moment.

Regard, too, how the Lord lodged water in the earth, and then by its action caused to grow a myriad of plants. Some plants nourish, some season the food; some are digestive, some enfeeble, some are lethal poison, some are sickening; some heal diseases, some cause a chill, some cause heat; a certain plant, as it reaches the stomach, suppresses bile at its source; another as it settles in the stomach turns to bile; another repels phlegm and black bile; another transforms to one of these; one stimulates blood to flow, another represses it; one causes sleep, another dismisses it; one causes elation, one causes its reverse, and so on and on. There is no end to the wonders of plants; there is not a leaf, a branch or a fruit but contains a miracle that beats the understanding of men to encompass or comprehend it in full.

Regulation of body water

Water intake and its disposal by the human body occur according to a meticulous system. Organs like skin, stomach, intestine and kidneys are obviously involved in this system. A very subtle role is also played by certain endocrine glands, most notably, pituitary, adrenal and thyroid. Like food, water goes first into the stomach. Afterward, it is distributed to the various body parts according to their need.



Figure "82"

Archaeologists and geologists keep excavating and investigating plates of the earth in their search for any evidence that reveals the forms of life in ancient history

Water intake itself is controlled by a sophisticated nervous mechanism. As for the quantity of water retained in the body, it is controlled by the amounts of salts of sodium potassium, and calcium. There are three reservoirs where the body keeps the needed quantity of fluid. There are intercellular (in the cell), extracellular (outside the cell), and interstitial (inbetween the tissues).

So the water in the body is not pure but salty. Also, strange to say, the structure of the human and animal blood bears some resemblance to the structure of sea water. It is as if the animal, after appearing on the land, reserved in its body the memory of its earlier beginnings from water.

The blood albumin plays a vital part in preserving water in the blood; it strongly attracts water inside the blood vessels. If albumin decreases in the blood, water diffuses out of the vessels and is trapped between cells and blood. This condition causes swelling of the body and can start several other diseases. At times of wars and famines, this condition is the main reason for the swollen bellies or other parts of the human body.

The body suffers very much if it loses large amounts of water for any reason. The first danger is the drying up of water stored between blood and cells. Then, the blood gradually dries up. The greatest danger, however, comes later when the cells begin to dry up. When this happens, extreme thirst and dryness of skin occur. Often, it is accompanied by vomiting that further increases dryness and causes the eyes to sink.

When people die of cholera, the cholera microbe is not the fatal factor; it is rather and an excessive loss of body liquid, a condition usually called dehydration. If the body is supplied water in time, it shows a miraculous recovery. Supplied water the proper amount of saline is sometimes almost like injecting new life in the body.

Since dehydration or the severe loss of body liquid can be fatal, good hospitals have separate sections or units to regulate water in the body. In fact, a special science in medicine, the science of water scale, has appeared.

Fortunately, the human body is quite adept in controlling any imbalance in its substances. If, for any reason, a particular substance gets out of control, its excess or shortage can become a killing poison for the body. And water, that is the source of life, is no exception.

In normal conditions, the body is not poisoned by water, because a number of organs and glands guard it from any such accident. Yet, poisoning by water can occur in some cases. For example, it can occur if someone has taken in a huge amount of water alongwith food having quantities of salt in it. The first symptom in such a case will be acute head and muscular cramps. These are, then, followed by vomiting and diarrhea. Thus the body tries to reduce the excess of water by its own regulatory mechanisms. The distribution of water in the body may also be disturbed, and the result of any such disturbance is not less serious than that of imbalance in quantity. In this condition, cells are distended with water while dryness spreads around them. This dryness may even destroy the cells while they are flooded with the surrounding water, water that is at their door but cannot offer them any help.

So glory be to Him Who set the balance in your body, a balance that operates without your being conscious of it! This is not the place to elaborate these topics. The point here is to realize that one's life depends on a little bit of water that may not be of any worth in comparison to another amenity. It is to appreciate the extent of Allah's mercy, when He willed that right amounts of water and air are available to every living thing. It is another of His blessings that the most vital thing is the most available and is the cheapest. Allâh Says:

"And we made from the water every living thing." (21:30)

The stability of the earth

Reflect also on the earth, how it is held stable, from the day the Lord created it, so that it forms a habitation and settlingplace for animals, plants and objects. It is by this that animals and men are enabled to move about on it, pursuing whatever they like of their interests and needs; taking rest when they like, and going to sleep on it, getting refreshment enough to resume their endeavours. If it were unstable or swaying they would not be able to find peace or comfort upon its surface; no building would stand on it, and no industry or commerce could be performed; agriculture or craft would not be possible. How could humans lead a happy life with the ground swaying beneath their feet? You may take an inkling of what such a state can cause by observing the devastation caused by earthquakes, despite the brevity of time they last. You see how, when this happens, humans are forced to desert their homes and flee from them. In this context the Our'an says:

"And He has cast into the earth firm hills that it quake not with you," (16: 15);

"Allah it is Who appointed for you the earth for a dwelling-place," (40: 64);

"Who has appointed the earth as a bed," (20: 53).

Instead of 'bed', [٦:النبأ: ٦] ﴿ مِهَندُا﴾ (78: 6) Allah says it is 'an expanse' in another chapter.

There is also a tradition of the Prophet ﷺ reported by Al-Tirmidhi, among others. In it, Anas reports the Prophet ¾ as saying:

«لَمَّا خَلَقَ اللهُ الأَرْضَ جَعَلَتْ تَمِيدُ، فَخَلَقَ الْجِبَالَ عَلَيْهَا، فَاسْتَقَرَّتْ. فَعَجِبَتِ الْمَلاَئِكَةُ مِنْ شِدَّةِ الْجِبَالِ، فَقَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُّ مِنَ الْجِبَالِ؟ قَالَ: نَعَمْ، الْحَدِيدُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُّ مِنَ الْجَدِيدِ؟ قَالَ: نَعَمْ، النَّارُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُّ مِنَ النَّارِ؟ قَالَ: نَعَمْ، النَّارُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِّ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِ هَلْ مِنْ خَلْقِكَ شَيْءٌ أَشَدُ مِنَ النَّارِ؟ قَالَ: نَعَمْ، الرِّيحُ. قَالُوا: يَارَبِ هَلْ مِنْ خَلْقِكَ شَيْءً أَشَدُ مِنَ النَّذِي إِلَا لَهِ عَلْ اللَّهُ مِنْ خَلْقِكَ شَيْءً أَشَدُ مِنَ اللَّهِ مِنْ اللَّذِي عَمْ، النُّ آدَمَ يَتَصَدَّقُ صَدَقَةً بِيمِينِهِ، يُخْفِيهَا عَنْ شَمْالِهِ».

"When Allah created the earth it started to sway, and so he created the mountains, and mounted them on its surface, and so it was stabilized. The angels were amazed at the firmness of mountains, and so they asked: 'Is there any of Your creations firmer than mountains, O Lord?' 'Yes,' He said: 'iron.' 'And is there any of Your creation firmer than iron?' they asked. 'Yes,' He said: 'fire.' 'And is there any of Your creation firmer than fire, O Lord?' they asked. 'Yes,' He said, 'wind.' 'And is there any of Your creation firmer than wind, O Lord?' 'Yes,' He said: 'A human who gives a charity with his right hand, hiding it from his left hand.' "1

Think also of the great wisdom embodied in the earth's being soft and solid at the same time. If it were too soft, sloppy like mud, no structure could be built, and no animal could walk on its surface; it would cease to be habitable. If it were too hard, like a stone, it would not be suitable for cultivation or planting; it would not be possible to plow it and sow it; it would not be possible to bore wells in it or to erect structures on its surface. It is

Reported by Ahamd and Al-Tirmidhi. Rated by Al-Albanee as of 'weak' authenticity.

neither hard like stones, nor sloppy like mud. By the wisdom of its Creator, it is perfectly balanced, a convenient place for animals, in a moderate state between softness and hardness, in a way that realizes all interests.

The diversity of climates

Reflect also on the great wisdom of the Lord when He willed that the blowing of winds is higher in the north than it is in the south, so that water should flow on the surface of land, irrigating and watering; and then it overflows and pours into the sea. It is as a builder, when he builds a roof, raises one side of it, and lowers the opposite side, to let water run in the direction of the lower side. If it were level, water would stay still on it and would ruin the roof. And so it is with the blowing of wind in every territory - it is higher in the north than it is in the south. Had it not been so, water would stay still on the surface of land, impeding men's striving to produce and seek their interests, blocking ways and paths, and causing harm to people. Is it right in the mind of any thinking human that such arrangement is the result of coincidence, without the designing of the Most Mighty, the Wise, Who did carefully all that He did?

Mountains

Think now of the mountains, an amazing marvel which the ignorant take to be useless masses in the earth not serving any function – indeed they have so many benefits that no one but their Creator and Raiser can reckon. This reminds one of a tradition in which Dammam bin Tha'labah asked the Prophet \$\mathbb{g}\$ on the day he entered the faith: 'I ask you, by the name of the One who raised the mountains and endowed them with benefits, is it Allah who commanded you to do so and so?'

"اللَّهُمَّ نَعَمْ" 'Oh Allâh, yes,' he answered.

Some of their benefits and uses are the following:

- 1. Snow falls on them, and stays at their peaks, supplying men with drinking water until it expires. It melts slowly, forming gushing streams, rivers and brooks. From this, a variety of plants, fruits and medical crops grow in hills and lawns that are different from the plants of planes and deserts. If there were no mountains, snow would fall on level ground, melting there in a short time, serving no benefit. Besides, it would cause torrential floods which would destroy everything in their way. This would cause great hardships for people, and a lot of bad consequences that could not be averted.
- 2. Caves, depressions and supports in their peaks and crests serve as castles and strongholds. They also are used as shelters for humans and animals.
- Stones are hewn from mountains and chiseled for various buildings and structures, and for grinding.
- 4. Minerals and precious stones are hidden beneath them, varying from gold, silver, copper, iron and lead to aquamarine, emerald and many other minerals which no human can count in full. Some minerals are so precious that a handful of them is more valuable than many times their equivalent in gold. They are of such great benefits that no one but the Creator, glorified be His name, can reckon.
- 5. Mountains break the rage of violent winds, soften their sharpness, and prevent them from lashing on the areas beyond them with their full force. Therefore, you find the dwellers in their shade sheltered from violent, harmful winds.
- 6. They divert floods descending in their beds, directing them to the right or to the left. Otherwise, floods would have destroyed all in their way. Mountains, in this case, are functioning like ramparts and safeguards.

7. They work as landmarks that indicate ways. They do the functions of man-made signs that direct travellers. They have indeed been called landmarks in the Qur'an, in the following verse:

"And of His portents are the ships, like mountains, on the sea." (42: 32).

In the above verse, 'jawaree' are ships, and 'a'lam' are mountains. The word is used here in the sense used by the poetess Al-Khansa' when she says, lamenting her deaced brother, Sakhr:

"Verily, Sakhr was a pilot for guides, whom they followed;

Similar to a mountain with a bonfire on its peak."

A mountain is called a landmark or a banner since it sticks out like a sign.

- 8. Medical plants and herbs grow on them; what grows on mountains does not grow on planes and deserts, while what grows in planes and deserts does not grow in mountains. In each, there are benefits and uses that no one but the Omniscient Creator can count.
- 9. Mountains can be used as a fortress to take refuge in against enemies, where the soldiers of Allah can feel safe from the aggression of the foes, in the same way as they hide in castles they are often safer and more impregnable than many castles and walls.
- 10. One benefit is the one mentioned by the Almighty Allah in His Book, that He had made them as pegs of the earth, stabilizing it, and anchors, like the ships'. This is an extremely valuable benefit and they serve a precious function in that connection. If you regard them,

and reflect on their amazing creation from that aspect, you find that they perfectly serve the purpose they were created for. If they had been higher and more perpendicular like a wall, they would have been hard to climb and much of their benefit would have been missed. They would have blocked the way of the sun's light and air, which is harmful to humans. If, on the other hand, they had been spread out more on land, they would have occupied a wider area than is necessary for farms and dwelling; they would have filled the planes, and would not have provided shelters, caves and forts; they would not have softened the violence of winds, nor broken the rush of floods. If they were spherical, men would not have been able to climb them, and that would have wasted much of their benefit. From this, it is clear that the most useful and beneficial shape of mountains, the most adapted to serve the needs of humans, is the shape willed by Allah.

We find in the Qur'an verses which exhort us to contemplate the mountains and reflect upon their creation. Says the Almighty Allah:

"Will they not regard the camels, how they are created? And the heaven, how it is raised? And the mountains, how they are set up?" (88: 17-19)

Their creation and benefits are a compelling proof of the power of their Maker and Originator, His Omniscience, Wisdom and Oneness. In addition, mountains glorify their Lord, hymn His praise, show humility to Him, split asunder and fall down for fear of Him.² It is they that

In reference to the Qur'anic verse:

feared their Lord and Maker, despite their firmness and great bulk, when He offered them the trust. There is the mountain on which Allah spoke to Moses, His addressee and confidant; the mountain to which the Lord revealed His glory, and it sank and crashed down; the mountain that had a liking for the Messenger of Allah 紫 and his Companions, and the Prophet % and his Companions loved it³; the two hills, Al-Safa and Al-Marwah, appointed by Allah to be a reminder of His Prophet Abraham, and ordained that believers hasten between them as part of their pilgrimage rituals; the hill of Al-Rahmah (Mercy) rising on the hills of Arafah, where only Allah knows how many sins are forgiven, misdeeds overlooked, trespasses disregarded, requests realized, distresses removed, crises favours happiness solved. renewed, won. wretchedness dispelled. Why not, when it is the hill privileged with receiving the grand congregation and noble delegation, coming from the farthest corners of the earth, standing in humility before their Lord's majesty, humble before His glory; in undistinguished, simple apparel, bareheaded, supplicating to Him to redress their trespasses, beseeching Him to render their requests. And He draws near to them, and speaks proudly of them to His angels. O Allâh! What hill and what mercy descends on it, what

﴿ وَإِنَّ مِنَ الْحِجَارَةِ لَمَا يَنَفَجَرُ مِنْهُ ٱلْأَنْهَرُ ۚ وَإِنَّ مِنْهَا لَمَا يَشَقَّقُ فَيَخُرُجُ مِنْهُ ٱلْمَآةُ وَإِنَّ مِنْهَا لَمَا يَشَقَّقُ فَيَخُرُجُ مِنْهُ ٱلْمَآةُ وَإِنَّ مِنْهَا لَمَا يَشَوَلُونَ ﴾ [البقرة: ٧٤]

"For indeed there are rocks out of which rivers gush, and indeed there are rocks which split asunder so that water flows from them. And indeed there are rocks which fall down for the fear of Allah. Allah is not unaware of what you do." (2:, 74)

I.e. The mountain of Uhud, as stated by the Messenger of Allah 🐒 with Uhud in view:

«هَذَا جَبَلٌ يُحِبُّنَا وَنُحِبُّهُ»

"That is a mountain that loves us and that we love." Reported by Al-Bukharee, Ahmad and Al-Tirmidhee.

great sins are forgiven upon it! There is also the mountain of the Cave of Hiraa, where the Messenger of Allah 雅 used to seclude himself to pray, until the day Allah honoured him with the Message while he was in the cave. It is from that mountain that light shone to the whole of earth. It rises above all mountains in prestige, and for good reason. So glory be to Him Who privileged whatever He chose from among men as from among mountains. Some mountains have been designated to be like magnets to hearts, as if hearts have a relation to them. Those hearts are moved whenever the particular mountain is mentioned, and long to visit it; in the same way, certain men are privileged with Allah's grace, and favoured with His blessing, honoured with His love, in a way that He loves them, and so do His angels and His believing servants, and they are generally gladly received wherever they go. It is as expressed by a certain poet:

"If you consider territories you will find

That they, like men, can be miserable or happy."

Therefore, you would be well-advised not to extol a certain mountain or another because it is associated with a certain people. You do well to act upon the advice of a poet who said:

"Take what you see; disregarding that which you have heard about;

When the sun shines, you no longer need the light of Saturn."

Mountains realize that they will meet a day when they will explode resoundingly, turning to cotton wool with the ferocity of the blast, smashed in response to the majesty and glory of the Lord. They are the same mountains that their Creator and Lord described as subdued and submissive with the fear of Allah. How strange, then, that some people's hearts are harder than those mountains, hearts which hear the verses of Allah recited to them, and the Lord, glorified be His Name, mentioned to them, yet do not soften, nor submit, nor repent. It is no wonder, then, nor is it incompatible with His wisdom, that the Almighty Allah should expose those hearts to a fire that melts them, since they do not yield to His Words, the mention of His Name, or to admonitions and warnings. Let those whose hearts do not soften to Allah in this world, who do not repent to Him, do not melt with the love of Allâh and fear of Him, let them find some enjoyment for a while, until the day they face the Great Melter, when they reckon to the Knower of the Unseen and the Seen – then they will see and know.



Figure "83"

With His Might, Allah causes enormous iron ships to float on water

The interior of the earth

Since the wisdom of the Lord Almighty willed that the earth, its planes, rugged lands, mountains and deserts, are all destined to give benefits of all sorts, to be the substance for creating diverse creatures, the earth is bound to have affinity with a mother that bears in her belly babies of every sort. It gives birth, for the benefit of men and

animals, known or unknown to them, ejecting from inside it whatever its Lord allowed it to bring out; and at a later time to reclaim all that it had brought out. He willed that it be a provider for living things as long as they live on its surface, and then, once they die, to reclaim them and to fold them in its belly. It takes responsibility in this way of the living things while they live and after they die. And then, when the appointed day (i.e. Resurrection) has arrived, and the earth is heavy with conception, delivery is imminent, and the labour is due, its Lord and Creator commands it to bring out what is in its belly, to be unloaded of its burden; and so it puts out humans from its belly to its surface; then it says: "Here is what You entrusted to me, my Lord." It puts out, by the will of the Almighty, it's treasures, reveals its mysteries, and gives witness about its children, of the good deeds and bad deeds they had done.

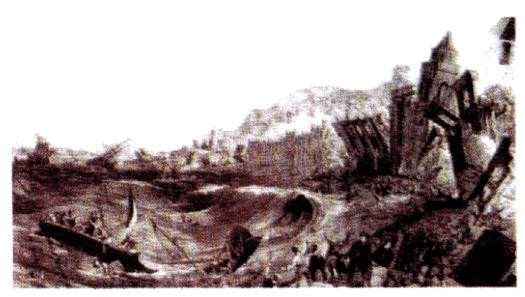


Figure "84"

The earthquake of 1755, which destroyed the city of Lisbon, the capital of Portugal. 60,000 people were killed, buildings were leveled and fires spread everywhere in the City.

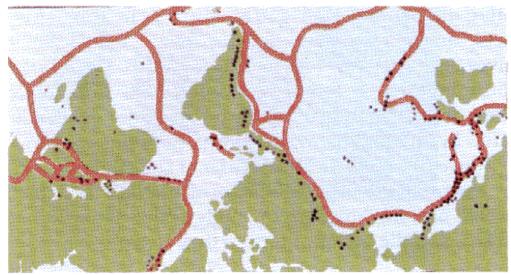


Figure "85"

The earthquake areas of the world according to the studies of Geographers. However, earthquakes only occur by the permission of the Lord, Allâh.

Earthquakes

Because winds blow around the earth, penetrate into its cavities, cause steams to be trapped in it and blow into it, without outlets, the Almighty willed that the earth occasionally 'breathe', resulting in violent earthquakes, which inspire His servants with fear and awe, driving them to repent and give up wrongdoing, supplicating to Him and penitent of their misdeeds. It is as an eminent believer of the earlier generations, sensing an earthquake, said: "Your Lord is reprimanding you." In the tenure of Umar bin Al-Khattab, there was an earthquake in Al-Madinah. So he gave a sermon exhorting people to be penitent; then he said: "If this happens again, I will not live with you in this town."

Air and the benefits of winds

Observe now air⁴ and the benefits it has for living things. It is the essence of life; it sustains living things internally since they breathe it, and externally by protecting their bodies; it carries sound and delivers it to near and far places, acting as a messenger or herald whose job is to convey information and messages. Air is the bearer of odours in their diversity, conveying them from place to place, so that a human receives an odour realizing its source by noting the wind's direction, in the same way as air conveys sounds. It is the bearer of cold and heat which are essential for the survival of animals and plants. Observe also the functions of winds as they blow over land and sea, and the mercy or torture they foretell.

Consider how much the wind has served the clouds until they rained! There is first the 'raiser', the wind that raises the cloud, which suspends it between the earth and

⁴ Scientists say that if air of the atmosphere were liquefied, it would cover the earth to a depth of approximately ten and a half metres.

the sky. There is then the 'transporter', that transports the cloud, carrying it on its back the way a camel transports a water-bag. Another wind is 'the collector', the wind that gathers bits and pieces of cloud into a big mass. This is followed by the 'fertilizer' that acts in the way a male fertilizes a female, but it is with water that the wind fertilizes - without it, the cloud is dry, without water. The next wind is the 'driver', the wind that drives clouds wherever it is commanded to drive them, where they release their water. A different wind, the 'disperser', disperses the clouds, stretching them around the sky, so that when it rains, it does not pour the water in a mass; for if it does, it would destroy dwellings, plants and animals; so the 'disperser' is designed to keep clouds spread in a way that they rain in drops. There are winds that fertilize plants and trees, without which they would be barren; the winds that propel ships, without which ships would be immobile on the surface of the sea. Some other functions of the wind are that it cools water, helps people in kindling fire, and dries what people want to dry.

On the whole, all that lives on earth, plants and animals, can survive only because of the winds. If Allah had not put them in the service of His servants, plants would wilt and animals would die; edible things would go bad, and pollution and rotting would be unbearable. Do you not see that when the wind subsides for long, great distress and affliction are flagrant, to a point that people do not survive if this condition lasts too long? If this happens animals will be sick, healthy people will no longer be healthy, and sick people's condition will deteriorate; fruits will go bad, plants will rot, and there will be contagion in the atmosphere. So glory be to Him Who made the blowing of wind a source of nourishment, mercy, blessing and a bounty from the Lord! It is as the Prophet ** said of the wind that

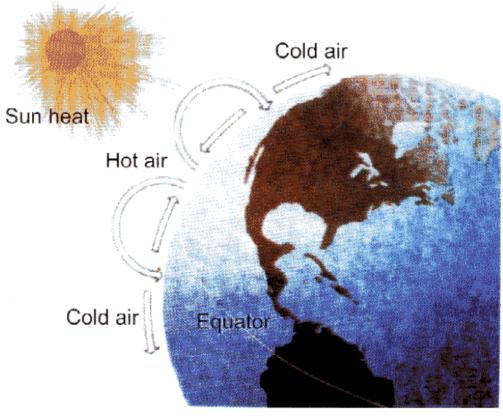
﴿إِنَّهَا مِنْ رَوْحِ اللهِ تَأْتِي بِالرَّحْمَةِ»

"Verily, it is of the Mercy of Allah that heralds mercy." 1

Note also a finer point about air in relation to sound, that sound results from the friction of bodies: it is not the friction itself, as some assume, but the outcome of friction once a certain object collides with another and then it moves away from it; so it results from collision and the following separation. Sound results from this, and air transmits it, delivering it to people's hearing, and this serves them in so many ways in their lives day and night. Very loud noises happen as a result of people's activities and dealings, so that if the sound that ensues from all of that were to stay in the air, there would be a great density of noises in the atmosphere, and the harm would be unbearable! People would have great difficulty trying to muffle the noises in the air to be able to hear badly needed sounds - in the same way as they wish used paper were blank to be used for useful writing. It is the mercy of the Most Mighty, the Wise, that willed that air should be like invisible paper that takes in as much voice as is needed, and then erases it with the will of the Lord, so that it becomes pure and blank, ready for receiving new information at all times.

Reported by Ibn Majah (2/1228), Abu Dawood (5075), Ahmad (2/268), Al-Shafi'ee in his Musnad (47) and Baihaqee in 'Shu'ab Al-Eeman' (4/315). Rated as 'fairly good' by Al-Albanee in his commentary on Al-Kalim Al-Tayyeb (No. 135).

The heat radiating from the sun heats the earth. In its Rotating, the earth heats the atmosphere that touches it. Then the hot air rises, replaced by cold air. This movement of the air is called the wind.



Movement of wind and air

Figure "86"

If the atmosphere were a little thinner than it is, some meteors that now burn by the millions in the atmosphere would hit all parts of the earth, at a speed of anything from six to forty miles per second. They would set on fire any combustible things.

The composition of Air

The air that we breathe consists of: oxygen, nitrogen, carbon dioxide, argon, neon, krypton and xenon.

Oxygen constitutes 21% of the atmosphere. Oxygen is a constituent of the compounds of which the earth crust consists; it constitutes 80 % of the world's waters; if that rate increases to 90%, for instance, many of the living things on the earth will burn; if it decreases to 10%, all creatures will die.

Carbon dioxide constitutes .0003 of the atmosphere; it is a heavy gas and requires a lot of hard work to be separated from oxygen. Plants can, however, with the assistance of sunlight, separate oxygen from carbon dioxide in a process that is called photosynthesis. In this process, a plant lets off oxygen into the air, and retains carbon, which it unites with the water hydrogen; this latter it will have absorbed through its roots. Later, with the grace of the Lord, it manufactures sugar, cellulose and other compounds that we see in the form of fruits, vegetables or flowers. So I ask you, in the name of God, who commanded it to perform all that?

Nitrogen constitutes 78% of the atmosphere. It is hard to dissolve, and in this way it puts a limit to the spread of oxygen. Without nitrogen, no food can form anywhere; it is essential for the nourishment of plants and animals, and of course man. Nitrogen is made available to plants in one of two ways:

1- With the help of bacteria in the ground and the plant: they take nitrogen from the atmosphere and transform it to one of the nitrogen compounds. After they die, they leave it dissolved in the ground. 2- Through thunder storms and lightning flashes: these cause nitrogen to unite with oxygen in the air, then it falls in the form of rain to dissolve in the ground. That is why rain water is the best for irrigating plants, since it contains the nitrogen that plants need.

Idle gases, like krypton, argon, neon and xenon.

Heat and cold

Regard also the outstanding mercy of cold and heat as vital things for the life of animals and plants! Observe how each displaces the other gradually and bit by bit until it completely dominates! If cold or heat were to displace each other in a sudden way, it would have been harmful and fatal for organisms and plants, the same as when a man comes out of an extremely hot bath to an extremely cold weather. The way heat and cold take place has no other reason but the care, wisdom and mercy of the Lord! If you say: The slow and slack way that heat and cold displace each other is a result of the sun's slow motion in ascending and descending, you will be asked: And what causes the slow motion of the sun? If you answer: The reason is the great distance between its rise and its setting, you will have to deal with the next question: And why this great distance? And so on.. You will have to answer question after question every time you give a cause until you end up with one of two attitudes: either stubborn denial and claiming that it is mere coincidence, without a controller or maker; or recognition of the Lord of the Worlds, a submission to the Eternal Fount of all being, a resolve to be among the sensible and thinking humans. There is no mid-way place between the two camps at all! So do not let your mind be deluded with the raving of atheists, as such delusions are for the one who knows, no

more than the hallucination of devils and the fancies of deniers. When the dawn of guidance comes, and the sun of prophethood rises, the troops of those deluded are the first to take to their heels. Indeed Allah will bring to its fullest the glow of His light, in spite of the unbelievers.

The creation of fire

Reflect also on the creation of fire, how it is kept in waiting and how it is lighted. If it were ablaze all the time, like the continuity of water and air, it would burn the world; it would spread beyond conrol, and so much mischief and harm would result. If it remained a potentiality, never actually coming into existence, humans would miss many benefits that are realized because of the fire. The wisdom of the Most Mighty, the All Knowing, therefore, determined that fire should be potentially present in materials, that a human can bring it out whenever he needs, preserve it with fuel, like wood, and let it burn as long as he needs; when he no longer needs it, and ceases to supply it with fuel, it subsides with the will of its Lord, its Originator, which saves the trouble of its preservation and the harm of its continuity. So glory be to Him, who created it and put it in the control of humans in the most striking and admirable balance, combining enjoyment of its benefits, having control of it, and keeping secure from its dangers. Some of these meanings are referred to in the following verses from the Qur'an:

"Have you observed the fire which you strike out; Was it you who made the tree thereof to grow, or were We the grower? We, even We, appointed it a memorial and a comfort for the dwellers in the wilderness. Therefore,

praise the Name of your Lord, the Tremendous." (56: 71-74)

We praise our Lord, the Tremendous! He acquainted us with Himself, with His signs, guided us with His marvels, and saved us the need for guidance from mortals. He reminds us with the fire of this world of the fire of the Hereafter, so that we may take caution, beware of it and take refuge in Him from the Fire. He adds that the fire is a provision for 'muqween', that is travellers who take rest in an uninhabited land, where the need is keen for fire, for lighting, cooking, baking, warming, dispelling loneliness and other functions.

Notice the wisdom displayed in privileging man with the use of fire in preference to all animals! Apart from man, animals are not in need of fire. If man were to be fire, the effects would be grave and very unfavourable in all matters of life and in his interests. Other animals, in contrast, have no use of fire, nor do they enjoy its services. To refer to just one of the many uses of fire, a use that is seemingly trivial, but is really vital in the life of human beings, let us notice the use of the lamp. This device is commonly used by people to perform any of the tasks they choose to perform at night. If they were deprived of this device, humans would have to spend half of their life as inactive as the dwellers of tombs. Who would be able to write, sew, perform a craft or do any activity in dark nights? How would an ill person behave at night? How would he manage without light to obtain medicine or to extract blood or to take any other action on his ailment? Consider the amount of light that is radiated by the tiny wick, how it lights quite a big circle around you, enabling you to see what is near and what is far! Consider, also, how if every creature of Allah's were to take a light from your light it would not weaken or grow fainter! As for the benefits of fire in cooking foods,

preparing medicines, drying what is only usable after drying, analysing what has to be analysed, condensing what needs to be condensed and combined to make it useful; all these and many other uses are more than can be figured out.

Think again of the fire, how it naturally rises up! If the surrounding atmosphere did not check it, it would rise and rise; it is rather pulled down in the same way as a body that has weight is attracted down; and if, on the other hand, nothing checked its downward attraction it would go down and down. So who is it that arranged that the fire should rise to a determined level, and arranged that its descent should have a limit at the desired point? Who but the Most Mighty, the All-Knowing?

The rareness of gold and silver

Consider Allah's wisdom revealed in the rareness of the two precious metals, gold and silver; observe the failure of the best minds among humans to artificially produce these two metals, their utter inability to emulate Allâh's creation in this, despite their zeal and utmost endeavour to achieve this end. They only succeeded in producing imitations of the two metals. Had they succeeded in producing the identical gold and silver, great chaos would happen in the world, as gold and silver would be available to men in great abundance, until they become as cheap as palm leaves and pottery; in which case they would cease to serve the interest they are created to serve. Their ampleness would make them of little value, and they would no longer be used as the price for valuable property and goods, services and weaponry for fighters. Men would refuse to be employed, since everyone would be a possessor of gold and silver. If the Lord were to make all of His creatures rich. He would have virtually made them all poor, for who would let himself be employed in menial jobs which are

absolutely essential for life? So glory be to Him who deemed that the rarity of gold and silver be a basis for establishing an organized system in the world! On the other hand, He did not make them as rare as red sulfur which is almost impossible to obtain, for in such little quantity they would be absolutely useless! He rather created them and laid them in such quantity as is deemed right by His judgement and mercy, for the convenience of His creatures.

I once read this description of an incident written by his eminence, Jibreel bin Rawh Al-Anbaree: "I was told by some precious-metal seekers that they once went quite far in searching for such metals along the paths of a certain mountain. They reached a spot where they came upon a mass of silver that seemed as big as a mountain. There intervened, however, between them and the silver a deep and wide river that they had no means of crossing. So they returned to fetch some device of crossing. Having found what they needed, they returned and looked for the way to the river, but they could not find any trace of it, and they had no means of choosing the right direction. So they returned, bearing their frustration." You see how preciousmetal seekers will go to great lengths in looking for the precious metals, being unable to produce it in artificial methods. This is an evidence of the falsehood of chemistry, which on inspection will turn out to be mere fraud and hoax. Indeed, I wrote a treatise about chemistry in which I showed in forty ways that it is false and unfounded.* The

^{*} Editor's Notes: The concept of chemistry referred to here by the Imam is not the study of elements, their structural make up and chemical composition. Rather, the Shaikh is refuting the idea that man can create anything he wishes by combining the proper elements and molecular structures through laboratory type procedures. Only Allâh is the Supreme Creator and man can never imitate Allâh's ability to create what He wills! A.W.

point that we would like to emphasize here is that Divine wisdom willed that gold and silver should be rare and hard to find in comparison with iron, copper and lead; and this is for the benefit of humans. To drive this idea home we add that when an interesting and appealing thing is introduced among people to please them, it will be treasured and held valuable as long as it remains a rare thing. But as soon as it multiplies and becomes commonly available to people, common and noble, it loses its lustre in their eyes, and they lose interest in it.

This is the reason for the aphorism that goes: "The preciousness of something is contingent on its scarcity." It is also for this reason that a scholar is least appreciated by his family and neighbours, and he is sought after most by those who are farthest away from him.

Availability of favours through Divine mercy

Think also of the marvelous wisdom embodied in the Lord's bringing within access of His servants what they most badly need, His compassion in fitting the availability and abundance of things to the extent they are needed. The more human beings need something, the more abundant it is; the less they demand it the less it is abundant; and when they need it in moderate amounts, it is available in moderate amounts - it would not in that case be too common nor too scarce. All depends on the extent and diversity of needs. Take for example the four essentials, earth, water, air and fire. See how commonly available they are. Observe the huge amount of air Allah has created, and how commonly available it is everywhere you go. That is because land animals cannot survive without it; and so it is accessible to animals wherever they happen to be, since they cannot do without it for a moment. Had it not been there in great quantities in all lands and territories, people and animals would suffocate

because of smoke and vapour that keep forming and spreading. Observe, too, the wisdom of your Lord when He caused the wind to expel smoke and vapour; when they rise into the atmosphere, the wind carries them to where they are transformed to cloud or fog, and the world is rid of their nasty effects. You may well ask the denier who is it that managed things in this way and ordered everything most accurately? Can all human beings, if they work as a united group, transform smoke into clouds or fog, or can they blow them away from people where they would cease to be a source of danger to them? If your Lord so willed, He could have held the wind from blowing away smoke, and so it would become denser and denser on the surface of the earth, causing the demise of multitudes of humans and beasts.

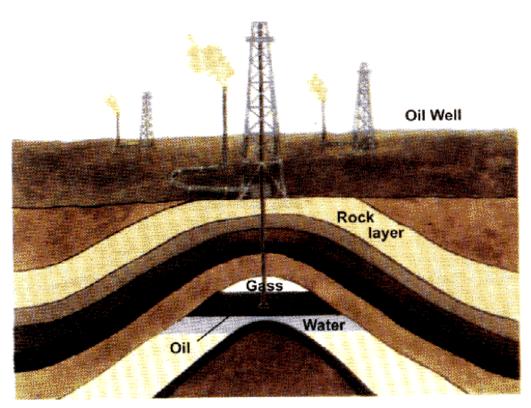


Figure "87"

From their study of the layers of rocks under the earth, geologists learn about the places where coal, oil and natural gas may be found. Such fuels are called fossil, because they developed from the remains of living beings trapped between layers of rocks.

Geologists also investigate the nature and structure of rocks. They can distinguish rocks that contain useful minerals, such as iron, copper, diamond and uranium.



Figure "88"

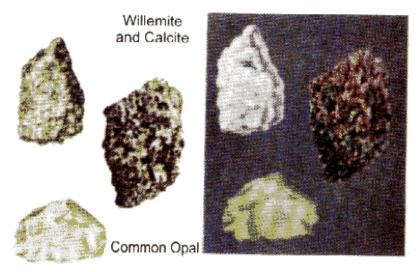
A diamond





A few minerals are strongly magnetic. This is pyrrhotite, an ore of iron.

NATURAL LIGHT



Some minerals emit beautiful colours under the rays of an ultra -violet lamp.

Figure "89"

Some minerals that the Almighty deposited in the earth for human use.

Tropical forests may exist where the rainfall is high and the temperature is high; deserts exist where the weather the weather is dry and hot; the tundra plains exist where the weather is cold and dry.

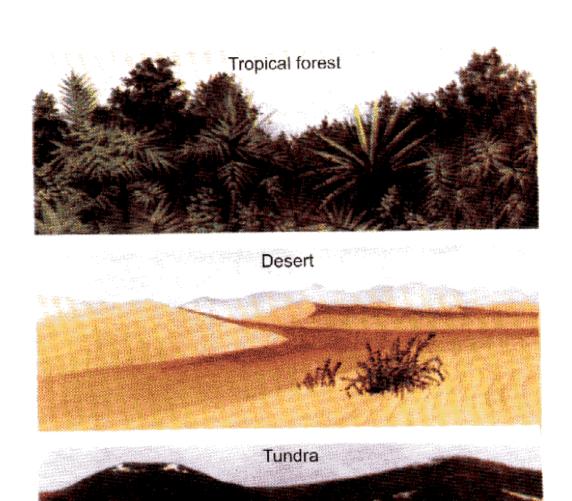


Figure "90"

The distribution of rain

Reflect on the exceeding wisdom witnessed in the falling of rain from above; how its precipitation extends to valleys and hills, mountains and planes, low lands and high lands. Had the Lord deemed that lands were to be watered from below, water would not reach high land until it had risen unduly in the low parts, which would cause much harm. It is for good reason that the Lord waters lands from above; He forms clouds, the irrigators of land, and sends winds that carry water from the sea, and then fertilise the clouds, in a way similar to a male impregnating a female. It is for this that lands adjoining the sea have a lot of rain, while those that are far from the sea have little rain. A certain poet has aptly described the clouds and their fertilisation in the following couplet:

"They (i.e. clouds) drank sea water and then rose;

Like great green waves speeding with a high hoot."

There is also, in relation to this, a tradition reported in Al-Muatta' (though it is one of the four traditions in Al-Muatta' with a break in the line of transmission):

"If a cloud rises from the sea then moves westward, it is a rain-replete cloud." For Allah originates water in the clouds at a certain stage; sometimes by transforming air into water, at other times by causing air to carry water from the sea; then it fertilises the cloud, then it falls on the ground to fulfill the benefits mentioned above. If He had caused water to be driven from the sea as a stream

³ Commenting on this tradition, Ibn Abdul-Barr says: Apart from Al-Muatta', I have not seen this tradition except in Al-Shafi'ee's 'Al-Umm'.

running on the face of earth, the required watering would not have been realized without a lot of ruining of lands, and this watering would have not been comprehensive enough, not reaching the higher parts. Therefore, the Lord, in His infinite mercy, caused water to evaporate into the air, then, the Gentle and Powerful caused it to fall softly on the ground, in a way that overwhelms the minds of all the wise people.

Regard, too, the compelling wisdom of the rain's falling in the right amount. Once the ground has taken its need, and an excess of water would be harmful, it stops, and a clear sky follows. These two states, cloudy and clear sky, come to the world in succession of each other for its good. If one were to prevail, it would be to the ruining of life on earth; if rain fell continuously, it would cause the perishing of what is on earth; if it fell in excess of need, it would spoil grains and fruits, rot plants and vegetables, exhaust our bodies, and over-humidify air. Various diseases and ailments would spread, most foods would go bad, ways would be blocked. If, on the other hand, cloudlessness prevailed, bodies would dry; water would be scarce: springs, wells, and rivers would be without supply. Great damage would ensue, the air would be stifling; living things on the earth would dry, aridity would prevail. All this would cause various hard-to-cure diseases. It has been a blessing from the Gentle, the Wise, that He alternated clear sky with water in this world. In this way, balance is maintained, the air is healthy, rain and clear sky eliminate the adverse effects of each other, and, on the whole, this arrangement works for a better life on earth.

Greenery (Vegetation)

We read in the Noble Qur'an:

﴿ أَوَلَمْ يَنظُرُوا فِي مَلَكُوتِ ٱلسَّمَوَتِ وَٱلْأَرْضِ وَمَا خَلَقَ ٱللَّهُ مِن شَيْءٍ ﴾

[الأعراف: ١٨٥]

"Have they not considered the dominion of the heavens and the earth, and what things Allah has created," (7: 185) And we read:

"Lo! Allah it is who splits the grain of corn and the date-stone for sprouting. He brings forth the living from the dead, and is the bringer-forth of the dead from the living. Such is Allah. How then are you deluded away from the truth?

He is the cleaver of the Daybreak, and He has appointed the night for stillness, and the sun and the moon for reckoning. That is the measuring of the Mighty, the All-Knowing.

And He it is Who has set for you the stars that you may guide your course by them amid the darkness of the land and the sea. We have detailed our revelations for a people who have knowledge.

And He it is Who has produced you from a single being, and has given you a habitation and a reposity. We have detailed Our revelations for a people who have understanding.

He it is Who sends down water from the sky, and therewith We bring forth buds of every kind. We bring forth the green blade from which We bring forth the thick-clustered grain; and from the date-palm, from the pollen thereof, spring pendant bunches, and We bring forth gardens of grapes, and the olive and the pomegranate, alike and unlike. Look upon the fruit thereof, when they bear fruit, and upon the ripening, ..." (6: 95-99) 1

In the above verses the Almighty is commanding us to watch plants at the time of the appearance and ripeness

These green factories come into being at an early stage of the plant's development. The Plant, in turn, grows, supplied with water, from its seeds and roots. This growth is described effectively in a Qur'anic verse:

﴿ وَهُوَ ٱلَّذِى آنزَلَ مِنَ ٱلسَّمَآءِ مَآءُ فَأَخْرَجْنَا بِدِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا لَخَرْجُنَا بِدِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا لَخْرِجُ مِنْهُ حَبَّنَا ثُمَّزَاكِبًا وَمِنَ ٱلنَّخْلِ مِن طَلْمِهَا قِنْوَانُ دَانِيَةٌ وَجَنَّنتِ مِّنْ أَعْنَكِ لَخُرْجُ مِنْهُ وَالنَّامِةُ النَّالُورَا إِلَى ثَمَرِهِ إِذَا آثَمَرَ وَيَنْعِدْ إِنَّ فِي ذَلِكُمْ وَالزَّيْنُونَ وَالرُّمَانَ مُشْتَبِهُا وَغَيْرَ مُتَشَنِيةٍ ٱنظُرُوا إِلَى ثَمَرِهِ إِذَا آثَمَرَ وَيَنْعِدْ إِنَّ فِي ذَلِكُمْ لَا يَعْمَرُوا إِلَى ثَمَرِهِ إِذَا آثَمَرَ وَيَنْعِدْ إِنَّ فِي ذَلِكُمْ لَا يَعْمَ لِيَعْمِ لِنَا عَلَى اللَّهُ مَا لَا يَعْمَ مِنْ اللَّهُ مَا اللَّهُ مُنْ اللَّهُ مُنْ مَنْ اللَّهُ مَا اللَّهُ مِنْ اللَّهُ اللَّهُ اللَّهُ اللَّهُ وَالرَّبْعُ اللَّهُ مَا لَا لَهُ مَا اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ مَا اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ مَنْ مُنْفَالِهُ إِلَّا لَهُ اللَّهُ الللَّهُ اللَّهُ الللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ الللَّهُ اللَّالَةُ الللَّهُ الللَّهُ اللَّهُ اللَّهُ اللَّهُ الللَّهُ اللَّهُ الللَّهُ الللَّهُ الللَّهُ الللّهُ اللّهُ اللّهُ الللّهُ اللّ

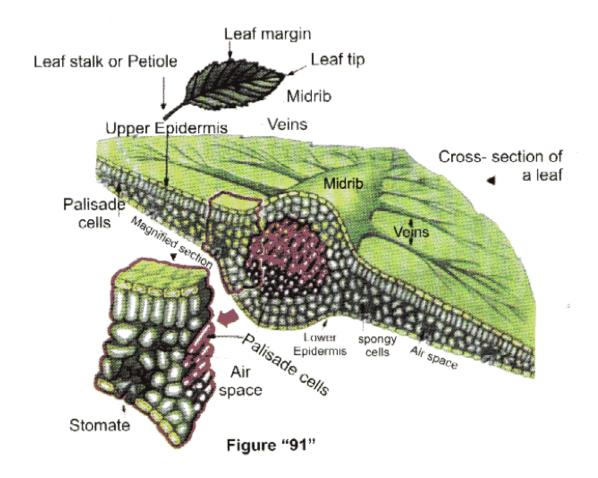
"He it is Who sends down water from the sky, and threrewith We bring forth buds of every kind. We bring forth the green blade from which We bring forth the thick-clustered grain; and from the date-palm, from the pollen thereof, spring pendant bunches, and We bring forth gardens of grapes, and the olive and the pomegranate, alike and unlike. Look upon the fruit thereof, when they bear fruit, and upon the ripening, Lo! herein verily are portents for people who believe." (6: 99)

Mankind were for long ages ignorant of the formation of grains, fruits and vegetables; of even the structures of different parts of plants. Modern scientists, however, have striven to understand the way plants develop their seeds and fruits, in hope of emulating them, and producing food the way plants do! They endeavored long in that direction, aiming to disclose the hidden secrets of plants. In the end, they revealed what is now called photosynthesis: they discovered in the plants green micro-factories (green plastids), parts of the plant that give it its green colour. These micro-factories manufacture the nutrients that shape grains, fruits and vegetables, in fact all parts of the plant.

of fruits. The reference here is to the overwhelming marvel and extraordinary feat of bringing out fruits from among wood and leaves; and then the transformation of fruit from acridity, bitterness and sourness to the bright appealing colour and the sweet delicious taste; in this is a sign indeed for believers. It is in this spirit that one of our classic scholars said: It is the duty of people to go out to fields at the time of the ripeness and mellowness of fruit and vegetables to watch them. He recited, in support of his exhortation, the following verse from the Qur'an:

"Look upon the fruit thereof, when they bear fruit, and upon the ripening, ..." (6: 99)

Indeed, it is beyond us, beyond all past and all future generations, to try to exhaust the significance of Allah's glaring signs in the universe that point to Allah, the only true God, who has no partner, and no one like Him, no one as great, perfect, appreciating, or gentle like Him; it is beyond us to just give justice to the tiniest fraction of all that. It does not follow, however, if such target is unattainable, that we should desist from pointing out some samples that alert man to what lies beyond. It is in that spirit that we embark on writing the following sections.



Structure of Leaf

The distribution of provisions and fruits

Reflect on the Divine mercy as revealed in the growing of provisions, vegetables, grains and fruit, gradually emerging in a slow succession! It is a blessing that they do not grow all at the same time, for if they were to grow like this on land, or if they did not grow on branches and stalks, much harm would take place, and many benefits that accrue from their emerging gradually would be missed. For each season and period requires fruits and plants that are not required in other seasons and periods; some period are hot, some cold, and some moderate; each season is so for the benefits of plants that are precisely adapted to it.

Benefits of crops and trees

Besides the above benefits, the Lord also invested crops with extra benefits, as noted in grains' husks, timber and wood, leaves, blossoms, palm leaves, palm branches, and other parts of crops; to say nothing of fodder and forage, supplies for building, ship building, saddles, utensils and so forth. Observe the benefits of blossoms and the picturesque sight that is ecstatic to watch; regard the spectacular form of trees, their magnificent shapes that are a strong reminder of the their Originator and Maker Whose handiwork reveals His compassion and wisdom! The blossoms are a wonderful thing when you think of their budding on wood, and when you observe on the same wood the green leaves! They are followed by many fruits of all colours, types, forms, sizes, tastes, scents and benefits and functions! Reflect on all these being stored in that wood, the trunk and the twigs and branches before their emergence! The tree is like a mother to them, but where is the poor father who could bring forth the amazing forms, the perfect symmetry, the marvelous colours, the luscious tastes, the fragrant scents and the spectacular sight? You may well ask the denier: Who undertook to determine all that, to give it shape, to articulate it, and to develop it bit by bit? Who caused provision to come within reach, along delicate paths and subtle ways, hardly visible with the naked eye? Who, then, has control of all that? Who caused the sun to shine over all the living things, subdued the wind to their service, caused rain to fall on them, and protected them from ruin and harms?

The nourishment of plants 2

²For a long time all mankind did not know the factors behind the variation of plants, until modern sciences revealed that all plants consist of the same basic elements: carbon, oxygen, hydrogen, nitrogen, sulfur or phosphorus, and some trace elements. Their variation is caused by the variation in the amount each of the above elements contributes to the structure of the plant. It was further found that the root only absorbs from the ground exact and accurate amounts. We can find a support of this in the Divine Book, the Qur'an:

Consider the calculation of the Gentle, the All-knowing! Like people and animals, trees are in constant need of nourishment; unlike animals, however, they have no will and mouths, nor can they move to seek food. Therefore, their roots have been inserted in the earth, so that they absorb nutrients from the soil, and then pass them to their branches and boughs, which distribute the nutrients in their turn to leaves and fruit, each absorbing its allotted amount, never exceeding it. Nutritious matter and water are delivered to the various parts along paths and ways that are most precisely made, picking that matter from below, and transmitting it to branches, which take it in the way an animal takes its food with its mouth; then they distribute to each part what it needs; no part is denied anything of its due, nor does it exceed it.

Ask the denier, then: What gave plants that power? Who guided them to it, and enabled them to do it? Could all human beings, if they were to converge from the first man on earth to the last, and combine all their powers and skills, cause a single fruit to develop through an artificially devised way, through instruction or training? Is there any other explanation for all this but that it is the doing of Him, for Whom every creation gives evidence, and every miracle attests His sovereignty? It is indeed as is expressed in some couplets:

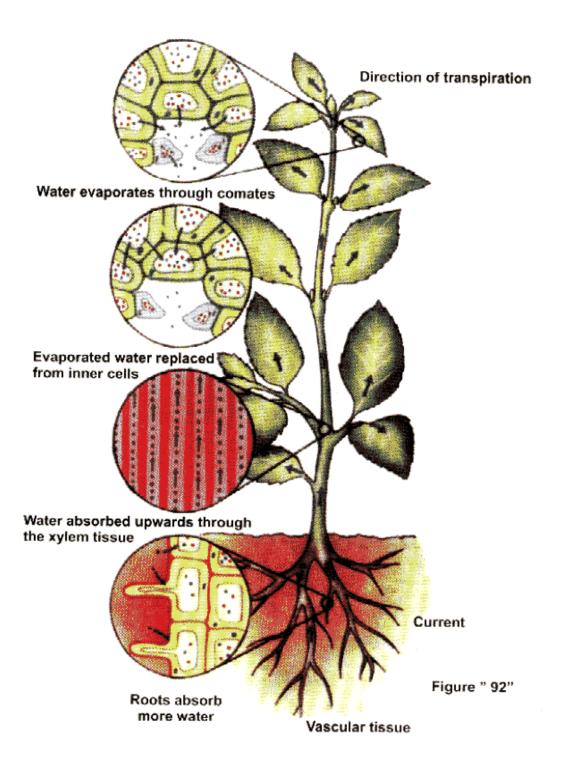
"It beats one how a denier, disobeys the Lord or denies Him; When in every movement or rest there is a proof of Allah; And in everything there is a sign confirming that He is One."

﴿ وَأَنْبُتَنَا فِيهَا مِن كُلِّ شَيْءِ مَّوْزُونِ ﴾ [الحجر: ١٩]

"and We caused to grow therein of every thing justly weighed," (15: 19).

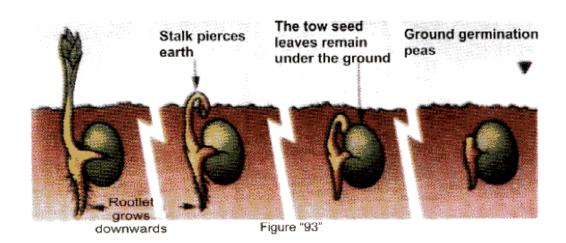
Translocation in plants

The transport of nutrients in plants is called translocation. Liquids move in vascular tissues, composed of xylem cells and phloem cells. Xylem cells transport water, with mineral salts dissolved in it, from roots to leaves; phloem cells transport nutrients from leaves to the various parts of the plant, each according to its need.



Roots of trees

Do you notice how when one puts up a tent or pavilion he fastens it with many pegs on every side, to keep it fast and to protect it from falling or leaning? In the same way, plants and trees have extensions spreading under the earth on every side, to steady them and hold them; and the more a tree's upper parts spread, the more its lower extensions spread in various directions! How else could those high-rising palm trees and lofty trees of many species remain firm in spite of the violent storms. Observe how this Divine precedent has provided humans with models: by watching trees and plants, they learn the building of tents and pavilions. Trees' subterranean extensions are like the pegs that stabilize tents; their branches and boughs are like a pavilion, and man has learnt to copy them.



Germination of a seed into green leaves

Tree leaves

Reflect on the deep wisdom of creating tree leaves. You see in the single leaf veins that criss-cross on the whole of its surface in a way that bewilders an observer! Some veins are thick and line the leaf longwise and sidewise; and some are fine, weaving in between the thick ones, in a very intricate pattern. If humans were to emulate the network of even a single leaf, they would not complete the veins in a whole year; they would also need tools, skills and treatment that beat their means. Observe, then, how the Almighty grows, in a few days, leaves that cover the trees and bushes all over the earth, on both planes and mountains, without the need for support or assistance, without tools or treatment. It is evidently His power, operative on everything in the universe, and His ability that no barrier can obstruct.

It is indeed as Allah says in the Qur'an:

"But His command, when He intends a thing, is only that he says unto it: Be! and it is." (36: 82)

Reflect, then, on the wisdom as revealed in those veins that spread all over the leaf, to provide it with water and nourishment, thus preserving its survival and bloom; in rather the same way as the veins in the human body deliver nutrients to each part of it! Observe how the thick veins give substance to the leaf, making it rigid and strong, protecting it from tearing and decaying! They perform the role performed by the nerves in the animal body; they are well-designed and carefully crafted and spread longwise and sidewise, giving it the required solidity, and protecting it from tearing.

The benefits of leaves

Think, also, of the wisdom of the Gentle, the All-knowing when He willed the leaves to be an adornment to trees, a covering and shelter to fruits, and a protection to them from any destruction that may interrupt their ripeness! It is for this reason that if a tree is stripped of its leaves, the fruit will decay and lose its appeal. Regard how the leaves protect a frail budding fruit from drying! After a tree is fruitless, the leaves still protect the weak twigs from heat. When it is cool, and sunlight is no longer harmful to boughs and twigs, the Lord strips the tree of its leaves, and leaves it bare, in preparation for clothing it again with a fresh, nicer apparel. So glory be to the Lord of the worlds Who knows the falling place and budding place of each and every leaf; no leaf grows, nor does it fall without His notice. If human beings realized, while watching those leaves in their variety and multiplicity, that they glorified the Lord, together with the fruit, twigs, branches and trees, they would discover aspects of their charm that they had not been aware of; they would perceive them with new senses, and would realize that they were created for a noble purpose, not in vain! Let's recite in this context the following verse from the Qur'an:

"And the herbs and the trees both bow in adoration," (55: 6).

In another place we read:

"and there is not a thing but hymns His praise; but you understand not their praise. Lo! He is ever forbearing, Forgiving," (17: 44).

I hope you are not of those whose heart is little-comprehending, who take 'tasbeeh' (in the Arabic text) to mean their pointing to their Creator and no more. Remember, then, that such understanding is refuted in more than thirty ways, as I showed at another place. Is there any language in which direction to the Maker is called 'praise, adoration, prayer, turning unto the Lord, descending in fear', the terms used by Allah in His Book referring to His creation? Allah uses in describing creations terms like 'tasbeeh', (glorification) prostration and prayer, as you see in the following verse:

"And the birds with wing outspread (in flight). Each one knows its own mode of prayer and praise." (24: 41)

Can it seem conceivable to your mind that the above verse means that Allah knew that the creatures mentioned pointed to Him, and that He called that pointing a prayer and 'tasbeeh', though He made a distinction between them, and joined them with the conjunction 'and'?

In another place in the Qur'an, the Lord describes creatures as echoing the hymns of praise, as we see in the following verse:

"O you hills, echo his (David's) psalms and praise!" (34: 10)

³ The reference is to an earlier place in the same book, not included in this book

In still another place He mentions that they perform 'tasbeeh, praise of the Lord at a particular time, at the break of the day, or at twilight. Is it conceivable here that they point to the Lord at that time and not at another? On the whole, the untenability of the above view is so manifest to people of vision that it is not in need of refutation. Praise be to Allah.

The creation of the stones of dates

Consider the wisdom involved in the stones and kernels placed inside the dates and other fruits! Have you thought of the many benefits and functions of the stones. which play a part similar to that of a skeleton to the animal's body, giving solidity to the body of the fruit; otherwise it would be flabby and tender. Without the stone, a fruit would split and rot, and would be quick to decay. A stone to the fruit is, as we said, like the skeleton to animals, and the fruit itself is like flesh clothed over animals. bones. in Stones are also useful for the preservation and reproduction of the species. In case the tree loses substance or decays, the Lord provided the stone, to be a substitute from which, if sown in the ground, a new tree may grow. Stones and seeds are also used as fodder for animals. Many materials, ointments, drugs, dyes and other things are made from them as people learn more about them; but the potential uses are even more! You ought to reflect long on the wisdom of the Lord's creation of the seeds and stones, which serve many functions; and He clothed them with the delicious pulp that man enjoys eating.

The skin of fruits

Think of the outstanding wisdom of the Lord when He provided the delicate, soft fruit, like the pomegranate, the chestnut and the hazel-nut with a skin that preserves it

from rotting if exposed to the sun and air. As for the fruit which does not go bad if exposed, it is provided with a thin membrane at the beginning of its development, which preserves it when it is tender and unresisting to heat. After it has toughened, the membrane breaks up, and the fruit is allowed to be exposed to the sun's heat and to air, as is exemplified in dates and similar other fruits.

The creation of the pomegranate

Reflect also on the creation of the pomegranate, what wisdom and wonder it involves! You see inside the pomegranate a mass of fatty material lining it, surrounding the pulpy arils that are arranged in rows and organised layers, in a way that no human hand can emulate. The arils are divided into several compartments and smaller compartments; each enwrapped in a shell that envelopes it in the most exquisite, fascinating and appropriate way. They resemble nothing that men can accomplish, since they are the handiwork of Him Who said:

"Be! and it is," (36: 82) You see how this solid, air-tight vessel envelopes all that it is designed to envelope to a perfection. Reflect on the fatty material that separates the arils, barring them from overflowing to each other, since if they did, they would get mixed up, and they would be one chaotic mass. As it is, the fatty stuff has been caused to flow among arils to provide them with nutrients; you see that the pulp of each aril has no access to other arils, but all are embedded in that fatty stuff. This situation contrasts with the grapes, which in place of the above arrangement, have a canal that reaches each single berry, nourishing it individually; in a way that no berry needs to trespass on the noursihment of the berry next to it. In the

grape cluster, a main canal carries the sap along, then it branches into the many canulets of individual berries, so that sap is delivered to each and every berry. So glory be to the Best of Creators! See how He enwrapped all the arils in pomegranate in strong wrappers to hold them together, so that they do not loosen or scatter, and then He covered those wrappers with a solid shell that shields the pomegranate and holds it firmly, fulfilling Allah's will to protect it. This is only a glimpse of the wisdom manifested in only one fruit. It is beyond us, and beyond anybody else, to exhaust the full wisdom, no matter how long we try, or how clever the investigator is. It is, however, enough to awaken a curious reader to what lies beyond, since a hint would suffice for such a person. As for the heedless, we find it apt to quote the following verse to describe their state:

"How many a portent is there in the heavens and the earth which they pass by with face averted!" (12: 105)

This means that they are heedless of the significance of what is around them.

The creation of seeds

Reflect on the fertility and production that Allah endowed crops with, so that from one grain seven hundred grains may grow. If a grain produced only one grain, there would not be produced enough to resow in the ground, to feed people, and for the farmer to save for himself until the next harvest. Instead, what is sown is from the surplus yield, and the farmer finds enough to feed himself, to feed others and to use for farming. This is also true of fruit trees

and date-palm trees. A double plant, that grows from the same root, is an alternative way to let people cut one plant, and let the other replace what they have used for their various purposes. They do not run short of the particular plant. A farm-owner who is concerned for the prosperity of his lands would provide the peasants with what they need for sowing and what they need to live on until the ripeness of crops. It is for this that the Gentle, the All-Knowing grew from a single grain several grains, so that people can save what they can survive on, and sow the rest for the next season.

The creation of grains

Consider now the wisdom manifested in the creation of grains, wheat, barley, and the like. See how a grain is encased in a husk with a spear-sharp tip, thus repelling the flocks of birds from assailing and destroying it! If birds found the grains unsheathed and unprotected they would be sure to do great mischief, ruining the grains, spoiling them, causing havoc and devouring all they could; the farmers would be unable to deter them. This should lead one to realize the great mercy of the Gentle when He arranged that grains should have effective protection to keep them intact. Birds do pick up what they need for their nourishment, but the greater part remains for man, their rightful owner, since it is he who strove and drudged to grow them. Besides, he needs many times as much as birds do.

The right amount of trees' yield

Regard the great wisdom evident in the trees! See how they keep 'conceiving' and 'delivering' year in and year out! They are continually either 'conceiving' or 'delivering'! During the former phase the Lord decrees that a tree's natural heat is trapped inside, so that there should be conception at the destined time. The first phase is similar

in the animal to the period of the formation of eggs and sperm in the human. The necessary processes are taking place inside in preparation for the time of fertilisation. At the time assigned for fertilisation and conception the tree seems to get ready and there is an increase in moisture inside, and this shows in the tenderness of its boughs. When its 'delivery' is due, it clothes itself in luxurious apparel, resplendent with blossom and leaves, and it seems to 'swagger, sway and swing', showing its pride over the barren tree. Once it has run its course, and its conception is visible to observers, its liberality or meanness is displayed. Its offspring will be nourished by the One Who nourished foetuses in their mothers' bellies. It is He Who clothes it with leaves, protecting it from cold and heat. Once the stage is completed, and the time for weaning is due, it will reach down with its boughs to the bypasser, as if it is inviting him to help himself to some of its fruit. As you approach it, you are met with the boughs, which seem to meet you attended by their children; they welcome you, and put their offspring forward to express their pleasure. A tree offers you its offspring, so liberally that it seems to hand them to you. This is especially true of the fruit-trees of Paradise, whose clusters are in easy reach. A believer dwelling there need just reach out to pick from his place, standing, sitting, or lying. Observe also the basils as they seem to greet you with their fragrance and breathe sweetly at your approach. In all this there is a display of courtesy and taking special care of you; there is an assertion of your prestigious place among creatures.

Does it become you, then, to be diverted by the blessings from the Blessor? To say nothing of using those blessings to disobey the Lord, and employ them in incurring His anger? To say nothing of denying the Lord, and ascribing His favours to another? This last attitude is described by the Almighty in the following words:

﴿ وَتَجْعَلُونَ رِزْقَكُمْ أَنَّكُمْ تُكَذِّبُونَ ﴾ [الواقعة: ٨٢]

"And make denial thereof your livelihood?" (56: 82)

It is incumbent on him who has sense to let his mind envision those blessings and bounties! Should he not review them again and again in hope of discerning the purpose of their existence? Why he has been created? What is expected of him? What is required of him, being endowed with those blessings? He should heed such verses of the Qur'an as the following:

"Remember all the bounties of your Lord, that happily you may be successful." (7: 69)

Reviewing the Almighty's blessings and bounties to His servant leads to the latter's success and happiness; such review cannot but lead the human to increase in his love, thankfulness and praise of the Lord; he will doubtlessly obey Him more, realise his own shortcoming more clearly, and his extreme shortcoming in doing what he should do. It is indeed as was well-expressed in the following couplet:

"You have been prepared for a purpose which, were you but aware of it,

You would not yield to following blindly the ignorant multitude."

Stages of the growth of bananas

- 1 . Banana blossom appears,
- 2 . Extends like an arm,
- Branches like fingers
 Bending on wards under their weight
- 4 . Hangs down, ending in purple leaves



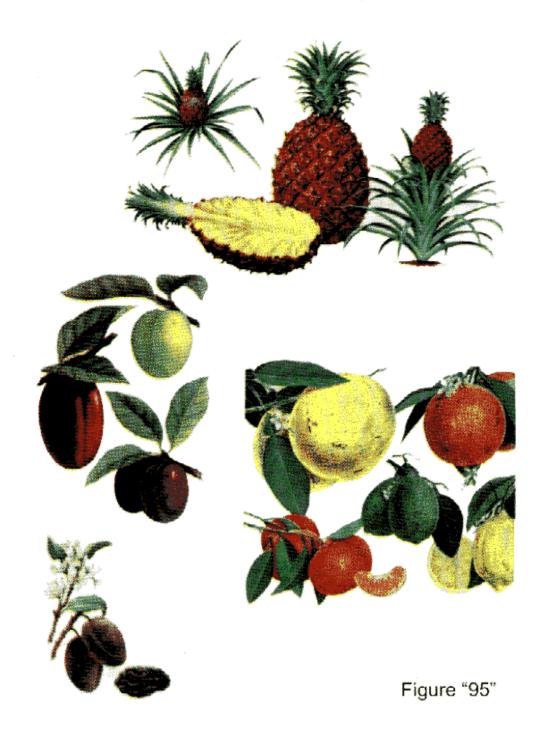
The watermelon

Think of such plants as the gourd, the watermelon and the carrot: since Divine Wisdom willed that their fruit should be large in size, the plant crawls on the surface of the ground! If it grew erect in the way other plants grow, it would not be strong enough to bear the weight of the heavy fruit. The fruits' growth in that case would be stunted before they reached their full ripeness. Therefore, it was the wisdom of their Creator and Maker that He caused such plants to crawl on the ground, laying their fruit on the ground, which bears their weight. You see how the frail, thin stem stretches on the ground, with its fruits sides of it, resembling a female animal, surrounded by its cubs, sucking at its breasts. As for French beans, aubergines, broad beans and similar other plants which are firm enough to bear their fruits, the Lord willed that their stems stand erect, since they can endure the fruits' weight, and do not fall under their weight.

Diversity of fruit to fit the diversity of times

Reflect also on the depth of Divine Wisdom as revealed in the dispensing of fruit and vegetables at the right and appropriate times. They are made available to people when they most relish them! They welcome them as a thirsty person welcomes water; they help themselves to them delightedly and eagerly, as one receives a beloved traveller. If the summer's fruit were to come in the winter, it would arouse not little dislike and lack of appetite on the part of eaters; not to mention its harmful and sickening effect on bodies. In the same way, if the spring fruit were to grow in autumn, or the autumn fruit in spring, it would not have excited the pleasure it naturally excites; people would not find it tasty or luscious as they find timely fruits. You see how fruits that linger beyond their season are found unpalatable and unappetising. You should not think that

this is no more than the power of habit; quite the contrary, habit has accepted this because it is the will of Providence that it is basically in accord with what is beneficial; it is the mercy of the Wise, the All-knowing!



The palm-tree

Observe the palm-tree, one of Allah's many signs, and you see so many wonders and miracles that you will be bewildered. As Allah willed there are female palm-trees, and there are male ones to fertilise them, in the same way as there are male and female animals. It is for this that this tree is the one tree that resembles man the most, especially a believer, as the Prophet $\frac{1}{2}$ described it. It deserved this affinity for many reasons:

First: The firmness and stability of its root in the ground, in contrast with the tree described as 'rootless from upon the earth, possessing no stability.'

Second: The lusciousness and sweetness of its fruit, and its general usefulness. In this, it is like the believer, who is decent of tongue, decent of behaviour, who does good for himself as well as for others.

Third: The permanence of its clothing and adornment; its green apparel adorns it summer and winter. In this, it is compared to the believer, who never takes off the raiment and adornment of restraint from evil and steadfast until the day he meets his Lord, the Almighty Allâh.

Fourth: Its accessibility and ease of picking its fruit; a picker seeking to pick up fruit from short palm-trees is

⁴ Ibn Umar recounts: I was sitting in the presence of the Prophet * when he ate some palm-pith; then he said:

[&]quot;There is a tree, which, among trees, resembles a believer." I (Ibn Umar) was about to say it was a palm-tree; but when I cast my eye at the people present there, I found that I was the youngest person. Then the Messenger of Allâh % said:

[&]quot;It is the palm-tree." (Reported by Al-Bukharee and Muslim.) "هِيَ النَّخْلَةُ»

not in need of a means of climbing; and as for tall ones, they are easy to climb in comparison with other tall trees of a different species. You can notice how a palm-tree has step-like parts that reach up to its top. In a like manner, a believer is simple and accessible to those who seek him, not conceited or arrogant.

Fifth: Its fruit is one of the most beneficial in the world. It is enjoyable to eat it fresh as a sweet fruit; when it is dried, it is stored as provision, food and fruit; vinegar, syrup and sweets are made from it; it is a component of various medicines and drinks. The advantages of dates and grapes are superior in their diversity to that of any other fruits.

Sixth: The date-tree is the most resistant among trees to the violence of winds and adverse conditions. Many other great trees are sometimes swayed by winds, uprooted, or their branches snapped. Most do not resist lack of water like the palm-tree. A believer is similarly very patient against hardship, not easily shaken by ordeals.

Seventh: A palm-tree is beneficial in its entirety, so that nothing drops from it except that it is of advantage. Its fruit is beneficial; its trunk is useful for building, making roofs and so forth; its leaves are used for building roofs in place of canes, for closing up holes and cracks; its stalks are used for making containers, baskets and other vessels and mats etc.; its dried stalks and fibres are of such uses as is commonly known. It is for such considerations that some writers have established a direct correspondence between the above advantages and the qualities of a Muslim, so that for each feature of the palm-tree they mention a good quality in the Muslim. For instance, the thorns of the palm-tree are compared to the Muslim's firmness in dealing with Allah's enemies and sinful similar to the thorn in his Muslim is strenuousness and coarseness against those people while he is compared to the sweet and mellow dates of a palmtree in dealing with believers. This situation reminds one of a Qur'anic description of believers:

"Hard against the disbelievers and merciful among themselves," (49: 29)

Eighth: The longer it survives, the more good it does, and the better its fruit. In this, also, it resembles a believer, whose longer life is a means to do more good and benevolent deeds.

Ninth: Its kernel is one of the sweetest and best; and so is the believer's heart one of the kindest.

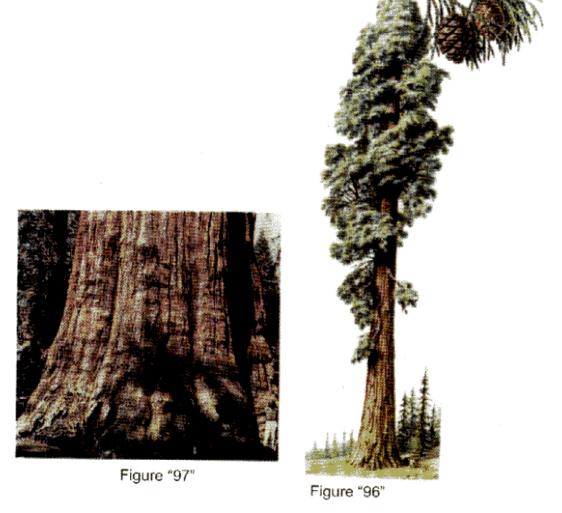
Tenth: Its benefit never ceases; whenever one of its advantages falls back, others become active. Even during a year when it does not bear fruit, people find benefits in its leaves, stalks, fibres, and dried leaves. Here also, we find its affinity with the believer; he does not let a day pass without doing some good. If he stops doing one thing, he will be sure to be doing some other thing instead. His good is always accessible, while he is always free from mischief. He realizes the purport of a tradition of the Prophet ** reported by Al-Tirmidhee:

"The best among you is he whose good is expected, and whose mischief is not expected; the worst among you is he whose good is not expected, and whose mischief is likely to come."⁵

Reported by Al-Tirmidhee, rated as 'authentic' by Al-Albanee.

The above section has been a diversion, and I chose to put it in as an elaboration of the wisdom underlying the creation of the palm-tree and its formation, so that the reader may reflect on it.

Regard, then, the trunk of the palm-tree! Observe its structure! You will notice how some of its fibres extend lengthwise, as if it were stitches of fabric; while others extend crosswise, as though it were sinews of meat. It does all of this as if it were man-made stitching. In this way the palm-tree is sturdier and more durable; it can withstand the weight of heavy animals and resist the shaking of violent gales; it is strong enough to use in building roofs and bridges; in making vessels and other similar uses. The timber from the palm-tree, like that of other trees, is seen on inspection to be similar to fabric, not solid like the homogeneous stone. You can notice how parts of it extend lengthwise, and other parts crosswise, similar to the body's flesh where parts intertwine with other parts. This ensures the timber to be strong and better adapted to the purposes it was created for. If it were homogeneous like stone, it could not be used in the making of tools, doors, vessels, household objects, beds, coffins and so forth.



Tree used for logging can be so big that a road can be cut through them for cars to pass, as the above picture shows. It depicts a sequoia tree, which can give enough boards for carpenters to make 300 three-room houses. Its height can reach 300 feet.



Hazelnut

Shell

Kinds of fruits

A fruit contains seeds. The true fruit is a fruit that grows only from the ovary, while a false fruit (e.g. strawberry) may also grow from the receptacle. The outer skin of a fruit is called the pericarp. It is divided in some fruits into the epicarp, a fleshy part called the mesocarp, and an inner layer called the endocarp. Here are the main types of fruits:

The legume or pod: a fruit whose seeds are connected to its inner wall, and it releases its seeds by splitting open along two seams,

The berry: a pulpy fruit, such as the orange and the black current, that contains several seeds,

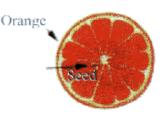
The nut: a dry fruit, such as the hazelnut and walnut, with a hard shell, containing only one seed,

The cereal grain, also called the caryopsis or the kernel: a small fruit, such as wheat, whose wall is fused with the seeds's coat.

Achene: a small dry fruit, such as the maple and the buttercup, with just one seed. A winged achene, like the maple, is called 'samara' or a key fruit,

with a hard seed at it centre, usually called the pit,

The pome: a fruit with a thick, fleshy outer pericarp and pulp. Its seeds are found inside a sac, e.g. the apple. The pome is an example of the false fruit.



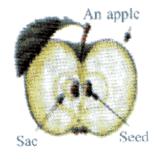
Black currant

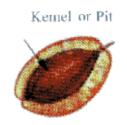












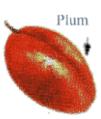


Figure "98"

Which are more beneficial, dates or grapes?

People have long disagreed about which are better and more beneficial, dates or grapes! Al-Jâhidh has written a whole book debating the advantages of each, and he expatiated and dwelt on the issue; he listed the arguments of the two parties who supported one or the other. Then he concluded that palm-trees were better than grapes and more widely beneficial in their regions, like Al-Madinah, Al-Hijaz and Iraq; and grapes were better and more widely beneficial in their regions, as for instance in Syria, in mountains and in cold climates, where palm-trees could not be grown.

I was once present at a meeting attended by the most prominent celebrities in Makkah. This same issue was raised, and a certain man started expatiating upon the preference of palm-trees and their uses, then he added: "A conclusive argument in favour of dates is that we can exchange grapes for their stones; so how can a fruit that is obtainable for dates' stones be preferred to it?" Another person from among those present supported this point-of-view by saying: "The Prophet has given his judgement concerning this issue; he made all debate unnecessary by prohibiting people from using the word 'al-karm' (a name for the grape-vine implying generosity and liberality) to designate grape vine trees, and he added:

«الْكَرْمُ: قَلْبُ الْمُؤْمِنِ»

"'al-karm' is indeed a believer's heart." So what proof (in favour of the dates) can be more glaring than that?" And they continued to talk in that way. Then I addressed the first speaker; I said: "Your argument about the dates' stones being the price for grapes is not a proof, as there are reasons for their being so. One reason is that

you need date stones for fodder, and the grapes' grower needs them to feed his water-drawing beast and loading animal. Another reason is that the grapes' seeds are of no use, nor are they normally collected. The third reason is that grapes are very little in your land, while there are lots of dates; therefore you have a lot of stones; and for that much of them you can buy some grapes. In countries where there is a predominance of grapes, the dates' stones are of no worth, and you can buy nothing with them.

To the one who used the Prophet's tradition in support I said: The tradition you quoted is in fact a proof that favours grapes, because people used to call the vine 'al-karm', in recognition of its many benefits and merits. It is eaten fresh and dried, sweet and sour; various drinks, sweets and syrup and other things are made from it. When the Prophet % told the companions that the designation 'al-karm' more appropriately described the believer's heart, he was pointing to the great deal of goodness, blessing, mercy, kindness, justice, charitableness, sound advice and all kinds of excellence and goodness that Allah ingrained in the believer's heart. A believer's heart has therefore a stronger claim to the designation 'al-karm' than the vine tree. It is not that the Prophet 1 meant that the vine tree did not have many benefits and functions, that the designation 'al-karm' is a misnomer, that it is a false usage, in the same way as it is false to use a 'scholar' to refer to an ignorant person, 'good-doer' to refer to a baddoer, or 'generous' to refer to a mean person. Do you not notice how he refrained from denying the benefits of the vine tree? He merely said that a believer's heart was richer and more replete with goodness and blessing.

The above is more-or-less what took place during that meeting. Reflect on the Prophet \$\mathbb{8}\$ saying:

"'Al-karm' is the believer's heart," and you will realize that it is analogous to his saying of the vine tree: "It is like the Muslim." He compared the palm tree to the Muslim in the tradition reported by Ibn Umar, and compared a Muslim to a vine tree in the other; in this latter tradition he forbade us to confine the designation 'al-karm' to the vine tree to the exclusion of a believer's heart. Some have suggested another interpretation, that he forbade us from calling a vine tree 'al-karm' (which denotes generosity and honouring), because the 'mother of vices' (i.e. alcohol) is made from it; that he loathed to hear the vine tree called with a name that encouraged people to use wine; that his purpose was one of 'eliminating the means of evil through word designations'. This argument would be acceptable, were it not for the other expression

"because 'al-karm' is a believer's heart." This statement in fact specifies the reason of the prohibition; it points out that a believer's heart has a better claim to that designation than the vine tree. However, the Messenger knew better his intent; whatever he meant to say is the truth.

On the whole, the Almighty Allah listed to His servants the fruits of the vine tree and the palm tree as two of His bounties and blessings to them. This supports the first view, that 'al-karm' should not be the designation of only the vine tree. Against the other interpretation there is the argument that 'the mother of vices' (i.e. alcohol) is extracted from various fruits, including dates. This is supported with the following verse from the Qur'an:

"And of the fruits of the date-palm, and the grapes, whence you derive strong drink and also good nourishment." (16: 67)

A tradition of the Prophet \$\%\$ is also relevant here. Anas bin Malik, the Prophet's Companion, stated: "When alcoholic drinks were prohibited, there was no grape drink in Al-Madinah at all; people used only dates' juice." One may conclude, then, that if the Prophet \$\%\$ forbidding the usage of 'al-karm' to designate the vine tree was for its use in the brewing of alcohol, he would not have compared the palm-tree to the believer, since alcoholic drink is also made from its fruit. But Allah knows best.

Timber

It is also a splendid fact that timber is made to float on water; it is indeed for great wisdom. Without that, ships would not be able to transport mountain-like heaps of loads and goods, sailing with them to and for across the sea; such burdens would have been a great trouble to transport by land, and people would have missed many of their interests!

Desert plants

You may wonder about the wisdom of the many plants one encounters everywhere in the desert and wilderness and mountains where no human inhabitants or dwellers can benefit from them. It may occur to you that they are a worthless addition of no value or benefit at all. But this only reflects on the amount of your knowledge and comprehension. Many aspects of wisdom and benefit has the Lord willed when creating those crops. Lots of beasts, birds and insects feed on them! Some living above the earth and some below its surface! Such plants are a kind of feast that Allah has set for those birds and animals, from which they eat, and the rest is left, in the same way as a

wealthy host lets his guest eat, and much of the food remains after the feast, since the host is wealthy, hospitable and generous!

Medicines

Think of medicines and remedies that the Lord grows from the earth; think of their distinctive characteristics, and their diverse benefits and uses! One penetrates to joints, extracting heavy wastes which could be fatal if ignored; one gets to and removes black bile; one removes yellow bile; one eases swellings; one soothes irritation and worries; one causes sleep and recovers it after spells of sleeplessness; one relieves the body from the feeling of heaviness; one cheers up the heart if it is too much burdened with depression; one eliminates and removes phlegm; one sharpens vision; one purifies the mouth's flavour; one lessens erotic desire; one excites it; one cools temperature; one defeats cold and raises temperature; one counters the bad effects of other medicines and foods; one modifies the effect of other medicines and balances it off, so that their effect on the body is a moderate one; one quenches thirst; one eliminates pernicious wind and dismisses it; one gives a person a bright and fresh colour; one increases weight in certain parts of the body; one decreases it; one coats the stomach with a layer; one cleanses and purifies it; and the list can go on and on; it is hard for humans to make a repertory of all medicines.

You may well ask the denier: Who is it that provided those plants, herbs, grains and roots with their diverse characteristics and powers? Who provided each with its peculiar quality? Who guided human beings, and even animals, to take what is good and to avoid what is harmful? Who alerted humans, and even the ignorant beasts to them? What understanding, and what experiment led them to know all that? What makes them

realize what those things were created for? Who, let the misguided think, but Him Who gave unto everything its nature, and then guided it aright? Even if one supposes that man was awakened to those characteristics through his intellect, experi- mentation, reflection and observation, it remains to ask Who guided the beast to many characteristics that even human beings do not realise; in such a way that some of those beasts use the particular medicines until they are healed? Who is it that guided the animal to seek that particular plant and no other? It has been observed that some birds take in sea water in their bodies when they suffer from retention, and this enables them to pass the waste; that some birds take a certain plant when they are ill, and this heals them. One may refer to wondrous instances in this respect as reported in compilations by physicians! So again you may ask the denier: Who inspired them to do that? Who guided them? Who taught them? Is it conceivable that such things take place without a Controller, without the management of the Most Mighty, the Wise, and the determination of the Omniscient, the Compassionate, the All-Knowing, Whose overwhelms and baffles the intellect. Who compels the innate nature (fitrah) of a human to testify to His truth, reflecting what had been ingrained in it by Him, identifying Him as Allah, beside Whom there is no god, the Creator, the Shaper out of naught, beside Whom no one should be worshipped? That if there were another god beside Him in the heavens or the earth they would have been disordered, and the system in the heavens and the earth would run wild! Exalted is the Almighty above what the wrongdoers and deniers say, High Exalted!

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