

الله
رسول
محمد

MIRACLE IN THE EYE



HARUN YAHYA

Before you finish reading this sentence, approximately one hundred billion (100,000,000,000) operations will have been completed inside your eyes. However fantastic it may seem, you possess an example (two, in fact) of the Universe's ultimate technology. No scientist has ever come close to fully grasping it, let alone inventing anything remotely similar.

Whatever you have in your life is meaningful through your senses—vision and others. Without eyes, you could never imagine colors, forms, scenes, human faces, or what the word beauty means. But you do have eyes, and thanks to them, you can now read these printed words before you.

Nor does the act of vision cost you very much effort. To see an object, all you have to do is to turn your gaze at it.

Nor did you have to struggle to develop a pair of those wonderful instruments. At birth, your eyes came as standard equipment, with free installation and, unless you had a particular defect, in perfect working order. Since then, you're not likely to have felt any urge to ask the kind of questions you might upon receiving an expensive, anonymous gift, such as "Why did I get this?" or, "Who sent this to me?" or, "Exactly what do they want from me in return?" Be assured that the Creator, Who lent you this blessing, will call you to account when the contract ends—which is sooner than you imagine.



ABOUT THE AUTHOR

The author, who writes under the pen-name Harun Yahya, was born in Ankara in 1955. He studied arts at Istanbul's Mimar Sinan University and philosophy at Istanbul University. Since the 1980s, the author has published many books on political, faith-related and scientific issues. His main focus has been the refutation of Darwinism and materialism, two modern myths presented under a scientific guise. Some of the books of the author have been translated into more than 20 languages and published in the countries concerned. Harun Yahya's books appeal to all people, Muslims and non-Muslims alike, regardless of their age, race, and nationality, as they center around one goal: to open the readers' mind by encouraging them to think about some critical issues such as the existence of God and His unity, and to display the decrepit foundations and perverted works of godless systems.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

اللَّهُ
رَسُولُ
مُحَمَّدٍ

To the Reader

A special chapter is assigned to the collapse of the theory of evolution because this theory constitutes the basis of all anti-spiritual philosophies. Since Darwinism rejects the fact of creation—and therefore, God's Existence—over the last 140 years it has caused many people to abandon their faith or fall into doubt. It is therefore an imperative service, a very important duty to show everyone that this theory is a deception. Since some readers may find the chance to read only one of our books, we think it appropriate to devote a chapter to summarize this subject.

All the author's books explain faith-related issues in light of Qur'anic verses, and invite readers to learn God's words and to live by them. All the subjects concerning God's verses are explained so as to leave no doubt or room for questions in the reader's mind. The books' sincere, plain, and fluent style ensure that everyone of every age and from every social group can easily understand them. Thanks to their effective, lucid narrative, they can be read at one sitting. Even those who rigorously reject spirituality are influenced by the facts these books document and cannot refute the truthfulness of their contents.

This and all the other books by the author can be read individually, or discussed in a group. Readers eager to profit from the books will find discussion very useful, letting them relate their reflections and experiences to one another.

In addition, it will be a great service to Islam to contribute to the publication and reading of these books, written solely for the pleasure of God. The author's books are all extremely convincing. For this reason, to communicate true religion to others, one of the most effective methods is encouraging them to read these books.

We hope the reader will look through the reviews of Harun Yahya's other books at the back of this book. His rich source material on faith-related issues is very useful, and a pleasure to read.

In these books, unlike some other books, you will not find the author's personal views, explanations based on dubious sources, styles that are unobservant of the respect and reverence due to sacred subjects, nor hopeless, pessimistic arguments that create doubts in the mind and deviations in the heart.

MIRACLE IN THE EYE

HARUN YAHYA

February, 2006

About the Author

Now writing under the pen-name of HARUN YAHYA, he was born in Ankara in 1956. Having completed his primary and secondary education in Ankara, he studied arts at Istanbul's Mimar Sinan University and philosophy at Istanbul University. Since the 1980s, he has published many books on political, scientific, and faith-related issues. Harun Yahya is well-known as the author of important works disclosing the imposture of evolutionists, their invalid claims, and the dark liaisons between Darwinism and such bloody ideologies as fascism and communism.

Harun Yahya's works, translated into 41 different languages, constitute a collection for a total of more than 45,000 pages with 30,000 illustrations.

His pen-name is a composite of the names *Harun* (Aaron) and *Yahya* (John), in memory of the two esteemed Prophets who fought against their peoples' lack of faith. The Prophet's seal on his books' covers is symbolic and is linked to their contents. It represents the Qur'an (the Final Scripture) and the Prophet Mohammed (may God bless him and grant him peace), last of the prophets. Under the guidance of the Qur'an and the Sunnah (teachings of the Prophet), the author makes it his purpose to disprove each fundamental tenet of godless ideologies and to have the "last word," so as to completely silence the objections raised against religion. He uses the seal of the final Prophet, who attained ultimate wisdom and moral perfection, as a sign of his intention to offer the last word.

All of Harun Yahya's works share one single goal: To convey the Qur'an's message, encourage readers to consider basic faith-related issues such as God's Existence and Unity and the Hereafter; and to expose godless systems' feeble foundations and perverted ideologies.

Harun Yahya enjoys a wide readership in many countries, from India to America, England to Indonesia, Poland to Bosnia, Spain to Brazil, Malaysia to Italy, France to Bulgaria and Russia. Some of his books are available in English, French, German, Spanish,



Italian, Portuguese, Urdu, Arabic, Albanian, Chinese, Swahili, Hausa, Dhivehi (spoken in Mauritius), Russian, Serbo-Croat (Bosnian), Polish, Malay, Uygur Turkish, Indonesian, Bengali, Danish and Swedish.

Greatly appreciated all around the world, these works have been instrumental in many people recovering faith in God and gaining deeper insights into their faith. His books' wisdom and sincerity, together with a distinct style that's easy to understand, directly affect anyone who reads them. Those who seriously consider these books, can no longer advocate atheism or any other perverted ideology or materialistic philosophy, since these books are characterized by rapid effectiveness, definite results, and irrefutability. Even if they continue to do so, it will be only a sentimental insistence, since these books refute such ideologies from their very foundations. All contemporary movements of denial are now ideologically defeated, thanks to the books written by Harun Yahya.

This is no doubt a result of the Qur'an's wisdom and lucidity. The author modestly intends to serve as a means in humanity's search for God's right path. No material gain is sought in the publication of these works.

Those who encourage others to read these books, to open their minds and hearts and guide them to become more devoted servants of God, render an invaluable service.

Meanwhile, it would only be a waste of time and energy to propagate other books that create confusion in people's minds, lead them into ideological chaos, and that clearly have no strong and precise effects in removing the doubts in people's hearts, as also verified from previous experience. It is impossible for books devised to emphasize the author's literary power rather than the noble goal of saving people from loss of faith, to have such a great effect. Those who doubt this can readily see that the sole aim of Harun Yahya's books is to overcome disbelief and to disseminate the Qur'an's moral values. The success and impact of this service are manifested in the readers' conviction.

One point should be kept in mind: The main reason for the continuing cruelty, conflict, and other ordeals endured by the vast majority of people is the ideological prevalence of disbelief. This can be ended only with the ideological defeat of disbelief and by conveying the wonders of creation and Qur'anic morality so that people can live by it. Considering the state of the world today, leading into a downward spiral of violence, corruption and conflict, clearly this service must be provided speedily and effectively, or it may be too late.

In this effort, the books of Harun Yahya assume a leading role. By the will of God, these books will be a means through which people in the twenty-first century will attain the peace, justice, and happiness promised in the Qur'an.

Translated by Michael Daventry
Edited by Tam Mossman

**Published by
GLOBAL PUBLISHING**

Talatpaşa Mah. Emirgazi Caddesi
İbrahim Elmas İş Merkezi
A Blok Kat 4 Okmeydanı - İstanbul
Tel: (+90 212) 222 00 88

Printed and bound by Entegre Matbaacılık in İstanbul
Sanayi Cad. No: 17 Yenibosna-İstanbul
Phone: (+90 212) 451 70 70

All translations from the Qur'an are from The Noble Qur'an: a New Rendering
of its Meaning in English by Hajj Abdalhaqq and Aisha Bewley, published by
Bookwork, Norwich, UK. 1420 CE/1999 AH.

Abbreviation used:
(pbuh): Peace be upon him (following a reference to
the prophets)

www.harunyahya.com

CONTENTS

Introduction	8
The Perfect Design of the Eye	13
How Vision Is Assembled	54
The Creation of the Eye	75
The Eye and Technology	91
Animal and Insect Eye	98
Who Sees?	122
The Deception of Evolution	134

INTRODUCTION



efore you finish reading this sentence, approximately one hundred billion (100,000,000,000) operations will have been completed inside your eyes. However fantastic it may seem, you possess an example (two, in fact) of the Universe's ultimate technology. No scientist has ever come close to fully grasping it, let alone inventing anything remotely similar.

Whatever you have in your life is meaningful through your senses—vision and others. Your family, your house, your office, your friends and everything else in your surroundings, you quickly identify thanks to your vision. Without eyes, you could never get a quick, complete sense of everything that's happening around you. Without them, you could never imagine colors, forms, scenes, human faces, or what the word beauty means. But you do have eyes, and thanks to them, you can now read these printed words before you.

Nor does the act of vision cost you very much effort. To see an object, all you have to do is to turn your gaze at it. You don't need to bother giving "project, capture, and analyze" orders to your eyes, the components inside them, the optical nerves running to the back of your brain, nor to the brain itself. You need only look, just like the rest of the billions of creatures who have ever lived on our planet. Without having to work out the optical measurements, your eye's lens can focus onto distant objects. Without needing to accurately compute the precise contractions of various muscles surrounding the lens, you only desire to see, and within a fraction of a second, that process is carried out for you. Like many people, you may never have realized what a miracle it is that thousands of independent processes can operate in a perfect harmony to enable you to see.

HARUN YAHYA

Nor did you have to struggle to develop a pair of those wonderful instruments. At birth, your eyes came as standard equipment, with free installation and, unless you had a particular defect, in perfect working order. Since then, you're not likely to have felt any urge to ask the kind of questions you might upon receiving an expensive, anonymous gift, such as "Why did I get this?" or, "Who sent this to me?" or, "Exactly what do they want from me in return?." Be assured that the Creator, Who lent you this blessing, will call you to account when the contract ends—which is sooner than you imagine.

Those who best understand how irreplaceable this blessing is, are people who lose their eyesight later in life. In the possible event that you are struck blind, your long list of lifetime plans and ambitions will be sidelined by just one wish: To regain your lost eyesight.

Had you been blind all your life, since birth, and after an operation, you could see all of a sudden, the reverse would be no less dramatic. Without a doubt, no gift in the world would seem more valuable. You would experience no greater happiness than at the moment your bandages were removed, and on the days that followed.

At this very moment, if you are not acknowledging the unique blessing of your eyes to the Gracious One Who has granted it to you, then you are being deeply ungrateful—a state of mind that, unfortunately, is shared by a substantial part of humanity.

Say: "It is He Who brought you into being and gave you hearing, sight and hearts. What little thanks you show!" (Qur'an, 67: 23)

Evolution Back on the Ropes

How did such a vital sense like seeing come to be? How could a formerly nonexistent concept—seeing—suddenly appear? Let's generalize the question by widening our scope. How did man come to existence in the first place, complete with his five senses, brains, internal organs, limbs, and with a soul and a functioning body?

Anyone with common sense can tell you that life is the work of a superior and flawless creation. Rejecting this clear truth, the theory of evo-

MIRACLE IN THE EYE

lution, provides "coincidence" as its answer to this question. Evolutionists claim that all living things in this world, past and present, came to evolve through a chain of countless coincidences, with never an original creation to start the process. But this claim defies all laws of logic and science, inasmuch as it's impossible for lifeless matter to create an organism. The theory of evolution tries to explain the universe's flawless nature through coincidental happenings, but science has been proven it wrong in every way. Scientific proof has shown not only how evolutionary claims are unreasonable and unscientific, but also, has revealed how evolutionists have forged their evidence. Science has demonstrated that life cannot possibly be explained through coincidences, since it is the work of a superior design. The Creator of this flawless design is God, Who created the entire universe.

Despite this unavoidable truth, today's dominant academic establishments and media conglomerates collaborate in a joint effort to uphold the theory of evolution. Their standard technique is to issue a news bulletin that some recently excavated skull proudly provides a link heretofore missing of the grand evolutionary chain. Not only are there any evolutionary chains to complete, but the excavations do not reveal anything closely resembling the long-awaited figments of evolutionists' imagination—such as the half-fish, half-reptile or the half-reptile, half-bird. Yet their press-release hype leaves the impression that evolution as a whole has been already proven, except for a few random details regarding the lineage from ape to human.

Of course, there is a reason behind the evolutionists' constant emphasis on excavating skulls. Throughout the history of the world, there have been thousands of species of ape, of all shapes and sizes, of which 97 percent are now extinct. It is simple child's play to array the skulls of extinct apes on a long table according to cranial volume or one structural characteristic and declare this lineup to be "the evolutionary chain joining ape and man." The evolutionist's basic toolkit consists of fossil forgeries, false lineages, and creative drawings of ape-men that have little to do with scientific evidence.

In reality, evolution's supposedly strong progression crumbles at its

beginning stage of microbiology. The most probing questions about the emergence of complex organelles again fall on deaf ears. No wonder the evolutionists avoid discussing these fundamental subjects, except occasionally by pretending to explain them by piling up numerous technical details that, in the aggregate, hardly constitute an answer.

The eye, the subject of this book, is one of those organs of the body that have kept evolutionists on the ropes ever since Darwin, who himself confessed, "I remember well the time when the thought of the eye made me cold all over."¹ A close examination of the eye's structure and functions will make it clear why evolutionists have felt compelled to avoid it. The eye's complex structure has several distinct components and systems. An amazing scope of distinctly different functions is realized individually, but only as a result of harmonious cooperation between all of these components and systems. If even one of them is missing or fails to cooperate, the eye can't perceive images. This is a Catch 22 for the evolutionists, who hold that all body parts have emerged gradually by themselves. That the eye can only function as a whole only when all its every system and component are present and intact rules out any such gradual formation.

To illustrate this crucial point, let us give a true-life example. An eyeball that does not secrete teardrops to lubricate itself will dry up and eventually go blind. Tears, with their antiseptic properties, also protect the eye against microbes. The evolutionists do not even want to consider the fundamental question of how the eye, which would desiccate within hours without tear secretion, could have persisted for millions of years before tear glands had yet to emerge via the evolutionary progression. For the evolutionist camp, insult is added to injury when they must account for the fact that for the eye to accomplish its function, it requires a full body, intact with its systems and organs—components and tissues such as the cornea, retina, conjunctiva, iris, pupil, lens, choroid, eyelid, and the eye muscles. In addition, vision requires the brain's complex visual area and the amazing neural networks connecting the eye to the brain. All of these subsystems feature structures that are far too complex and specialized to have ever emerged by chance.

MIRACLE IN THE EYE

Of these components, if only one—the lens, for example—were missing, the eye would become a useless lump of tissue. Again, it would again be rendered useless if any two of them—for example, the pupil and the lens, exchanged places. In short, the eye's structure is the result of a very special planning. These components' harmonious coexistence and cooperation, which are impossible to have appeared by themselves as a result of accidents, have one single valid and logical explanation: Each of the eye's components is created with supreme intelligence, which belongs to God.

Accepting such an obvious truth is the first step that leads to a person's eternal life. This book, along with displaying the truth of creation, intends to guide you in taking those steps towards your salvation.

Intelligent Design, in other words Creation

In order to create, God has no need to design

It's important that the word "design" be properly understood. That God has created a flawless design does not mean that He first made a plan and then followed it. God, the Lord of the Earth and the heavens, needs no "designs" in order to create. God is exalted above all such deficiencies. His planning and creation take place at the same instant.

Whenever God wills a thing to come about, it is enough for Him just to say, "Be!"

As verses of the Qur'an tell us:

His command when He desires a thing is just to say to it, "Be!" and it is. (Qur'an, 36: 82)

[God is] the Originator of the heavens and Earth. When He decides on something, He just says to it, "Be!" and it is. (Qur'an, 2: 117)

THE PERFECT
DESIGN OF
THE EYE



onsidering the eye's complex structure and special function, it occupies only a very small volume of our body. Like a precious artifact kept in a safe, it is guarded by the skull to withstand injury from outside blows. The superbly designed protection is proportional to its vital purpose.

Within their sockets, the eyeballs rest upon a protective cushion of fat, are encircled with special tissues, and joined to the skull by six bony extensions. They are protected against external harm by the brow ridges, by the arch of the nose and the cheekbones. Collectively, these surrounding bones and tissues are termed the orbit.

Beside the tight protection, the eyes are ideally positioned at an area most comfortable for vision. The location of this area enables us to control and direct our bodies and limbs in an optimum way.

Imagine for a moment if our eyes were fixed somewhere on our knees or worse, our ankles. Since we could see nothing more than the path we were walking upper parts of our bodies, especially the head, would keep banging into unseen obstacles. Given such a mismatched anatomy, many routine tasks like eating or using tools would become problems in their own right. There would be countless difficulties, had our eyes been situated anywhere else than exactly where they are.

The head is the optimum location where the eyes can be maintained in health and safety. You can move your head quickly, with instant reflexes at the right time, so as to protect your eyes from the slightest contact with any harmful material.

Your eyes are also situated at a perfect position on the face. Were they anywhere else—under the nose, for example—it would be a literally uphill struggle to provide the same safe viewing angle, not to mention the aesthetic appearance.

The eyes' position achieves its aesthetic ideal by means of symmetry. They are separated from each other by the approximate width of an individual eye. This golden proportion is surrendered, and the expression lost, when the two eyes are closer or further apart.

The eye, together with all its attributes, is a glittering proof that the

HARUN YAHYA

human being was created by God. To better understand this proof, let us now take a closer look at the eye's components. Once again, we'll see the theory of so-called evolution's helplessness in trying to explain away the eye's form and function.

Eyelids

The eyes are the body's windows to the outside world. With the help of a specialized system, these windows' protection and maintenance are perfectly maintained. Eyelids, the most important part of this system, undertake the double function of protecting the eyeball from harmful contacts, and also keeping the cornea (the transparent membrane covering the front of the pupil) and the conjunctiva (the delicate mucous membrane lining the eyelid's inner surface), both at a constant moisture level. During sleep, when the eyes' surfaces are not exposed directly to the air, veins on the conjunctival layer inside the eyelid feed needed oxygen onto the eyeball.



Meibomian glands

(Figure 1.1). A cross section of the eyelid. Glands inside the eyelid produce tears, and also secrete a lubricant that covers the eyelashes, allowing them to curl upwards, broaden the visual perspective and become aesthetically attractive.

Did the eyelashes or eyelid get the idea to secrete such an oil? Of course not! Every aspect of the eye was designed by the Lord of everything, God.

MIRACLE IN THE EYE

The skin of the eyelid, which can cover the eyeball firmly and completely when necessary, is far thinner than the skin on other parts of the body. The lower skin layer of the eyelid is very loose and lacks fat, allowing for easy accumulation of blood to the area. If this skin were any thicker and fattier, shutting and opening the eyelids would be a troublesome undertaking.

Without being aware of it, people blink their eyes thousands of times a day. These mostly involuntary movements make it possible for the eyes to preserve themselves from intense light and external particles. This unconscious operation, which most people take for granted, is actually an important blessing.

What if this reflex were not automatic? Human beings would remember to blink only after detectably large amounts of dirt had already accumulated in their eyes, which would lead to infection. Due to this incomplete half-way cleaning, vision would be blurred. The task of blinking would have to be consciously remembered, all through the day.

But by blinking every few seconds as if on autopilot, the eyelids moisten and cleanse the eyes like a car's windshield wipers. Closed during sleep, they defend the eye against drying out.

While opening and shutting, the eyelid perfectly fits the convex shape of the eye, contacting the entire surface of the eye's outside layer. Did the eyelid not fit the eyeball's curve so precisely, it would be impossible to remove dust particles remaining in the unreachable corners of the eye enclaves.

During blinking, an oily lubricant is pumped from the special meibomian glands inside the eyelid. This liquid eases the sliding of the eyelids while keeping them from sticking to themselves when they fold up.²

During sleep, it is important for the eyelids to be closed. If the eyelids did not cover our eyes, sleeping would be painful and awkward. A darkened room would always be required, without which, catnaps, siestas, or even sleeping under a bright moon would be unthinkable.³ Eyes would be defenseless, exposed to outside dangers.

To show how irreplaceable the eyelids really are, let us consider the complete reverse of what the case is now. If we had no eyelids, all of mankind would lose their eyesight in a very short time. The cornea, which forms the

eye's upper layer, would dry out, costing the eye immediate loss of function. The tiniest dust particle lodged in the eye would create serious problems from infection, thanks to the bacteria on its surface. The eye, left unprotected from even the gentlest impact, would be in constant danger of going blind.

As a real-life example, take lagophthalmos, an illness in which sufferers cannot close their eyelids completely. Infection, along with drying of the cornea, becomes inevitable. Chronic cases can result in permanent eye damage. Since the eyelids cannot be fully shut and the cleansing fluids are not available, the patient needs to constantly cleanse and disinfect the eyes. Even then, an eye that remains partly open all night collects aerial dirt and dust by the morning.⁴

An Early-Warning System

The eye is protected with the help of a built-in early-warning system. Whenever danger threatens, nerves activate to engage the eyelids, stimulate the muscles that close the lids.

Different types of muscle groups specialize in eyelid movements, whose closing takes three forms:

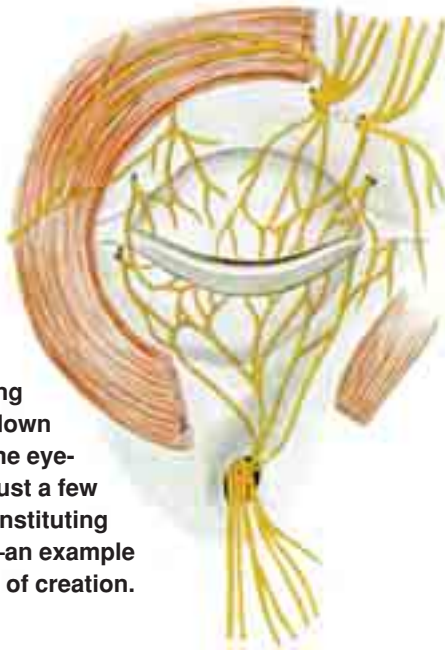
- By blinking,
- By reflex,
- And consciously.

Blinking is a property of vertebrates that possess eyelids and live in contact with the atmosphere. In humans, the rate of blinking is between ten to twenty per minute depending on activities such as reading and intense concentration, and conditions like the rise of air humidity—all of which reduce the rate. Grief, a rise in temperature and intense light all accelerate blinking. Thus the hygiene of the eye is maintained by automatically adjusted rates of blinking, freeing us from worry over when to close our lids.

Reflexes are involuntary and rapid responses to various stimuli. The reflex mechanism that activates eyelids when necessary protects the eye against external threats. Stimuli that create reflexes include contacting the cornea, the eyelashes or even the forehead.

A close inspection of the neural network controlling eye reflexes reveals

(Figure 1.2). The eyelids are automatically triggered whenever contact is made with the cornea, eyelashes, forehead or eyebrows. As in an early warning system, the alert is sent down nerve paths to activate the eyelids. This diagram shows just a few of the special nerves constituting this early warning system—an example of God's flawless art of creation.



the immaculately fine design of its architecture. For every reflex described above, different impulses are routed from different neural paths. The eye's peripheries are stuffed by such early-warning nets (Figure 1.2).

The brain, evaluating these fast-traveling warnings, dispatches neural impulses to the relevant muscles, routing them without ever making a single error along the chaotic network. Within a thousandth of a second, the warning signal reaches the brain and returns as a command, by which the eyelid closes in time to protect or cleanse the eyeball. The process of identifying the emergent danger and creating different reflexes by means of signals traveling along different neural paths is extremely complex.

For survival, man needs to be informed, with no interruptions, of his ever-changing environment. To satisfy this condition, blinking occupies only a very brief time without disrupting the continuity of perception. Any longer blinking time might cause serious dangers—while driving on the highway, for instance, and not noticing a suddenly appearing truck in time to swerve.

Acknowledging the Granted

Blinking is an involuntary action that is executed thousands of times every day. No one struggles to blink, nor does anyone contemplate why we blink when we do. We take this irreplaceable perfection for granted.

A person can best realize the value of healthy eyes when he awakens in the morning with his eyelids stuck together and filled with sticky mucus. These symptoms belong to an illness called blepharitis, which turns the eyes into a virtual Petri dish—a breeding ground for germs. Blepharitis, an inflammation of the eyelids, initially emerges as swelling and redness of the margins of the eyelids, but advanced cases can lead to small abscesses and ulcers in the eyelid.

Of course, there are many other eyelid illnesses. One of the more common ones is caused by the weakness of the muscles that raise the upper eyelid. As a result, one or both eyelids remain lowered, giving the face a bored, sleepy expression. These tiny muscles' incomplete functioning, also narrows the sufferers' angle of vision, making them see less than they should.⁵ It is incredible that the cells making up these muscles, which can be seen only through a microscope, are tirelessly in action all through our lives, and almost entirely beyond our control.

We don't need to suffer from a painful illness to understand what a blessing health is. Those who believe constantly thank our Creator for their health. When confronted with disease, they simply ask help from God and then face it with the grace and confidence that the Qur'an requires.

Any blessing you have is from God. Then when harm touches you, it is to Him you cry for help. (Qur'an, 16: 53)

Tears: The Perfect Eye Drop

Many people assume that tears are just the salty fluid shed when they cry. But actually, it's a very unusual liquid, with various ingredients serving different special functions.

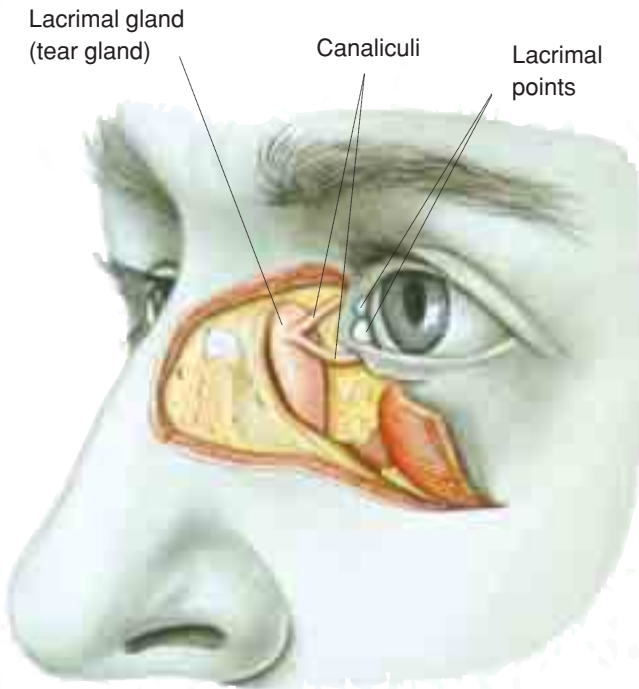
Primarily, a teardrop protects the eye against germs. The eye is disinfected by lysozyme, a germicidal enzyme, able to kill microbes and tear apart many types of bacteria. The mighty lysozyme is actually stronger than some

MIRACLE IN THE EYE

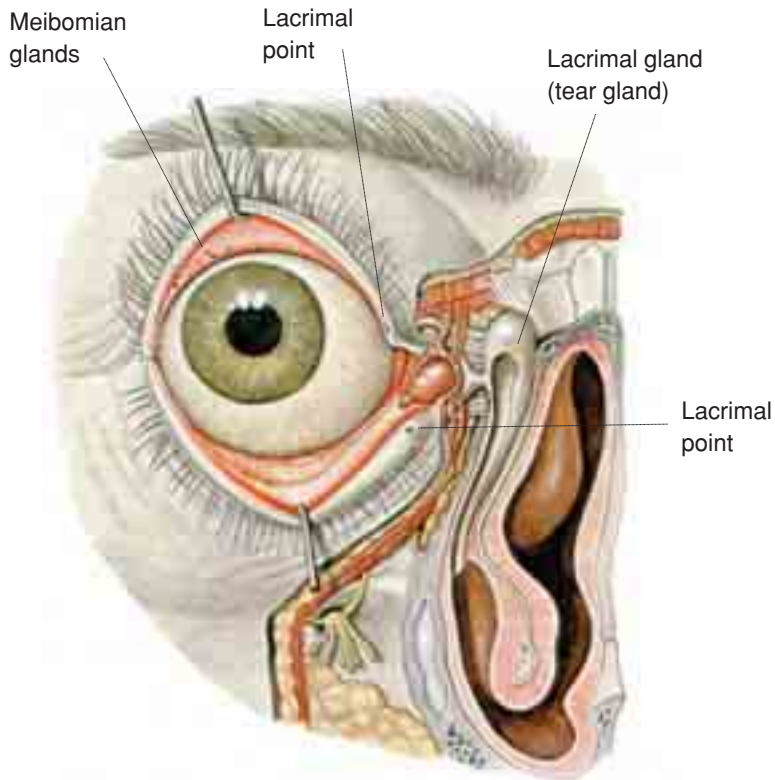
chemicals used for disinfecting whole buildings—yet miraculously, such a strong substance does not cause the slightest damage to the eye.

It's worthwhile to pause and reflect on this surprising evidence. How can such a powerful substance not harm the most delicate organ? The answer is clear: The tear's powerful disinfectants are created to serve perfectly under the eye's chemical system. The perfect harmony existing at every level and in every aspect of creation is evident in the eye as well.

No artificial disinfectant with similar effects can be applied to the eye. Nor is there any manmade substance that can replace tears—a situation that raises some questions evolutionists cannot answer. How did systems such as the eye and tears, working together in complete harmony, come about at the same time? Clearly, blind coincidences could never have created such perfect structures in the human body. But to illustrate how far away evolutionists are from science and logic, let us for a moment assume the impossible: That coincidences are able to bring about something.



(Figure 1.3). A diagram of the channels through which tears are released. With its superior abilities, the tear is a miracle in itself. The perfect systems that produce and discharge tears, combined with the delicate balance in its production, provides us with solid evidence, with no room for coincidence.



(Figure 1.4). In the system that produces and ejects tears, a superior design is involved. This diagram indicates the ducts through which tears are emptied into the eye and those through which tears drain. If tears are a fluid that evolved coincidentally, why are there systems dedicated just to producing and ejecting them, in the eyelids and the bone of the skull? If tears evolved coincidentally, how did the ducts come to be? Just like water fittings beneath the ground, these ducts are within the bones, so as not to diminish the beauty of the human face. These are all examples of flawless creation.

Considering that billions of other disinfectant substances exist, how did accidental processes synthesize one so powerful, yet which causes the eye no harm? Before the trial-and-error "evolution" of such an ideal liquid, how did the eye protect itself? The eye can function only if its present chemical structure and the chemical makeup of tears are working together. Consequently, we must add that this simultaneous cooperation includes the functions of the brain, as well as all the other body parts and processes.

MIRACLE IN THE EYE

For a moment, imagine that the eyes appeared suddenly, by accident, in an organism complete with all its organelles, tissues, liquids, glands and extensions including the relevant vision center of the brain. That would still be far from being enough for the eyes to function. They require the body's digestion system, the liver and bone marrow for the essential chemical and subsystems that support them. If such systems haven't yet evolved, then the accidental appearance of complete and perfect vision is pointless, since it cannot function. In short, it is not possible for any single portion of the eye to have evolved coincidentally. The eye and all its components were created by God:

Say: "Have you thought about your partner gods, those you call upon besides God? Show me what they have created of the earth; or do they have a partnership in the heavens?" Have We given them a Book whose clear signs they follow? No indeed! The wrongdoers promise each other nothing but delusion. (Qur'an, 35: 40)

To continue observing this miracle of creation, let's take an in-depth analysis of a teardrop's content.

98.2 percent of it is water, the rest being urea, found in the same proportion as in the blood plasma and, in lesser proportions, glucose, salts and organic substances,⁶ of which lysozyme constitutes only a small fraction. In other words, tears are a special liquid that contains different substances in different proportions.

Among the various components of the teardrop, a thin film of fat secreted by glands slows the teardrop's evaporation. This thin film, yet another amazing detail, rules out our eyes' drying out prematurely.

So who has coated the teardrop with a protective fatty layer that retards the effects of evaporation? How could such a specialized formula come about?

Tears are also secreted in accurate quantities, just enough to protect the cornea from drying and to maintain the eyeball's characteristic slipperiness. Thus, when the eyeball rotates, there is no uncomfortable friction between its upper layer and the conjunctiva inside of the eyelid.

HARUN YAHYA

If tears were produced at a lower rate, then friction between eyeball and eyelid would create never-ending pain. People suffering from a drought of tears experience a constant burning sensation, as if sand were in their eyes. Their eyes swell and turn red. In the advanced stages of the illness comes the inevitable blindness.

Once any irritating stimulus—foreign particles such as dust, for instance—contacts the eyeball's surface, tear production increases automatically. More lysozyme is secreted for antiseptic purposes, while more sheer liquid is secreted to help in quick disposal of the foreign element.

The fact that the tear glands are equipped with an accurate balance mechanism that controls secretion in precisely the necessary amounts, by itself, is enough of a miracle to refute the claims of coincidental evolution.

No sensible person imagines that a small bottle of eye drops, stamped with its production date and factory, can compose itself via a series of accidents. There must be someone who invented the drop's formula, manufactured the product and packaged it. Anyone who thinks otherwise would have his sanity questioned. Teardrops, possessing features that are superior, are produced with unique chemical ingredients in delicate proportions. There are also the glands that secrete them, sensor-based systems to control secretion, and sensitive canals through which they are ejected. Taking these into account, it's not logical to claim that tears came about coincidentally and were—again accidentally—located in the eyes. Every human being past and present has had tears, which do not differ from person to person. It is Almighty God Who created the eye as a complete whole, for every person, as yet another of God's flawless creations.

The Fine Art of Defense

By now, it's clear that the eye's sensitive structure is granted VIP protection. But it's vital to keep in mind the aesthetic perfection in which this maximum security is realized. The eyes might have been encased in a thick, rough, armor-like shell, but creation presents a more pleasant aesthetic view, with the bone circling the eye, and with eyelids, eyebrows and

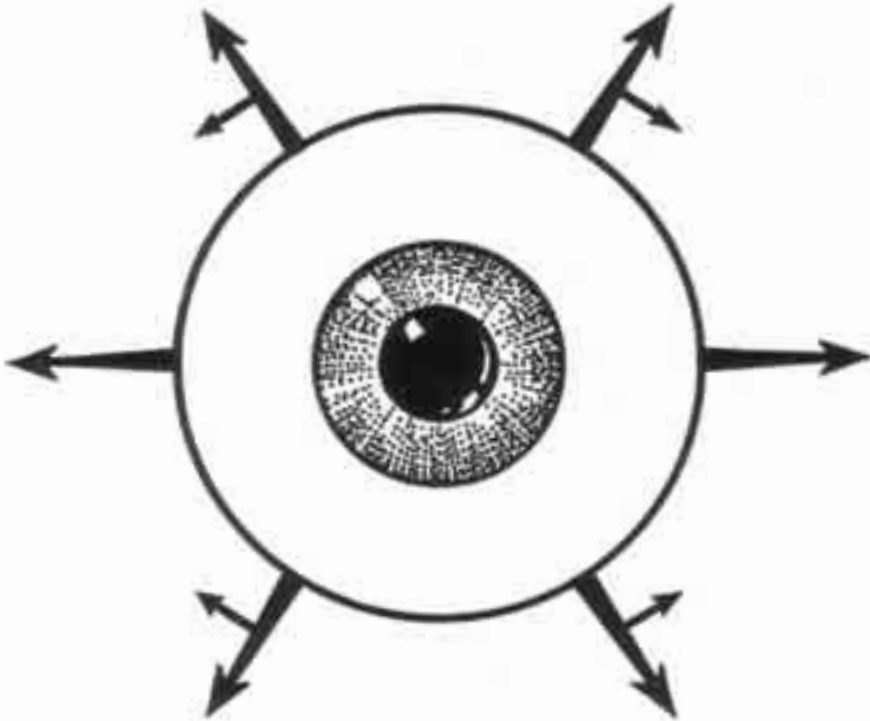
MIRACLE IN THE EYE

eyelashes. The result is only one of the countless examples of the unequalled beauty to be found in the creations of God.

He is God—the Creator, the Maker, the Giver of Form... (Qur'an, 59: 24)

The eyelashes attached to the outer edges of the eyelids protect the eye from outside dust and larger particles. When lost or cut, they grow again from the same roots. An eyelash stops growing when it reaches its previous length.

Eyelashes are straight and soft with slight curves towards their tips.



(Figure 1.5). Thanks to its three sets of muscles, the eye is capable of moving in all directions.

HARUN YAHYA

This shape is not just attractive, but optimally practical. It is no coincidence, of course, that eyelashes have adopted this unique shape. They attain their curved, elastic form with the help of the greasy secretion from sebaceous glands (known as glands of Zeis) inside the eyelids.⁷ Without this suppleness, the lashes would be rough as bristles and tend clump together annoyingly with every blink.

The eyebrows' function is to block the sweat draining down from the forehead into the eyes. The brows also save the eye from reflected or direct sunlight by blocking and obscuring the rays from above. Third, they are one of the most distinctive elements of the human face, beautifully completing the eye's visual appeal.

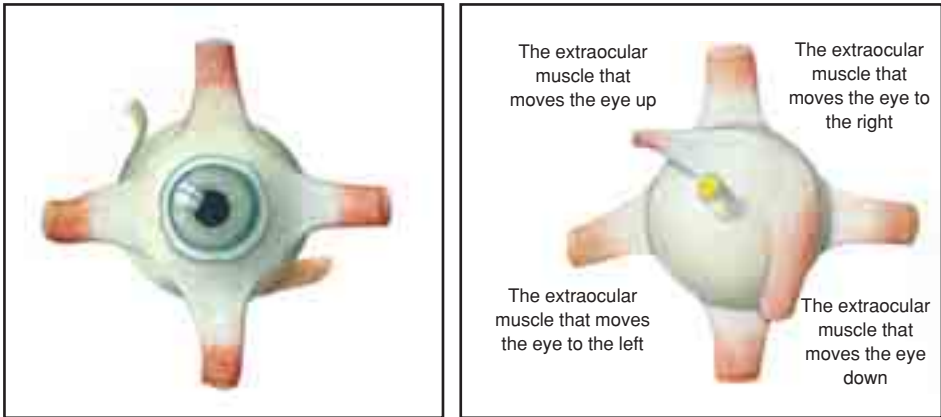
Say: "Who is the Lord of the heavens and the Earth?" Say: "God." Say: "So why have you taken protectors apart from Him who possess no power to help or harm themselves?" Say: "Are the blind and seeing equal? Or are darkness and light the same? Or have they assigned partners to God who create as He creates, so that all creating seems the same to them?" Say: "God is the Creator of everything. He is the One, the All-Conquering." (Qur'an, 13: 16)

Muscles Unvisited by Time

Muscles surrounding the eye are among the most active in the body, making possible some one hundred thousand movements a day. Over a lifetime, the average human performs literally billions of eye movements—even while asleep. Despite this heavy, never-ending duty, the eye muscles never complain of fatigue. In fact, few people are even aware of the muscles in their eyes, regardless of their lifestyle or age, which have no effect on the muscles at all.

Surrounding each eyeball are six muscles: One pair each for horizontal, vertical, and side-to-side oblique movements (See Figures 1.6 and 1.7). Each muscle in a pair moves the eyeball in an opposite direction. But this is no ordinary partnership that tolerates imperfection. Each member of the pair, as well as all three groups, must work together in perfect coordination so that both eyes turn to the object of interest, such that its image falls on both reti-

MIRACLE IN THE EYE



(Figures 1.6 and 1.7). The eye muscles, as seen from the front and from behind.

nas. If even one of these twelve muscles, in six groups, is not sufficiently precise, focusing becomes a problem and you see double. (To get an idea of how difficult the result becomes, simply press gently against the side of one eye with your finger and try to view any nearby object.)

Apart from the effect of double vision, when the harmony between the muscles is gone one's facial expression is distorted as is the case with squinting.

If the eyes did not possess such muscles, they would remain motionless like a pair of frozen glass buttons. The face would have an unchanging, uncommunicative expression, without any meaning or message. To see anything, we would have to aim the head directly in the direction of the object, costing us much mobility and flexibility in the course of our daily lives.

Conjunctiva: Lifetime Care

In addition to the tears lubricating and disinfecting the eyeball round-the-clock, the eyes have another liquid maintenance system that secretes greasy liquid to smooth the eye's some hundred-thousand-a-day rotational motions against friction and external particles.

The eyeball consists of many tissue layers one atop the other. The conjunctiva membrane's job is to lubricate the eyeball's surface layer. Conjunctiva is situated between the inner surface of the eyelid and the eye-

HARUN YAHYA

ball, together with another tissue called sclera (commonly known as the white of the eye). This is a firm, transparent membrane that covers about five-sixths of the eye's surface. Both of the membranes are composed of living cells and fed by tiny, invisible veins—a fact that demands attention.

The section of the conjunctiva coating the anterior portion of the eyeball is very movable, easily sliding back and forth over the front of the eyeball it covers.

During secretion from the tear glands, the conjunctiva plays an instru-



(Figure 1.8). A diagram of the eye muscles, seen from the side. They are designed to allow eye movement in every direction. Such a special structure cannot have developed coincidentally, by itself. The eye was flawlessly created by God.

MIRACLE IN THE EYE

mental role. Covering the two surfaces where teardrops function—the inner surface of the eyelid and the outmost layer of the eyeball—and activating tiny mucus glands embedded within it, conjunctiva supplies tears with the lubrication necessary for smooth, slippery rotation and blinking.

Whether it's a hinge or a car engine, no mechanical device with movable parts can run efficiently without regular lubrication. Forget the grease and oil and soon the engine will burn out. But with the eyeball making approximately hundred thousand movements per day, you don't need to do a thing. Lubrication is provided automatically by the system just described.

If that system were absent or even interrupted temporarily, each movement of the eye would cause unbearable pain. Yet thanks to God's flawless creation, a healthy person will never have such difficulties.

Cornea: The Window of the Eye

The eye is a round sphere, except for the small raised bump at the front, where it receives light. Surrounding this sphere is the sclerotic layer—white as milk, hard and tough, protecting the eyeball's internal tissues. The white area of the eye surrounding the colored iris in the center is only the visible part of this layer.

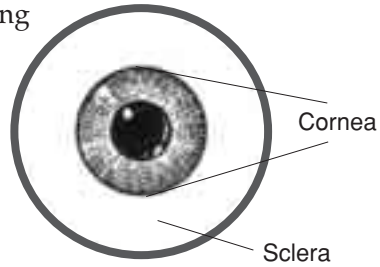
Suppose that the white of the eye was not hard and tough, but much softer, like jelly. Were this the case, the eye's internal layers would not be protected. Also, any external substances that entered the eye would adhere to the eyeball, becoming difficult to remove and causing potential damage. However, tear drops easily clear the eye of any foreign particles thanks to the fact that the white of the eye is fairly hard.

The structure of this hard white tissue changes suddenly at the center, when it approaches the bulging spot at the front of the eye. This structure, the cornea, is made up of a transparent layer permeable to light. Despite being a continuation of the sclera or white of the eye, it is distinctly separate and possesses a completely different structure (Figure 1.9). If the eyeball were compared to a building, the white of the eye would be the marble exterior; and the cornea would be its single round window.

The reason for the cornea's small size is quite simple: If the eye were

completely covered by the thin tissue making up the cornea, it would be effectively defenseless, and would almost certainly wind up blinded.

However, if the white of the eye were to cover the eye completely, including the transparent layer, then light would be unable to penetrate and enter, thus making it impossible for the eye to see.



(Figure 1.9)

How is it that two distinctly different tissues, lying along the same layer and continuous with one another, are clearly separated by a circular border? Who drew this border?

The cornea's function is to focus (or refract) incoming light, thus allowing it to pass through the lens towards the retina at the rear of the eye. This process refracts some two-thirds of the light needed to focus on an object, while the remaining third is processed by the lens.

In order for objects to be seen clearly, it's crucial that the cornea be always transparent. This is vital because even one drop in it causes misty vision, while alertness is equally important: The eye must be able to detect even the smallest dust particle that may enter.

The cornea owes its perfect transparency to the delicate arrangement of fibers inside it. Any interference will stain the cornea and cloud vision.

Think of the importance of objective in photography—for the eye, the cornea is equally important. So clear that it cannot be seen from a distance, it is one of the most sensitive parts of the body.

The cornea is made up of countless nerves and lymph vessels which, however, do not disrupt vision. The slightest movement around the cornea triggers reflexes that command the eyelids to close. Thereupon, the eyelids swiftly eject anything which may have stuck to the cornea and protect against possible damage by closing over the eyeball.

The cornea is like a window, behind which the eye operates. It is possible, for instance, for wind to blow a sand grain or wood chip into the eye and scratch the cornea. But thanks to its built-in self repair system, the cornea can repair itself.



(Figure 1.10). The cornea is the eye's window to the outside world. Its transparency is similar to a window's, the only difference being that the cornea is biological, composed of tissue, whereas windows are made of glass. It is God Who allowed a piece of human tissue to become clearer than glass.

HARUN YAHYA

During the day, the cells composing the cornea are fed with glucose from the tear fluid and, since the cornea contains no blood vessels, with oxygen from the air. During sleep, however, when outside oxygen cannot penetrate the closed lids, the cornea is supplied by the capillaries on the inner surface of the eyelids.

If this precise balance in the cornea were never maintained, we would always have misty vision and never know the meaning of clear sight. Safe to say, the world would be a very different place, looked at it through unclear eyes. It's amazing to think how much this thin layer of tissue does for us.

The cornea is completely isolated from the body, making it easier for surgeons to transfer it from one patient to another. A new body does not reject the cornea, because antibodies in the bloodstream never reach it.

An intensely transparent layer, the cornea allows some 98% of light to pass through, thus approaching the transparency of window glass (Figure 1.10). Of particular note is that the cornea is a living tissue, made up of cells and constantly fed with glucose and oxygen.

How can a living part of the body be so utterly transparent? How did it acquire this transparency? Even though we are looking through countless capillaries and vessels, how is it that we still see the world so very clearly?

From the divisions of one single cell came all the cells in our body, including the ones in this delicate, transparent living layer of the eye, in the rigid bones, in the kidney tissues and in the blood. What is the power that, with the division of a single cell, can create two structures as entirely different as rock-hard bone and a crystal clear cornea? How did the cells differentiate from one another to that extent? Do they possess the faculties of planning and decision-making to carry out these plans?

Cells, made up of inanimate and unconscious atoms, do not possess such faculties, of course. It is God Who inspires the cells what to do, to form various organs and perform a multitude of tasks.

That the fibers and the nerves making up the cornea are so sensitive again evidences the superior creation. Thanks to a complex early-warning system, this extremely delicate layer summons the eyelid to its defense in the event of danger. But how does that happen? Can the cornea cells really have

MIRACLE IN THE EYE

developed their own life-support system to stay alive, and then made an agreement with the brain for the eyelids to guard them?

Another miraculous aspect of the eye lies in the shape of the cornea. The focusing of light requires calculation, not to mention experience in the field of optics. However, this very complicated process is carried out flawlessly by corneal tissue, which came into being in the mother's womb through the simple splitting of a few cells. Every cornea is angled so as to allow light to enter directly into the retina. Does the cornea have the intelligence to predict this angle, or did each cornea cell attain this knowledge individually? One conclusion is certain: No calculation this complicated was solved through a series of coincidences.

Many other details—besides the cornea's shape that focuses light on the retina, its extraordinary structure providing a clear vision through its fibers, the conjunctiva and vessels of the lymphatic system feeding it, its early warning system—are all flawless, synchronized mechanisms that couldn't have come into existence coincidentally.

The cornea has a most superior design, which can have been created only by a uniquely superior intelligence, whose Owner is God.

O man! What has deluded you in respect of your Noble Lord? He Who created you and formed you and proportioned you and assembled you in whatever way He willed. (Qur'an, 82: 6-8)

Fluids in the Eye

The inside of the eye is divided into three sections. Of the two chambers toward the front of the eye, the first lies between the back of the cornea and the iris. The rear chamber, on the other hand, is a small gap between the iris and the lens. A wide space beyond the eye's center and the lens, often referred to as the dark chamber, is filled with a clear, colorless fluid known as the vitreous humor or the "glassy fluid."

This jellylike fluid is enclosed in a sac between the lens and the retina and holds the retina in place. The back chamber (between the iris and the lens), and the front chamber (between the iris and the cornea) are also filled with a watery fluid. Produced by the ciliary body, this fluid feeds both the

cornea and the lens, for neither has access to oxygenated blood vessels.

To nourish the components of the eye, this fluid contains a large number of chemicals and minerals, including salts, sugars and disinfecting substances drawn from the blood vessels and then mixed into the fluid through microscopic pumps in the ciliary body.

This fluid, which gives life to the eye, doesn't remain stationary, but is constantly circulating in a manner similar to the basic flow of water in the oceans, in which the colder water flows deeply below, while warmer currents flow closer to the surface.

Along with delivering nutrients and disinfectants, this fluid also expels waste matter in an exceptionally delicate, microscopic manner. Another of the fluid's functions is maintaining internal pressure, so as to keep the eyeball distended and stable.

Pressure within the Eye

The eyeball can be considered to be a sphere with restricted flexibility. The gelatinous fluid the sphere contains gives it a certain amount of internal pressure, determined by the quantity of the aqueous humor—which in turn is produced by the ciliary body. After being secreted, first it flows into the back chamber, then through the pupil into the front chamber, before being absorbed by tissues between the back of the cornea and the iris. If the rates of production and absorption become unbalanced, this can affect the eye's internal pressure.

When these two rates are equal, however,—that is, when the amounts of the produced and absorbed aqueous humor are equal, due to the continuous flow of fluid—the volume of fluid within the eye does not change. But if the production increases while the flow of absorption is reduced or somehow obstructed, pressure within the eye builds.

To recap: This fluid is produced at a discrete quantity, and the same amount of excess is absorbed. More importantly, this process is constant, ongoing in every human eye.

In this respect, the eye is similar to an aquarium that's filled at one end while it empties at the other: If the flow of water is blocked, it will overflow.

MIRACLE IN THE EYE

However, if the water from the source is cut off, then the aquarium will dry up. Likewise, the amount of liquid contained in the tanks in many industrial and chemical plants, is maintained with the use of computerized control systems. These systems, demanding highly delicate measurements and calculations, are programmed and supervised by specialized engineers. Any disorder in the system can lead to catastrophe.

To ensure the balance in such a small volume as the fluid within the eye, measurements and calculations need to be even more delicate and precise. The slightest inaccuracy, even smaller than mere millimeters, would result in blindness. In a healthy eye, however, these calculations and the cycle of fluid in the eye remain balanced throughout a lifetime. That the fluid exists is a miracle, but the fact that this very fluid is carefully produced and accurately absorbed is an even greater miracle that one should reflect on deeply.

But what if the sensitive balance of eye fluid is disrupted, as in an overflowing aquarium? When the fluid is not absorbed properly or the production of fluid is increased unnecessarily, the result is a quite painful condition known as glaucoma, marked by abnormally high pressure within the eyeball. This causes intense discomfort and sometimes loss of vision. The eyeball inflates like a balloon ready to burst, and the smallest impact can rupture it.

As with most other bodily processes, it's natural not to be aware that your eye fluid is constantly being secreted into, and absorbed out of, your eye—until you read this book. Some people, however, learn about the presence of this fluid the hard way, by developing glaucoma. Like any critically ill person, they realize how much of a blessing good health is and, as a last resort, turn to God.

You differ from those in such a situation, in that you learned of this miracle by reading this book, rather than through developing the disease and suffering the pain. But this doesn't mean you'll never experience pain in your life. If God desires it, He may impose such a condition or even a more painful one on you at any time, so that you may remember the value of good health and be thankful. But the truly acceptable way is to turn to God without waiting for an illness—to be grateful to Him, and to remember and glorify Him at all times.

What will those who dream up lies against God think on the Day of Resurrection? God shows favor to mankind but most of them are not thankful. (Qur'an, 10: 60)

The Iris: A Light Regulator

Placed behind the cornea, the iris protects the retina from unnecessary illumination. Muscles placed on either side let the iris change the diameter of the pupil, according to light intensity (Figures 1.11 and 1.12). One of these muscles contracts the pupil in bright conditions, while the other group, radiating from the pupil like the petals of a daisy or the spokes of a wheel, expands the pupil in darker conditions. In this way, the amount of light entering the eye is kept constant.

If this were not the case, and if the pupil size weren't regulated according to the changing amount of light, our eyes would then take much longer to adjust to even the slightest changes in light, making us unable to see for longer periods of time.

There are two reasons for the dazzling sensation we experience upon moving from a bright environment to a darker one. First, in the dark, the retina's sensitivity increases. Secondly, it takes a moment or two for the iris muscles to activate. When suddenly we move from a dark environment to a bright one, the pupils remain wide for a short instant. But within 0.04 to 0.05 seconds, the pupils contract with the help of the iris muscles; which is maximized in a tenth of a second.

If this interval were any longer, we would spend a considerable period of time unable to see. But thanks to our eyes' perfect structure, we can see our surroundings in changing light with minimal discomfort.

The iris also contains pigmented cells that give the eye its distinctive color. Just as the skin, the iris's color depends on the type and amount of pigment. Light-skinned people tend to have blue, hazel or light gray eyes, whereas dark-skinned individuals typically have dark brown or black eyes.

The Pupil

What we call the pupil is actually an opening at the center of the iris and can rapidly expand or contract to adjust the intensity of light entering the eye. Generally, both eyes receive the same amounts of light, but any change in the amount entering one eye will affect the pupil of not only that one eye, but the other as well.

MIRACLE IN THE EYE



(Figure 1.11).
The iris, which controls the amount of light entering the eye, and its surrounding muscles.

The amount of light entering the eye can be multiplied nearly thirty times according to how wide the pupil is. The change in the amount of light produced by a flash camera in 0.1 seconds, for example, causes the pupil to instantly adjust its size and admit less light.

Upon light's entering the eye and hitting the retina, nerves transmit a signal to the brain. The brain is not only informed of the light's existence, but also of its intensity. It immediately sends back a response as to how far the muscles around the pupil should expand or contract. The entire process of communication, calculation, and functioning, is over in less than a second.

At first glance, the line of communication between the iris muscles and the brain seems like a normal biological link in the body. But when analyzed

HARUN YAHYA

(Figure 1.12). The iris controls the amount of light entering the eye by adjusting the size of the pupil. It contracts in strong light (a), thus reducing the amount of light entering the eye. In dimmer light, the pupil expands (b) to allow more light to enter.

Thanks to a complex and advanced system, the amount of light entering the eye is calculated and the pupil size adjusted, in a tenth of a second. Is it really possible that a collection of atoms came together coincidentally to create such a perfect system?



in detail, this link can be seen for the miracle it really is.

The measurement of outside light intensity, the immediate relay of signals to brain, and the brain's consequent adjustment of the iris muscles to regulate the light entering the eye is a complicated process which is amazingly conducted in the brain of every person who has ever lived, with the exception of the congenitally blind. This is nothing short of a miracle, and a way for us to comprehend our Creator's power and knowledge and realize His true measure. It is the responsibility of humans to give thanks to God, Creator of the universe, and also to indulge ourselves in acts which will please Him. In one verse of the Qur'an, God describes those who ignore His

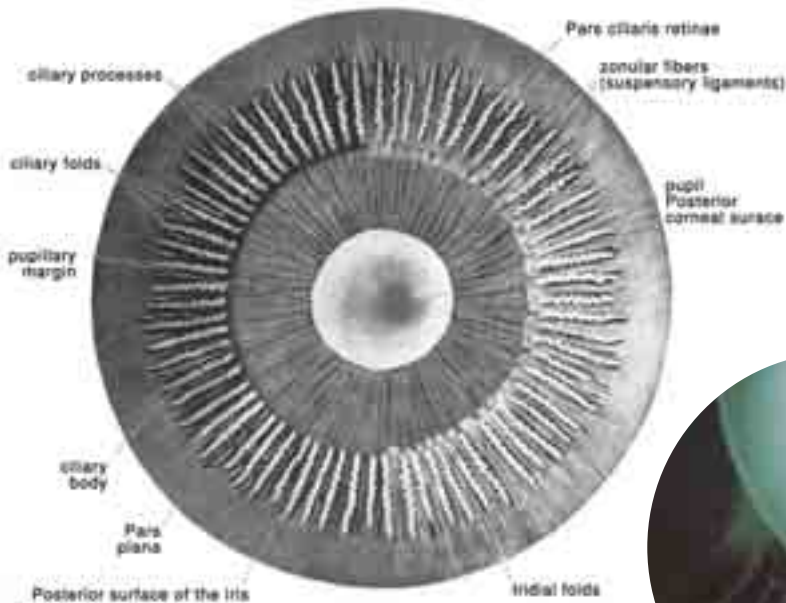
MIRACLE IN THE EYE

signs as wrongdoers:

Who could do greater wrong than someone who is reminded of the signs of his Lord and then turns away from them, forgetting all that he has done before?... (Qur'an, 18: 57)

Adjusting to Brightness and Dark

You can test for yourself all the details about the eye we have described up to this point. When you first enter a dark room, it's difficult to distinguish different objects within. This is because at that moment, your retina's level of sensitivity is very low. But this sensitivity can multiply itself by a factor of ten times in less than a minute, allowing your retina to respond to gleams only a tenth as powerful as before. In twenty minutes, the retina can adjust itself 6,000 times, and in forty minutes, nearly 25,000. The eye can increase its



(Figure 1.13). A diagram of the muscles that are triggered upon orders from the brain, and can either contract or relax to change the pupil size. This way, a constant intensity of light always enters the eye. The second diagram to the right depicts the same muscles, but magnified.

HARUN YAHYA

sensitivity to a maximum of between 500,000 and 1,000,000 times. This factor is adjusted automatically, according to the surrounding brightness in the environment.

In order for the retina to register an image, it must determine the dark and light spots upon the object being viewed. For that reason, sensitivity must be adjusted so that the receptors respond always to the brighter points, not the darker ones.

Imagine, for example, that you're stepping out into bright daylight, having just sat through a film at the cinema. Everything you look at, even spots that normally appear dark, will seem unusually bright and because of low contrast you will see a lot of light colors. This is inadequate vision, of course, and fixes itself once the retina adjusts itself so that its receptors are not overstimulated by the darker spots in your field of vision. When you walk into a darkened room, now your retina's sensitivity is very low and therefore, even the brighter spots on objects cannot stimulate it. But once your retina adjusts to the dark, the bright spots do register. The retina can adjust to extreme light and dark. And even though sunlight is 30,000 times brighter than moonlight, your eye is able to adjust and see in environments illuminated by either source of light.⁸

The Lens: The Eye's Focusing Mechanism

The lens, situated immediately behind the iris and the pupil, breaks down incoming beams of light and focuses them on the retina. Made of protein fibers, the lens is transparent, hard but slightly elastic and yellowish in color. Similar to a magnifying glass, the center of the lens is convex in structure.

With the aid of muscles surrounding it, the lens is able to change shape, allowing it to adjust itself according to the angle light comes in, ensuring it is always directed onto the retina. When you look at a point close to your eyes, muscles flex your lens into a more convex position. But when you view a distant point, the muscles relax, stretching the lens into a flatter configuration and thus clarifying the images of distant objects.

Like the cornea, the lens contains no blood vessels, and so it is nourished by the eye fluid.

MIRACLE IN THE EYE

Interestingly, the lens never stops growing throughout a human's life, although the rate of growth does slow down with age, leading to loss of its elasticity. Certain cell layers become isolated from the rest of lens and are consequently deprived of food and oxygen; a process which eventually kills these cells. The lens begins to harden. It becomes more difficult for it to curve itself and, as more and more cells die, it loses its ability to adapt itself to viewing nearby objects. This is why the elderly so often find themselves reading the newspaper at arm's length and using glasses to support their farsighted vision.

One should reflect on the fact that the eye lens doesn't maintain its capabilities for an entire lifetime. Just like other organs in the body, the lens of the eye can't survive the aging process and loses its originally perfect structure. It is a sign, God's way of reminding us that we are getting old. We are reminded of such facts as that life upon Earth is only temporary and that our human bodies will perish one day. Only those who truly use their minds can see God's such warnings wherever they look.

The lens in the eye works in a way similar to the lens in a camera. To get the clearest picture, it is necessary to adjust the camera lens either manually or automatically so as to focus light upon the film, depending on the distance. When you look at an advanced camera close-up, you'll see that when focusing, the lens revolves around its own axis. While this process takes place, the picture in the camera's view finder becomes blurred.

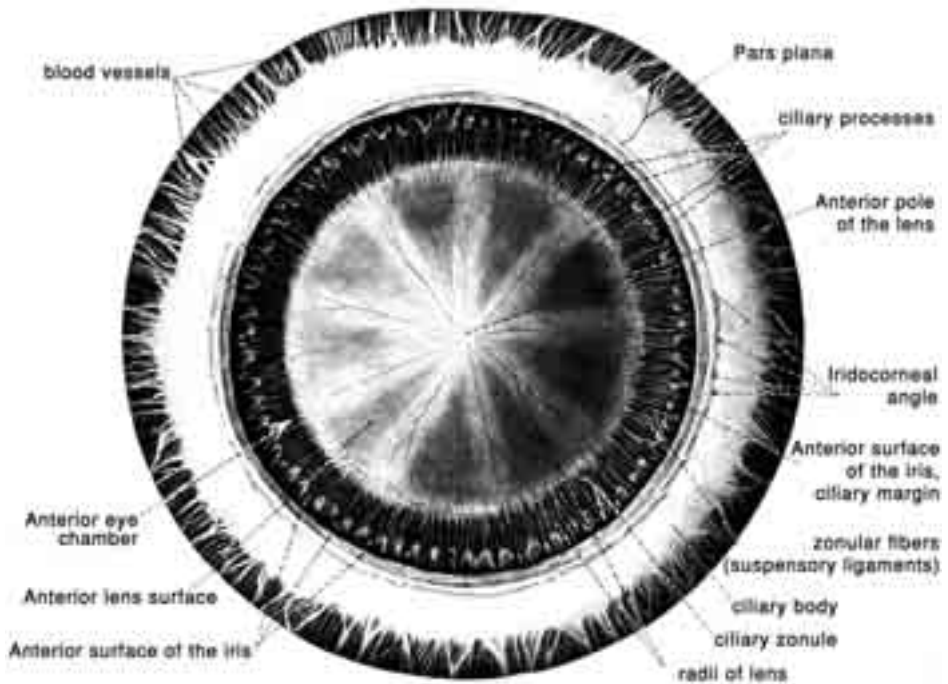
Even though the functioning of the eye was imitated in the construction of camera lenses, the eye's lens is countless times more developed. In particular, its dimensions are smaller than a camera lens. The lenses used in cameras reached their present level of technology after years of research. Scientists have still not succeeded in making an optical system as perfect as the eye.

Your eyes do not frequently break down, the way a camera does, and have no need of maintenance. Cameras are produced by expert technicians in special factories, using many different materials—plastic, metals, glass, etc.—according to engineers' designs. The eye, on the other hand, forms in the mother's womb as the result of the division of a single cell.

HARUN YAHYA

If you tie a camera atop your head and run or walk while filming, the resulting image will bear traces of shaking and slippage. Yet as you walk your eyes, which register images just like two cameras fixed to your head, never make you feel uncomfortable. There is never any shaking or slippage in the images you see.

Another question that may come to mind is why the muscles forming the lens seek to make light fall upon the retina. No one ever thinks, "I must make the light entering my eye fall onto my retinal layer so I can see properly." Most people are quite unaware of their retinas and lenses. Yet the whole day through, these tiny organs perform functions requiring unimaginable calculations. In order for the lens to do such things by itself, it needs to know the task of the retina, what vision entails, the structure of the brain, and the purpose served by photons. Only in this way can it focus the light falling upon it onto the retina.



(Figure 1.14). Fibers connected to the muscles responsible for expanding and contracting the lens. Sensitive adjustments made by these fibers allow incoming light to be focused in on the retina at the proper angle.

MIRACLE IN THE EYE

Naturally, neither the lens nor the cells comprising it have any will of their own. The lens, cornea, iris, retina, their cells and the muscles around them, and the brain all carry out their functions in ways inspired by God, and by His will.

The Retina

The retina receives the beams of light refracted by the cornea and the lens, and constructs the image we see. This image is then sent to the brain in the form of electrical signals (Figure 1.15).

The retina serves exactly the same purpose for the eye as the film does for a camera. In the same way that photographic film lies behind the lens, the retina lies at the back of the eyeball and there forms an image of the object being focused on.

Once a camera has recorded an image, the film is moved onto the next unexposed empty frame space so that another photograph may be captured. The retina, on the other hand, receives countless images every second, but doesn't have to change or be replaced, because the retina is capable of renewing itself. It displays and uses countless images throughout an entire lifetime without deteriorating or breaking down.

The retina is composed of eleven separate, microscopically thin layers (Figures 1.16 and 1.17). Images fall on the ninth layer, an area almost 1 millimeter wide. It's quite amazing to consider that entire kilometers of landscape can be focused down upon this tiny point. No one should forget that his whole world is recreated within this tiny area; that thanks to that area, he has perceived the existence of everything he has ever seen; and that ultimately, that point is nothing more than a tiny concave layer of cells.

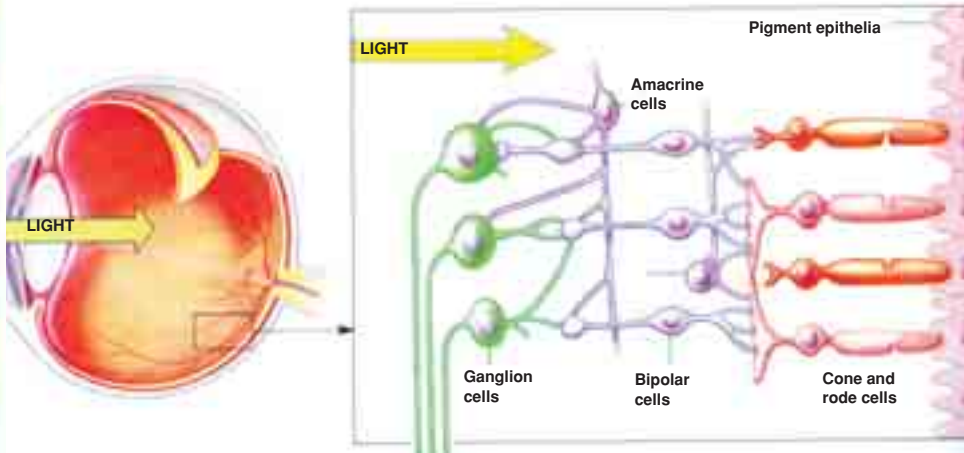
At the back of the retina are a number of rod-shaped and cone-shaped cells. These cells convert received light into electrical signals. Because of their shape as observed under a microscope, they are called rods and cones. There are 6,000,000 cones and 120,000,000 rods; a ratio of nearly 20 rods to every cone.

But the only difference between these two cells is not their shape or their number. Each type of cell has a different method of perception. Rods can respond to even the weakest beams of light. For the cones to respond, however, more powerful light is needed.

HARUN YAHYA

Rods can respond by forming only a black-and-white image, depending on the light received from the objects. They are designed to function even in environments where light is minimal. However, they do not perceive the details or colors of the objects.

When we are observing the stars at night, or trying to find our seat in a darkened movie theater, we succeed thanks to the images generated by the rod-shaped cells in our retina. We are able to make out objects' shapes, but not their colors. This is why, as the saying goes, "In the dark, all cats are gray"—in the dark, all objects seem to be black and gray in color.⁹



(Figure 1.15). When light enters the eye, it first passes through the cornea, pupil and lens. It then falls upon the retina, where millions of cells convert the light into electrical signals and transmit them to the brain.

In other words, light is converted into electrical energy at varying levels of intensity, thanks to which images form in the brain. This is an incredibly complex and advanced system, evidence of the flawlessness of God's creation.



MIRACLE IN THE EYE

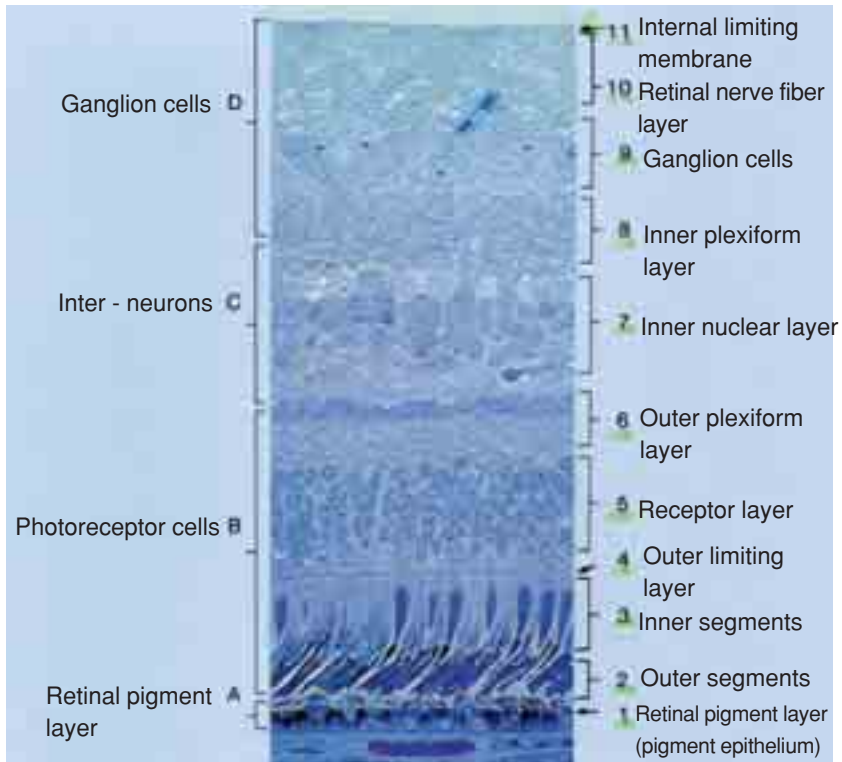


(Figure 1.16). The cells making up the retina, as seen under an electron microscope. The retina has the complex task of converting light energy into electrical energy. If there were even one type of cell in the retina, that would be a miracle enough. But four different types of retina cells, making up eleven different layers, have a processing power superior to any computer's, making "miracle" an insufficient word.



A little earlier, we mentioned that the rods and cones convert light waves into electrical energy. This conversion process is a most complicated one, but how does it take place? How, why and by what logic does a mere cell convert light energy to electricity? How did the cell first acquire the knowledge to complete such a process? How did it acquire its unique structure to carry out this process? Taking into account that these cells are divided into separate groups according to their function of perceiving shape and color, how did they allocate separate tasks to themselves in the first place?

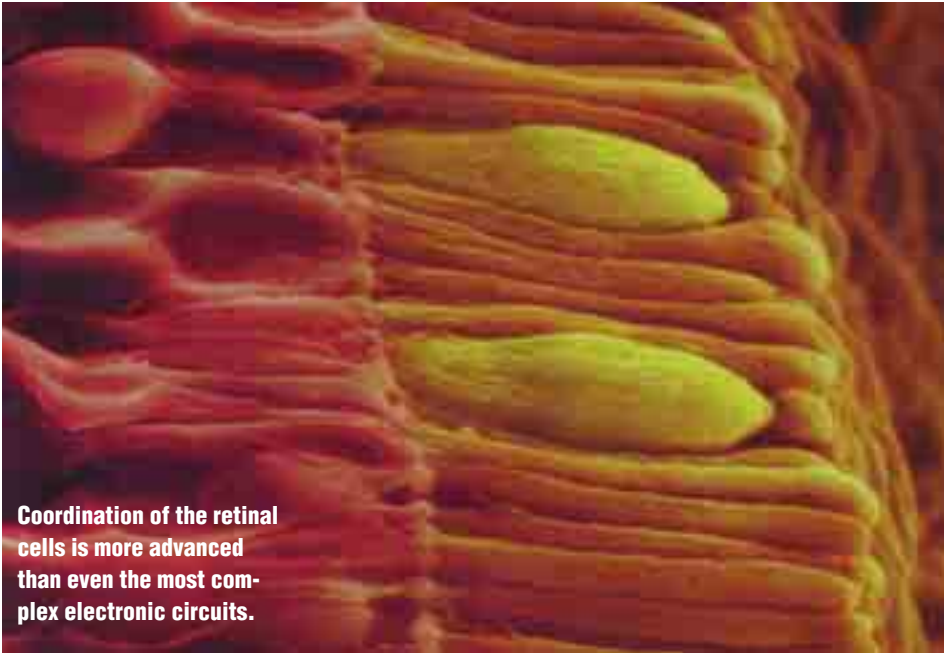
By itself, on its own, a cone-shaped or rod-shaped cell is of no use. Were it not for their excellently organized placement across the retina, the network



(Figure 1.17). A magnified photograph of the retina. In order to function, the retina requires eleven layers and four different types of cell to all be present at the same time. If even one type or layer of cell were not present, the entire eye would become useless. The theory of evolution alleges that species developed their distinct features over millions of years by trial and error. But even one single component of the eye makes it clear that the theory is simply a farce. This means that the eye was created by God.

of nerves connecting them with the brain, components of the eye such as lens and cornea directing light towards them, or the fine capillary vessels feeding them, not even several thousand of these cells would allow us to see. Moreover, were there no brain to interpret the signals sent by these cells, there would be little reason for the presence of these cells at all. This system, with all its parts, must have been present from the moment mankind first appeared on this planet. It's not possible for certain parts of this system to have developed at later stages, because in the meantime, man would be unable to see. The first human's retina was no different from the retinas of humans living today.

MIRACLE IN THE EYE



Coordination of the retinal cells is more advanced than even the most complex electronic circuits.

(Figure 1.18). The cone and rod cells, magnified 45,000 times. The broader cells are cones, which perceive colors, and the thinner ones are rods, which perceive black-and-white images. Every image you have ever seen up to this moment was actually an electrical signal sent from these cells to your brain.



Cone and rod cells



It is a miracle enough for just one single cell to convert light into electrical energy. But there is an even greater miracle—millions of these cells, all working together for a common purpose. It is clear that these cones and rods, together with other components of the eye and the brain, were created by God. It is God Who created humans with a flawless design. As God tells us in a verse, there is no other god besides Him:

He is the Living—there is no god but Him—so call on Him, making your religion sincerely His. Praise be to God, the Lord of all the worlds. (Qur'an, 40: 65)

The Four Perceptions of the Retina

The retina is capable of interpreting four different properties of vision: Contrast, color, light and shape.

Light: Under darker conditions, the rod cells are able to perceive more light than do the cone cells. Thanks to the rods, we can see at twilight, for instance. In brighter conditions, however, the cone cells come into play. This is why the eyes of nocturnal animals have a large amount of rod cells.

Shape: Cone cells play a large part in perceiving the shape of objects. The area of most acute vision of shapes is the fovea centralis, which has the highest concentration of cone cells.

Contrast: The ability to differentiate between areas that are not clearly separated, but have slightly different amounts of illumination, is extremely important. Loss of ability to distinguish contrast is common in a number of illnesses, a condition which can bother patients even more than loss of their acute vision.

Color comes from the mind's interpretation of different wavelengths of incoming light. The retina separates the wavelengths, interpreting each as a different color.

As mentioned earlier, it is in itself a miracle that the retina can convert light into electrical energy. But the miracles do not end there. The method by which images formed on the retina are sent to the brain is just as extraordinary. The retina doesn't transmit a picture to the brain as a whole. First the retina breaks up the picture, and then these pieces are reassembled in the brain. The left-hand side of an image ends up on the right-hand side of the retina, and vice-versa. The pieces are transmitted separately in less than a tenth of a second, to be interpreted in the brain. What's been described here is a brief summary of what actually takes place in the retina.

The better to understand these miracles, let's examine the process in closer detail. To see an object, the light energy entering the eye must first be converted into nerve impulses. Beams of light cause a physical stimulation, which triggers chemical and electrical reactions. This chain of reactions, ending with a vision of the object, depends on a Vitamin A-based pigment called rhodopsin, found in the rod cells.

Light striking the retina bleaches the rhodopsin. As a result of this bleach-

MIRACLE IN THE EYE

ing, a chemical substance forms that stimulates the nerve cells. Rhodopsin loses its property in bright light, but reforms again in darkness.

When you enter a movie theater, for example, at first you will be unable to see clearly, because at that moment, there is not enough rhodopsin present in your eyes. Once more rhodopsin is produced, your vision clears. You won't be able to see clearly until enough rhodopsin is produced; but once the rhodopsin balance is maintained, you'll find it easier to distinguish objects in the dark.

Once you leave the cinema and walk back out into the sunlight, however, rhodopsin breaks down rapidly, sending many signals to the brain at once. Objects in your vision become unusually bright, making it difficult to see. In bright light, rhodopsin breaks down faster than it is synthesized. That's why your vision seems defective for a while. Again, rhodopsin is why your eyes are dazzled by the sunlight and the snow. Once most of the rhodopsin is deformed, fewer impulses are transmitted to the brain; the eyes have become light-adapted.¹⁰

Rhodopsin, when needed, is produced at just the right amount. It works in conjunction with the other parts of the eye, allowing us to see easier in the dark. But who first decided to produce this substance? Did eye cells, unable to see in the dark, spontaneously gather and decide to make a substance that enhances vision in the dark and breaks down in brighter light? Supposing that they did so, then who designed rhodopsin's physical and chemical structure? And how did the eye cells gain all the genetic information they need to work with rhodopsin?

There are far more details to the process of seeing than we've described in these few paragraphs. But rhodopsin by itself is an accurate demonstration of what a miraculous system the eye truly is. Clearly, its cells didn't develop rhodopsin on their own. The eye, with its delicately calculated system, is a creation of God.

The Primary Colors

As we mentioned earlier, the cones within the retina are those cells that perceive colors. There are three separate groups of cones, each of which reacts

HARUN YAHYA

to certain specific wavelengths of light—namely, blue, green and red.

These are the three primary colors found in nature. Other colors come about through the varying combination of these basic three. For example, if you were to mix red and green light, we would get yellow. The pigment cells work following the same principles: When the cones sensitive to red and green light are alerted to an equal degree, you perceive the color yellow. If the cones sensitive to red, green and blue are alerted to an equal degree, we see white. When the cones that perceive all three colors are alerted at differing degrees of intensity, then it is possible to see any other color in existence. But our knowledge in this field of chromatics is pretty much limited to the above, and is currently nothing but a theory. It is still unknown, for instance, how the brain decodes the signals sent from the retina.

As you can appreciate, the process of color separation is very complicated. But as an aid to understanding it, consider an example from modern technology. Color television screens work in a manner similar to the eye's color separation system. On the screen, colors of different wavelengths are placed very close together, such that a magnified photograph of the screen would show that the TV picture is made up of miniscule red, green and blue dots. When we draw back a little distance from the screen, these colors merge to create the various shades we're used to seeing.

To assemble the pictures we all see with our eyes, a large number of complicated color adjustments are constantly effected. The intensity of signals sent by millions of cone cells must be delicately adjusted, then decoded by the brain. What's more, this is not a process that takes place in the bodies of only a few for short periods of time. Every human perceives billions of images over a lifetime, and color adjustments are made for every single one.

Acuity of Vision

Whether the sight be a speck of dust or a vista from the summit of a mountain; any vision—from thousands of kilometers to a few millimeters in size—eventually focuses upon a yellowish spot, only one millimeter square, called macula lutea.¹¹

At the central point of the macula, only about 0.4mm wide, the retina thins and contains a slightly depressed area called the fovea centralis. At the

MIRACLE IN THE EYE

fovea's center, the sensory layer is composed entirely of cone-shaped cells. As mentioned earlier, cone cells can differentiate between visual details. Here, therefore, at the point where vision is at its clearest, the colors, shapes and depth of vision are concentrated. Outside the fovea, visual acuity can drop by up to 1,000%.

When you examine an object carefully, your eyeball's active muscles move and adjust themselves so that light can be concentrated upon the fovea.

Someone with maximum visual acuity can discern, from ten meters away apart, between two bright points as big as a tip of a needle, separated by only a few millimeters.

The Choroid: A Vein of Life

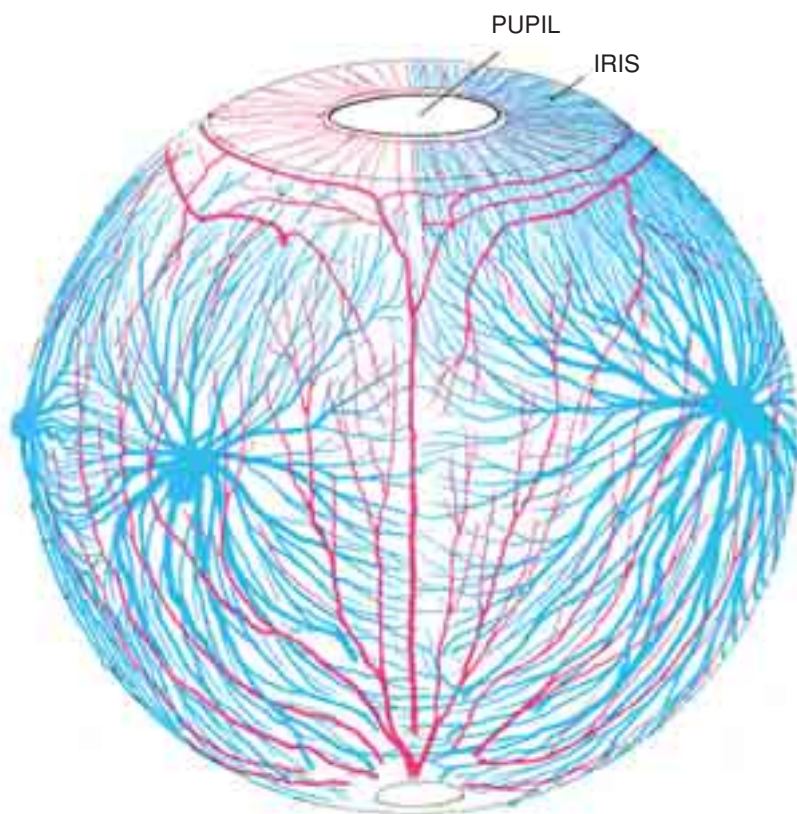
Between the sclera and the retina lies the dark-brown vascular coat of the eye known as the choroid. It is composed of blood vessels—millions of capillaries—through which the cone and rod cells are fed.

By itself, the choroid is effective evidence that the theory of evolution is incoherent and laughable—additional proof of the miracle of creation.

Without the choroid, which feeds every cell in the retina, the eye would lie completely useless. It's not possible for such a layer to evolve over time, simply because most other components of the eye could never survive without it, however miraculous they may be in themselves.

As we have pointed out repeatedly, the eye is composed of countless different sections and layers that include the cornea, sclera, iris, pupil, lens, eyelid, nerves connecting the cornea to the brain, and countless other structures. All of them can work together only as a whole—they are simply too specialized and interdependent to have evolved on their own. In order for the eyes to see, all those other structures and tissues must be present at the same time, working in complete and perfect synchronization.

This observation renders completely irrelevant the evolutionary theory that humans reached their state today through a series of coincidental mutations. Such a perfect organism cannot have come about by means of any power other than creation. The choroid layer feeds the retina, in an unrivalled example of God's artistry of creation.



(Figure 1.19). The choroid layer

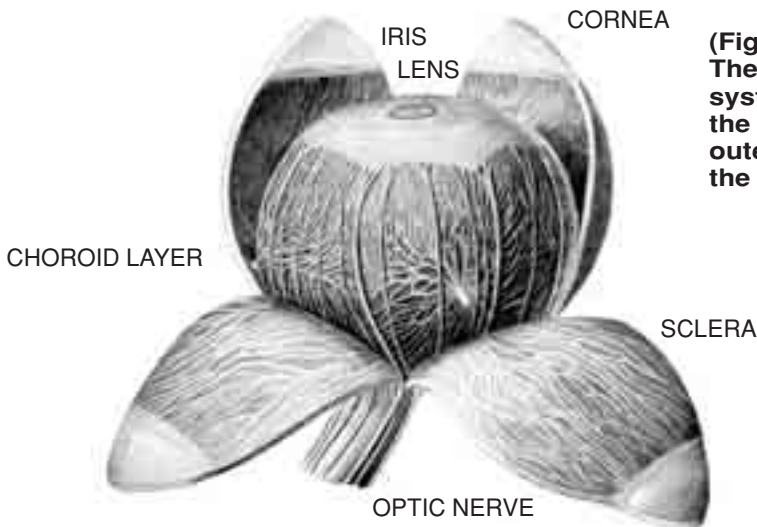
[He is] the Originator of the heavens and Earth. When He decides on something, He just says to it, "Be!" and it is. (Qur'an, 2: 117)

The Paint of the Retina

So that it can stimulate the cone and rod cells, light entering the eye passes first through two layers—one of which is the melanin layer, containing a black pigment. Melanin absorbs any light passing through the retina, thus preventing it from reflecting back and away. Without the melanin layer, light would scatter itself around inside the eye, and no coherent images could be formed. In other words, the retina is lined with black pigment called melanin—just as the inside of a camera is black—to lessen the amount of reflection.

To look at this topic from another angle, consider the question, "Who painted the inside of my camera black?" The answer requires hardly any

MIRACLE IN THE EYE



(Figure 1.20). The complex system beneath the sclera, or outer layer of the eye.

thought: Of course, engineers came up with the idea of using a dark coating to reflect less light. It proved successful in consequent experiments, and was therefore marketed.

So if we asked the same question for the eye, what would the answer be?

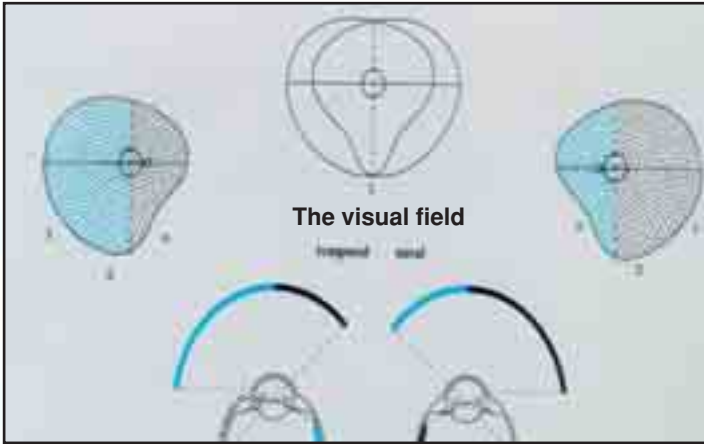
How can the structure of the eye, far superior to a camera, possibly have come about by means of a series of coincidences? Quite the opposite is true—the eye was created by a superior mind.

It's interesting how some individuals will marvel at the technology behind a simple camera, but still insist that the eye was not similarly created. Easily fooled by the forgeries of Darwinism, they utterly deny the true Creator.

To prove the flawlessness of His creation, God has left a number of lessons for us humans to dwell upon. For example, the importance of the melanin layer is truly dramatized in a disease called albinism. Sufferers of the condition lack normal pigmentation, with the result that light reflects all around inside the eye, especially under bright conditions. This brings with it an uncomfortably bright vision.¹²

Visual Field

The total angle that the eye can take in without moving the head is called the visual field. As you can prove for yourself, it is at its widest at the edges,



(Figure 1.21). The visual field is the area that you perceive when looking straight ahead and not moving your eyes. From each eye, the two nasal fields of vision (towards the nose) overlap when the eyes look straight ahead. The images from both eyes are combined in the brain, resulting in perfectly stereoscopic vision.

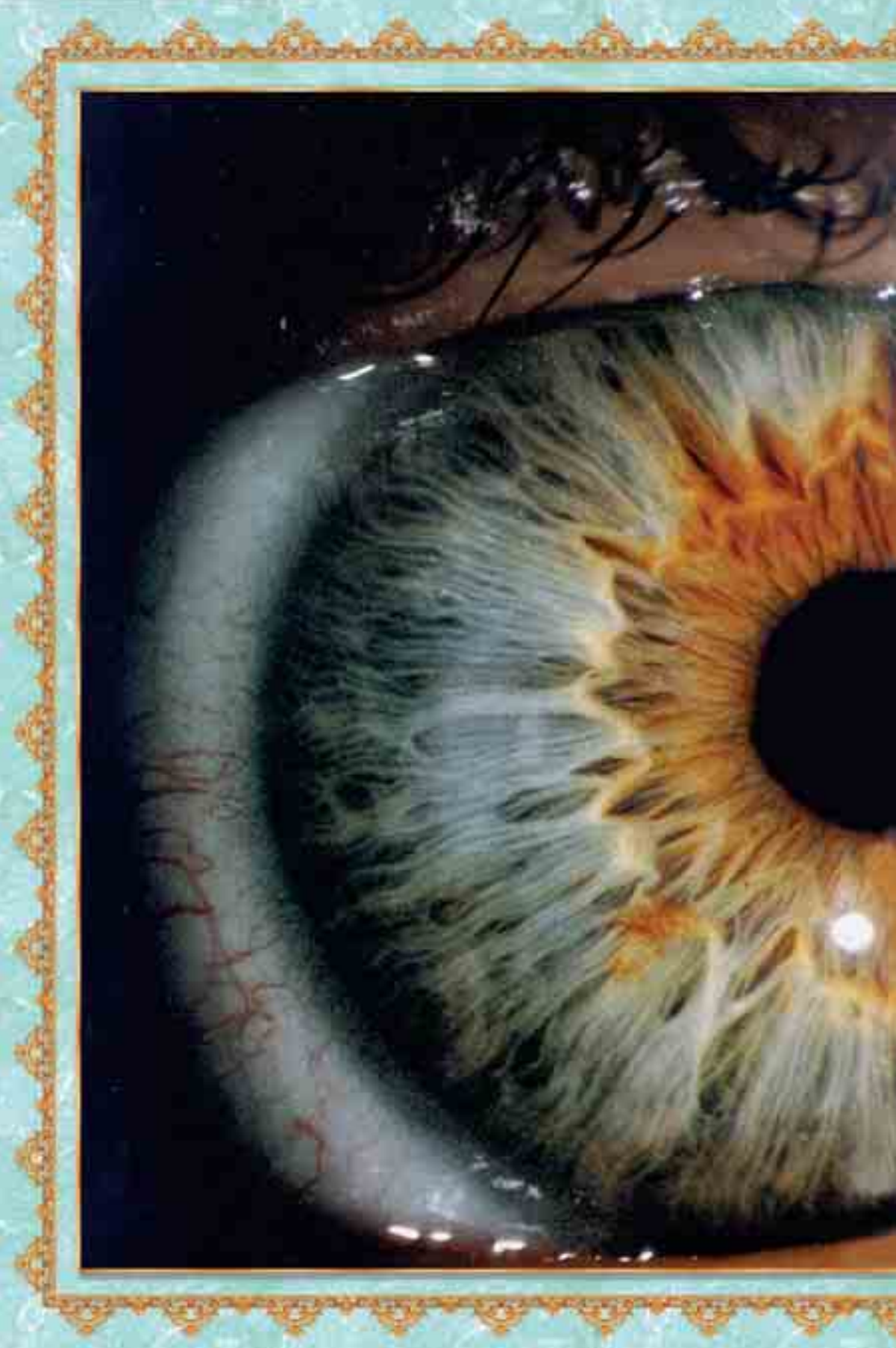
and narrowest towards the center (Figure 1.21). This field prevents the prominence of the nose from interfering with our vision.

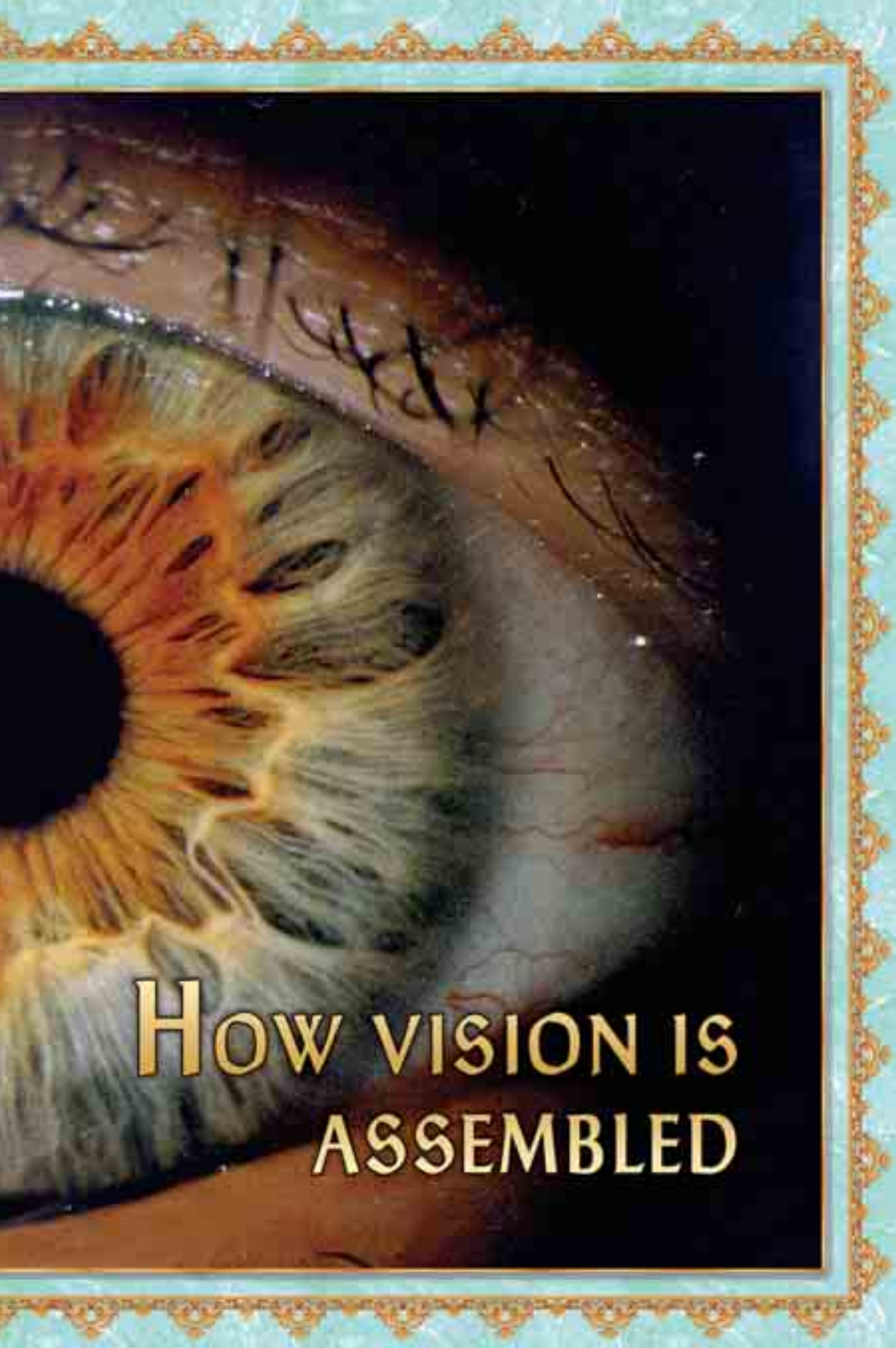
What if the visual field did not narrow towards the center? If this were the case, the nose would become an immovable obstruction to our vision. We would be forced to look at our noses all day, constantly. But thanks to this distinction, given to us by God, the nose causes us little discomfort on a day-to-day basis.¹³

The Identity of the Eye

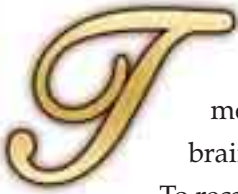
Fingerprints are a popular means of identifying people. And just as with fingerprints, the pattern of every person's iris is different, thanks to the varying arrangements of connective tissues, tissue fibers, muscle lines, blood vessels, rings, color, and stains within the iris.

Every one of the billions of humans on the planet possesses a different eye pattern. No pair of eyes are the same, not even on the same individual.





How vision is ASSEMBLED



he eye might be a window to the outside world, but in our sense of sight it plays only the role of an instrument. The spot where vision is established is deep inside the brain.

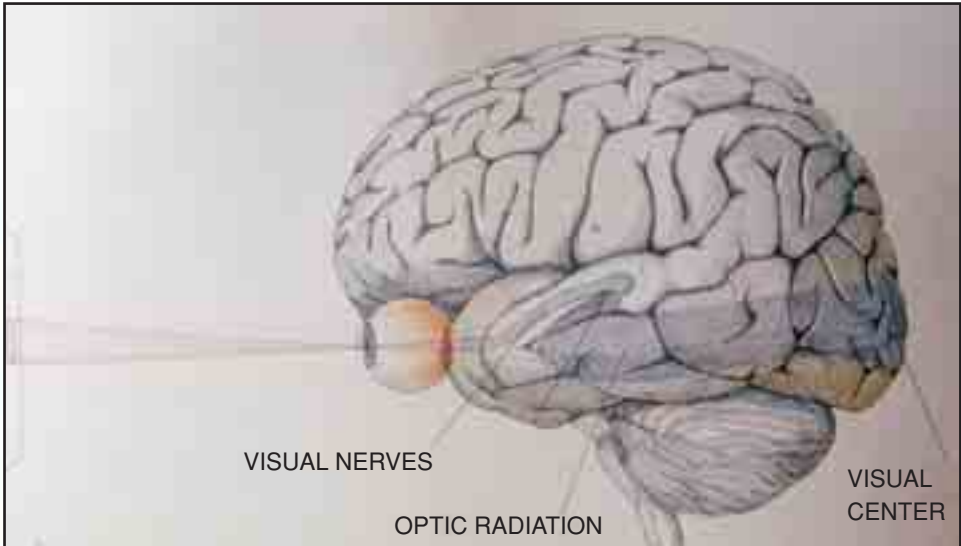
To recap the steps of seeing: Beams of light enter the eye and pass through the cornea, the pupil and lens. The cornea's convex structure and the lens break up the light beams and, after turning the picture or image of the scene upside down, direct it to the retina. Light-sensitive receptor cells—the cones and rods—then convert the light into electrical signals, to be sent to the brain. The image that comes from the retina is an upside-down picture of the world. But the brain reverses this accordingly, letting these electrical impulses provide it with information about the object—its type, size, color, and distance. This entire process takes place in less than a tenth of a second.¹⁴

During the assembly of a visual image, a staggering number of processes take place in less than a second. No computer in the world has yet been able to match this speed. But equally as staggering is the fact that the brain's optic nerves invariably restore reversed images from the retina back to their original state.¹⁵

The Role of the Brain in Seeing

After the retina converts beams of light into electrical signals, they are sent to the brain via the optic nerves in a thousandth of a second. Signals received from each eye contain all the visual information about the object one perceives. The brain combines the two images received from each eye to create the single three-dimensional image you see. It also chooses out the shapes and colors that are of interest in that image and determines the distance involved. In other words, it is the brain—not the eye—that sees.¹⁶

Electrical signals from the eyes first reach the primary visual cortex at the back of the brain. This area, a few centimeters wide and only 2.5 millimeters thick, is made up of six layers containing a total of hundred million neurons (nerve cells). The visual impulse reaches the fourth layer first, where it is momentarily analyzed before being distributed to other layers. Each neuron in these layers receives signals from—and sends new signals



(Figure 2.1). Vision takes place not in the eye, but in the brain. The eye is merely an instrument by which electrical signals are sent, similar to how a camera transmits images to a television screen. But these images are meaningful only if someone is there to watch them. If there is no viewer to watch, there is little point in compiling any images on the television screen. The important question here is not the sending of electrical signals or the assembling of images in the brain; but of who or what perceives the final image. It cannot be the eye, being merely an instrument. Neither can it be the brain, which is merely a collection of tissue made up of fats and proteins, and acts like a screen where the electrical impulses are decoded. Both eye and brain are made of cells, which are themselves made of unconscious molecules. This begs the question: Who "looks" and "sees" the image in the brain?

out to—over a thousand other neurons. This exchange of information between neurons with the connections and the ability necessary to process the information is definitely something that couldn't have come about through a series of coincidences. These neurons were created with the ability to exchange information.

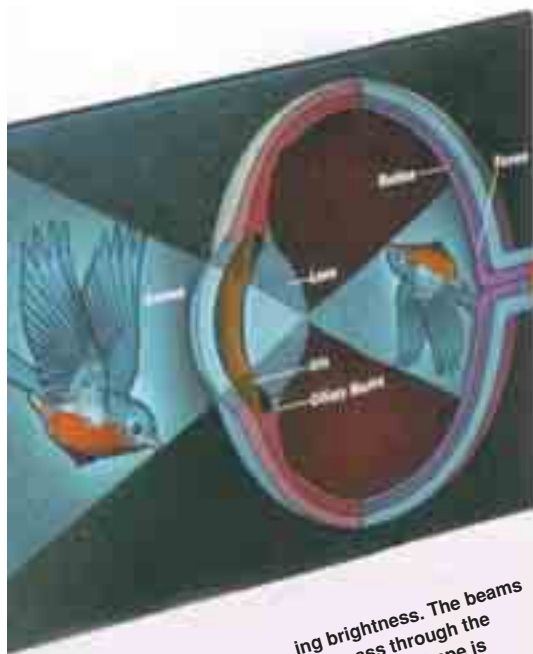
The brain, working like an advanced computer, is actually a collection of millions of living cells. In one square millimeter on the surface of human brain, there are over 100,000 nerve cells—adding up to a total of 10 billion (10,000,000,000) cells in the entire brain. A mere fraction of these cells work together to analyze signals from the eye.

(Figure 2.2). In order for you to see a bird in flight, first the lens has to focus its image. That image falls, inverted upon the retina at the back of the eye. Here, millions of photoreceptors split the image, and analyze the bird's color, shape and movement as photons, which are rapidly transformed into tiny electrical signals. This total encoding is far faster than a computer's processing speed. These signals are then transmitted to the brain, where they are decoded and the picture interpreted. Scientists continue to be fascinated by this amazing system and have not yet fully figured out the true nature of perception.

2

RETINA

Next the photons activate the retina's photoreceptors—the cone and rod cells. Cones determine the image's color; the rods let us see in the dark. Great ganglion cells then process the information about the bird's movement and outer shape, while the smaller ganglions encode information about the bird's smaller details and colors. The signals emerging from these cells are sent to the optic nerves.

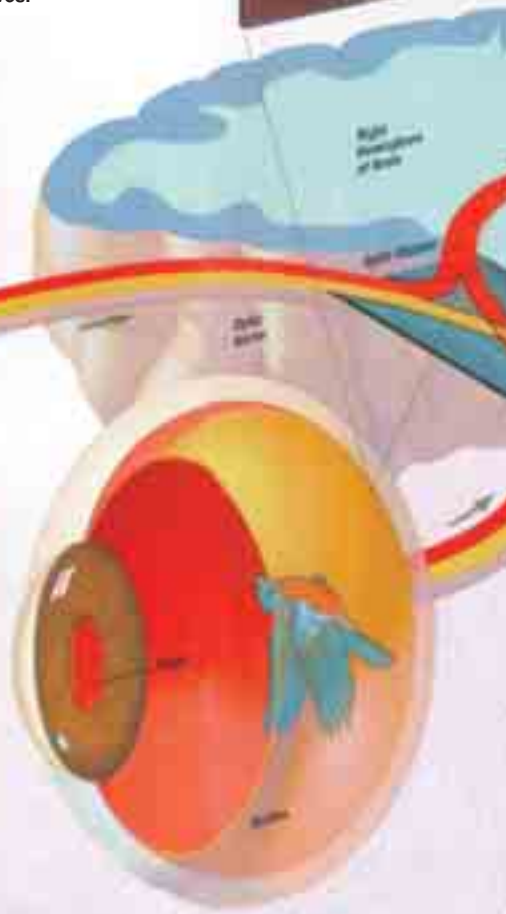


1

THE EYE - CAMERA

Light waves reflecting off the bird pass through the cornea and the pupil, which the iris muscles have already adjusted in accord with the surround-

ing brightness. The beams then pass through the lens, whose shape is changed by relevant muscles to focus the image clearly on the retina.



4

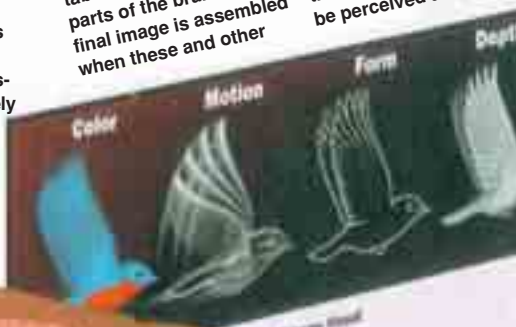
ACTION PANEL

The lower geniculate cells take the nerve signals and transmit them on. The upper four rows of cells transmit information about color and fine detail. Different inputs from the same image are transferred separately in parallel.

5

BRINGING TOGETHER

An image's color, motion, depth and form are all established in different parts of the brain. The final image is assembled when these and other mysterious parts of the brain work together. But scientists have yet to understand how an image's four aspects (color, motion, depth and form) can be perceived as one.



3

LEFT AND RIGHT

Yellow optic nerves carry signals from the left half of the retina. Conversely, the red optic nerves carry signals from the right. The two types of nerves, separating from each other at the optic chiasma, connect to the geniculate body of thalamus. From here, the signals follow different paths on their way to the visual center. This way, we can still see a complete picture, even we close one eye.

6

WHAT? WHERE?

In the brain's temporal cortex, images are recognized, compared and understood. People with damage to this portion of their brain lose their ability to recognize faces, even including their own.



MIRACLE IN THE EYE

In the following pages, we'll examine in greater detail the technicalities of the eye—such as how different cells distribute incoming signals to different locations, and how many cells there are in the visual center—that outline the basic functioning of the brain.

The process of receiving and converting beams of light into electrical signals, their journey to a specific part of the brain for processing, and the fact that both eyes work together in synchronization comprise just the physical and technical aspect of seeing. None of these specifics really tells us how the end result comes to be; that is how the abstract term we call "vision" is perceived, and by "whom" this vision is interpreted to become meaningful. Only a conscious, unbiased individual truly realizes that technicalities aside, the process of seeing reaches beyond the boundaries of physical laws and enters a metaphysical dimension.

We'll soon look into this topic in greater detail, but for now let us continue with the miracles of creation and the eye's many functions. While considering technical details, we must not forget that we expended no effort to attain this miraculous pair of organs. This flawless system came to be thanks to the splitting of one single cell in the mother's womb, and that the process of vision continues even as you read these very words. Immediately after analyzing the details, every human realizes how impossible it is for such a system to have evolved coincidentally, without a superior mind and power. Those who remain in utter denial, despite the clear evidence before them, are described in a verse as follows:

When Our signs came to them in all their clarity, they said, "This is downright magic," and they repudiated them wrongly and haughtily, in spite of their own certainty about them. See the final fate of the corrupters. (Qur'an, 27: 13-14)

Missing Signals and Cells with Responsibility

Electrical signals converted by the retina are transmitted by a bundle of about one million nerve cells from the retina to the visual cortex, which contains over 100 million nerve cells. All of the nerves in this group originate in the retina, but do not connect directly with the light-sensitive area. Some other cells

HARUN YAHYA

record the visual information, then transmit it to the optic nerve.

At any one time, over ten million electrical signals are being sent down one million nerves from the eye to the brain. Owing to this magnitude of information, from time to time the links are known to snap, sending any signals they were carrying to a wrong location in the brain. The eye's flawless design is equipped for such an eventuality, however, so that our vision is never disrupted.

Even more amazing is that a vast network of cells allows the signal to be carried down another path, from the wrong part of the brain to the visual center. Considering this, is it possible to call such parts of the brain "wrong"?

In reality, the answer is no. An apparent mistake in fact reveals a miraculous phenomenon. While one would expect misled visual signals to simply be lost and unrecoverable, the brain cells rescue and restore them to their original destination. When such a signal reaches them, the cells act as if they knew it was a signal coming from the eye that needs to go to the visual center. They have no obligation to do so, but allow the signal to go to the brain's visual center by building the requisite connections and organization. In this way, there are no defects in an image which otherwise, would be interrupted and fragmentary.

Who gave the brain cells this unique ability? Is it truly possible that billions of tiny cells, each with the same instructions, could have evolved into their current state? Moreover, besides knowing their own function, these cells, must be aware of other actions occurring throughout the body and have to be able to come into play in case of any failure, even though it is not their responsibility. Could this really have come to pass through a series of coincidences?

These details up until now constitute the first phase of the seeing process; one which still contains many unknowns. When we consider the later phases of seeing, it becomes apparent how much of a mystery the entire process actually is.

For over twenty years, David H. Hubel and Torsten N. Wiesel have been researching the eye. At the end of his book *Eye, Brain and Vision*, the Harvard neuroscientist Hubel stated:

MIRACLE IN THE EYE

This surprising tendency for attributes such as form, color, and movement to be handled by separate structures in the brain immediately raises the question of how all the information is finally assembled, say for perceiving a bouncing red ball. It obviously must be assembled somewhere, if only at the motor nerves that subserve the action of catching. Where it's assembled, and how, we have no idea.¹⁷

Put another way, mankind has been exploring the brain for centuries. Yet what we know still continues to be limited.

Man's present knowledge and technology has not allowed us to fully understand the structure of the brain. So how did such a complicated organ ever develop? Can billions of cells and trillions of proteins have come together over time to develop trillions of connections, each of which have particular significance, to eventually create the brain we know today?

The dilemma that evolution is still unable to escape is that not even one of the billions of cells making up the brain or even one of the billions of proteins making up the cells can possibly have formed by chance.

A Life in a Few Cubic Centimeters

From birth, everything a human sees is assembled in the dark, damp atmosphere of the brain known as the visual center, a few cubic centimeters in size. To put this in perspective, everything we own, our childhood, the schools we went to, our home, work, family, neighborhood, country, the world, the universe, every single detail we have ever seen—briefly our entire life—all came to be in a small piece of flesh.

If it did not exist, we wouldn't be able to see anything. None of the eye's other miraculous features would be enough to allow us to see and retain memories. The eye would be nothing more than a useless round mass filled with fluid. Clearly, the eye alone could not function without the brain and the visual center, both of which play an indispensable role in seeing.

The Role of the Brain in Seeing

By looking at the brain's visual functions, we can understand how closely it works in synchronization with the eye. For instance, the brain

HARUN YAHYA

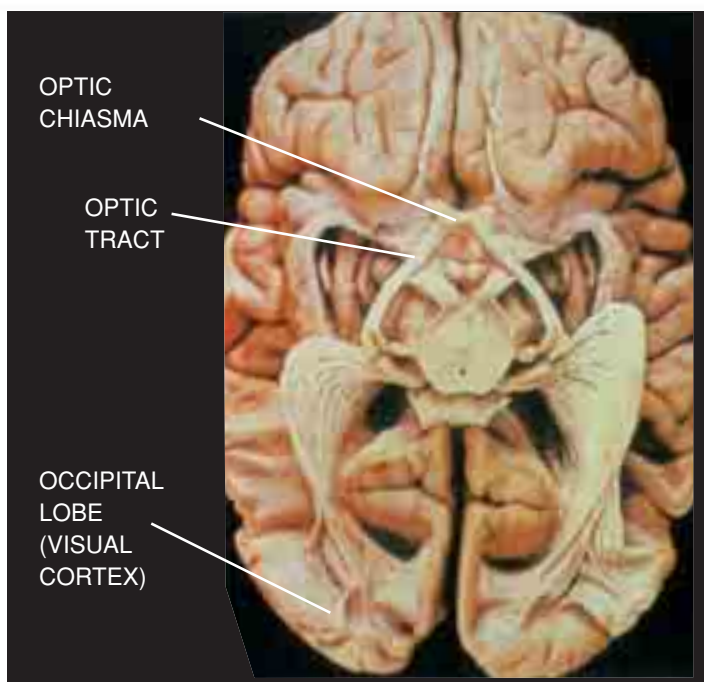
- combines the images received from the retinas of both eyes,
- compares the two images to calculate depth,
- recognizes lines and boundaries,
- analyzes color at the visual center,
- determines luminosity,
- controls the pupil's diameter,
- controls eye movements with the muscles,
- reassembles the pieces of the broken-down image sent by the retina and completes them with visual memory,
- reverses the upside-down image and
- fills in whatever small portion of the picture that falls on the retina's blind spot (a small round area of the retina, that has no light-sensitive cells) so we do not perceive a blank spot in our visual field.

A Map of the Brain

By closely analyzing cells, Korbinian Brodmann, a German neurologist, has created a map of the human cerebral cortex—which proves once again that evolution is a false claim. His map has revealed that the mechanism of vision is far too complicated to have been created via a series of coincidences.

Brodmann's map forms the basis of later studies on brain functions. For example, the brain's first visual area is Brodmann's area 17. This part of the cerebral cortex receives the most recent visual information through the optic nerve. Brodmann's areas 18 and 19, which lie just in front of area 17, store the previous visual knowledge. Information received by the first visual area is then transferred to areas 18 and 19 for further processing. Visual information from the upper right region of the visual field is processed in the brain's left hemisphere. Similarly, information from the left is processed in the right hemisphere. Because the signals are inverted in this way, each side of the cerebral cortex processes data from the opposite visual field.

Despite solid evidence of the brain's miraculous nature, evolutionists remain stubbornly loyal to their claims. For example, evolutionists coldly interpret each discovery of such evident miracles of creation as yet another success story in science's ongoing quest to unlock how the brain developed into such a



(Figure 2.3). An image of the links between certain parts of the brain's visual center.

structure. The Qur'an describes such backward-mindedness of disbelievers:

They have sworn by God with their most earnest oaths that if a sign comes to them they will believe in it. Say: "The signs are in God's control alone." What will make you realize that even if a sign did come, they would still not believe?

We will overturn their hearts and sight, just as when they did not believe in it at first, and We will abandon them to wander blindly in their excessive insolence. (Qur'an, 6: 109-110)

Those who reject the apparent truth, telling lies, are treated in other verses as well:

Shall I tell you upon whom the Satans descend? They descend on every evil liar. They give them a hearing and most of them are liars. (Qur'an, 26: 221-223)

The system existing within the brain has been explored and illustrated in detail by leading scientists. Every step of this discovery process offered



(Figure 2.4). A detailed information of the brain's structure indicates what a miracle of creation it is. However, classifying different regions of the brain and calling them by sophisticated Latin names cannot solve the secret of the brain's existence. Evidently, it can't possibly have been created through a series of coincidences—though ironically, in making their claims, evolutionists use the brain given to them by God. They made no effort to achieve their brains—they were there since before their birth.

proof of the brain's magnificent, miraculous nature. It cannot possibly have evolved on its own, by means of a series of coincidences—which is also evidence that God has no partner or counterpart in creation.

The Blind Spot and the Brain's Supplemental Function

You look at the words on this page and assume you see them completely. But this is certainly not the case—there is one small spot on this page which you cannot perceive. In a sense, you are blind to it. This is a scientifically proven fact, and does not just apply to this page. In every image you have looked throughout your life, there is always one little spot you have not seen in the representations of the external world.

MIRACLE IN THE EYE

You cannot see this spot because where the optic nerve enters the eyeball, there exists a small round area of the retina that has no cone or rod cells. This optic disk, which is not sensitive to light, forms the blind spot of the eye.

With such a blind spot, how can we still see seamlessly? This is thanks to the brain's supplementary ability. The missing part of your vision caused by the blind spot is "painted" with whatever color most closely matches the background, and thus camouflaged.¹⁸

This is why you are unaware that you have a blind spot in the first place!

In order to understand the concept better, refer to the test in Figure 2.5, then follow these steps: Shut your right eye and hold this book 50 centimeters (19.7 inches) away from your nose. Now, focusing only upon the red cross with your left eye, slowly draw the book toward your nose. As the book comes closer, you will see the red circle disappear, to be replaced by the background pattern of diagonal lines. At this moment, you are blind to that spot. But you perceive no gap in your vision, because your brain assumes that the spot would contain the linear background. How the brain forms this assumption is a mystery that neither psychologists nor neurologists have been able to solve. Some have put forward a theory that each eye compensates for the blind spot of the other eye, since with respect to the optic axis, the blind patch on one eye lies at a different location than the other's. This is only part of the theory, however. Defenders of this theory are far from an adequate explanation as to how we still manage to see a continuous picture with only one eye.¹⁹

We do know that the brain's "cover-up" for the blind spot is an illusion we are made to believe and accept. This means that any vision that you think is real may not be wholly accurate. It's a little like a dream: While it takes place, you believe you are actively taking part in the events, while they are nothing but an illusion created in your mind.

Now try another experiment. Look at the left-hand cross (in Figure 2.6) with both eyes, for a full minute. Now, move your eyes to the right-hand cross. In a few moments, color will appear around it, even if it isn't really there. Your brain is fooling you—you are under the impression that something is there, when it's actually not.

An Image Breaking Down

Every detail of an image falling on the retina travels around the skull as electrical signals. Their destination, where they will be interpreted, is the visual cortex in the occipital lobe, located at the back of the brain.

Information from the retina reaches the visual center as jumbled signals, which nerve cells decode and convert into the three-dimensional images we see. In a sense, the brain works like a very advanced computer, solving billions of electrical signals instantly.

The brain is an organ of two hemispheres. As already mentioned, the occipital lobe in each hemisphere takes signals only from the opposite eye. In other words, information about the right side of the visual field is sent to the left occipital lobe, and vice versa.

In his research papers, neuroscientist Colin Blakemore poses a question we have yet to answer effectively. What, he asks, does the brain do after collecting and dispersing visual information? He goes on to ask why the dispersing occurs in the first place, if the brain then reassembles everything to form the picture.²⁰

The phenomenally complicated process works, thanks to the combined effort of eye components, eye-to-brain nerve cells and electrical signals. But despite this, the process is regulated and seemingly immune to confusion



(Figure 2.5).

MIRACLE IN THE EYE

and chaos.²¹ This is because the body's perfect design allows every task, from the basic to the complicated, to be carried out flawlessly. Thanks to God's infinite power, we are able to live our lives—except in times of illness—with no physical difficulties.

Knowing What You See

The human mind stores some of the images it sees. These stores are regularly reopened, to be used again. When a child sees a pencil for the first time, for example, a file opens in his memory for that pencil. Later, when he comes across another pencil, the file opens again and the image within is compared with the image of the present pencil. In this way, the child determines a pencil is what he's looking at.

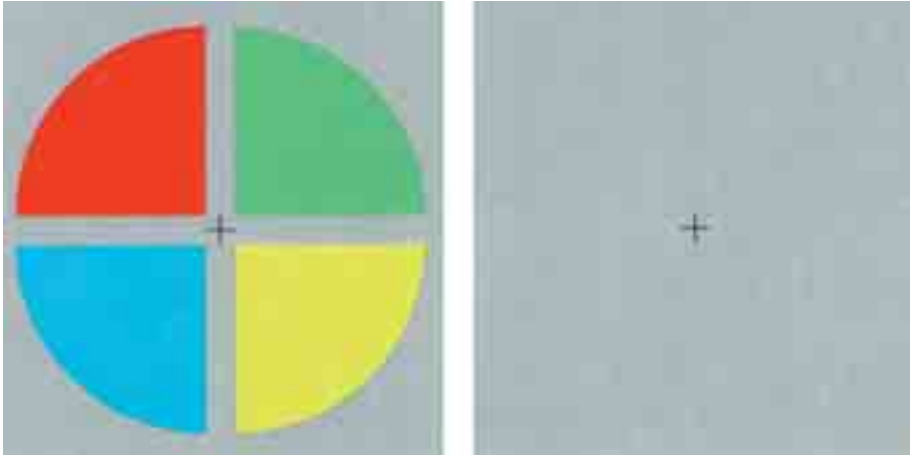
This pattern is by no means unique to infants and children. All human minds—yours included—follow it automatically, all the time. When you come across an image, it's immediately compared with any similar images from your archives, and thus the image is recognized or not. This process may sound needlessly simple, but if it didn't take place, you couldn't recognize your own child.

Associative memory also enables movement recognition. If you happen to be looking at an object in motion, your memory compares its movement with any action that may follow. As on a roll of film, the motions are recorded, one after the other, in a sequence of images; and the present location of the object is compared with its previous location. All of these factors contribute to how we perceive movement.

To recap the main details covered up until now, the mind records certain images and stores them for regular re-use. But where and how are these images recorded? Why and by whom are they recovered?

A computer records all data on a hard or floppy disk, but the amount of data it can store is limited to those disks' capacity. A brain contains no such disk, yet this piece of flesh can easily store millions of images.

Every computer disk on the market today has been designed and manufactured by humans, and in great numbers. But if anyone came forward to



(Figure 2.6).

claim that years ago, certain amounts of iron, plastic and silicon coincidentally came together to form the first computer chip, the ancestor of today's computers, no one would take him seriously. Yet despite this, it appears to be legitimate for people to claim that the brain and the eye, both far superior to the computer or the camera, did indeed evolve through a series of coincidences. The story of evolution is presented as scientific fact when in reality it is a deceptive forgery.

There is only one reason for this. It's perfectly acceptable to believe that the computer was designed by the human mind. But when it comes to the superior mind behind the brain and the eye, things change completely. If the concept of creation is accepted, then the Creator, and His laws must be accepted also. In other words, religion must be accepted unconditionally. This is why those who seek to maintain their non-religious establishments have always supported the theory of evolution. Influenced by their propaganda, those who know little about the subject believe that evolution is already an accepted fact. In reality, it's been scientifically proven to be merely an ideological myth. Scientific evidence proves that evolution is both incoherent and invalid.

MIRACLE IN THE EYE

The Visual Memory

The process of recognizing objects doesn't occur thanks to the eye and the visual center only, because the memory plays an important role in this process as well.²² In order for the brain to achieve recognition, all the "visual association areas" must work together, letting us to interpret perceptions at an advanced level, with the help of memory.

Despite the field of neurophysiology's many significant advances over the past half-century, we've yet to explain how memory works. What we do know is overshadowed by far by what we have yet to learn. But we have learned what symptoms arise when the visual association area of the brain is damaged. A damage or a tumor in this area does not lead to blindness. This area is activated by the impulses of the primary visual cortex, but the sufferer becomes significantly less able (even totally unable) to recognize familiar objects on sight—a condition termed visual agnosia.²³

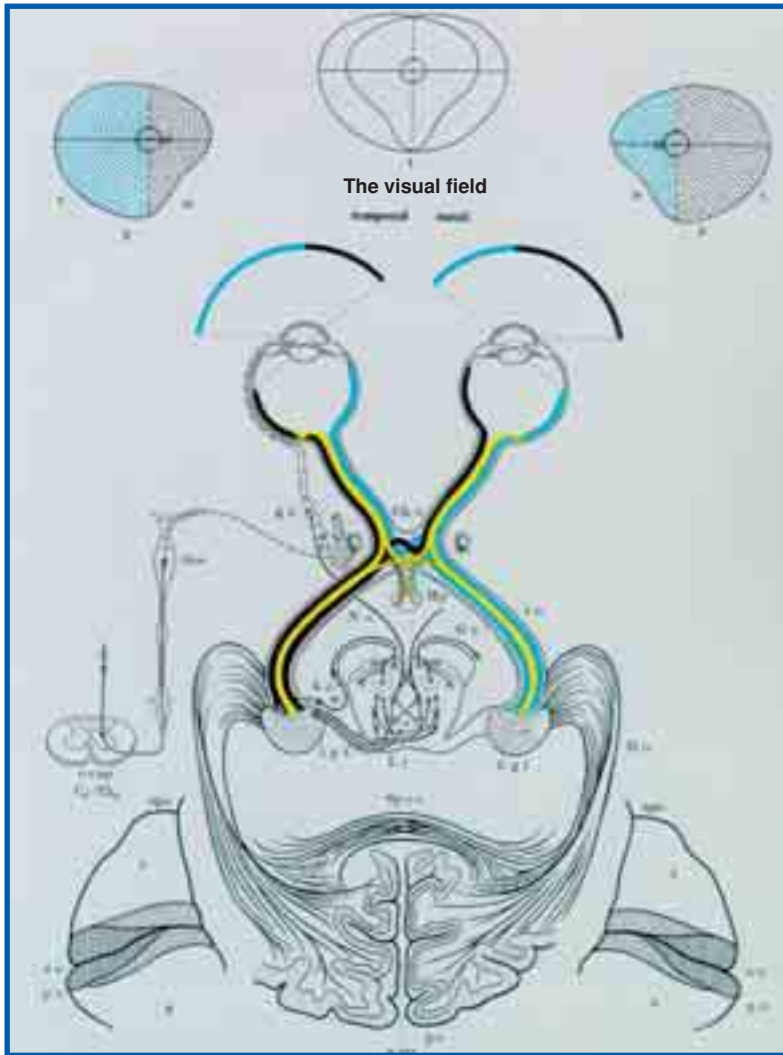
For a healthy individual, it's hard to imagine what such a condition is like. The inability to recognize "familiar" objects puts sufferers in a helpless position. When you consider that these symptoms can arise after even the smallest impact to the brain, it is clearer that the organ we carry in our heads is extremely sensitive.

Two Eyes, One Sight—Binocular Vision

We humans find ourselves born with two eyes, but never question why this is so. Is it a coincidence that we have two, or is there a special reason for this?

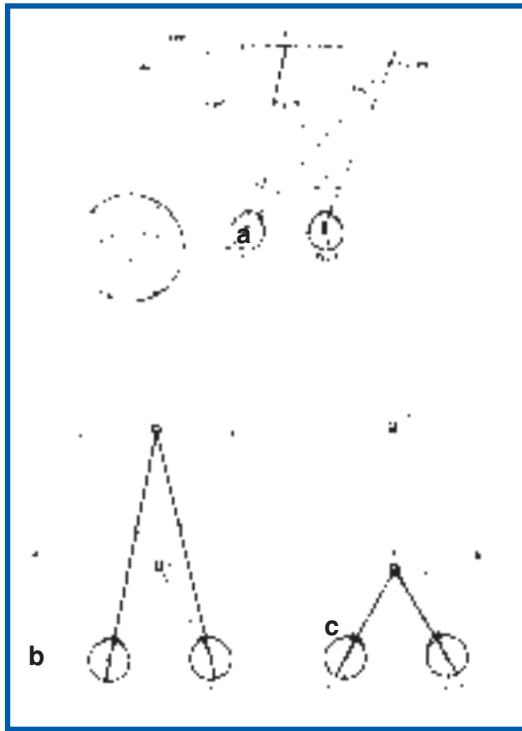
Each of the two eyes has a different perspective to the outside world, as they are spaced apart from the other (Figure 2.7). The two images seen by the eyes are subtly different, but complement each other. By picking out the differences between them, the brain is able to determine depth and distance. Even though a single eye can see only two-dimensionally, the brain creates the "final" three-dimensional image.

Our interpretation of the minute differences between those two images enables the image to be perceived as three-dimensional. If the two images formed separately in the eyes were combined not fully in the brain, then we would see double—and in two dimensions only.



(Figure 2.7). The image that every eye perceives is split down the middle (indicated above in black and green on the retina). Signals from the eyes come down different paths, but meet and merge at the visual center.

As seen in the diagram above, the process of decoding and reassembling these images requires geometric precision and countless calculations. Even more amazingly, the brain accurately compiles the broken-down picture with no discontinuity or slip, just like the original. It is not possible for such a flawless structure, of whose workings we're completely unaware, to have developed on its own, coincidentally. The entire system has to be present as a whole; it cannot develop bit by bit. It came to be from nothing, in the mother's womb. Put another way, the principle of gradual development, one which forms the basis of the evolution theory, is again rendered erroneous.



(Figure 2.8). In the diagrams above,
a) When the eyes focus in on point P, it becomes a single image. As a result, point Po is outside the focus and becomes doubled.
b) When we focus on point F, we experience double vision at point P, which is between our eyes and the object we look at.
c) When we focus on point F, we experience double vision at the more distant point P.
As you can see, there is flawless geometrical harmony between the two eyes. Evolution cannot claim to be behind either the eyes' structure or the mathematical communication between the two.

By means of a simple experiment, you can see the difference between the two images. Look at the branches of a tree, first with both your eyes open. After a few moments, shut one eye and keep staring at the branches. A minute later, uncover your eye, and you'll notice that the branches appear "deeper" than before.

HARUN YAHYA

Another experiment is trying to thread a needle with one eye closed. You will find this impossible, because with monocular vision, you have no sense of depth.

Sometimes, certain objects appear "doubled" to our vision. This happens when we focus in on one specific point—near or far—and consequently pay less attention to its surroundings. Hold a pencil in the air close to your face. Then with your other hand, take another pencil and hold it behind the first, at arm's length. When you focus on the more distant pencil, the closer one will appear doubled. If you focus on the closer one, the distant pencil will similarly appear doubled. Without this ability to focus, you would always be seeing double, no matter what you focused on.

Merging two separate images and creating a three-dimensional result is a process that requires perfect calculations. If the eyes had developed coincidentally, what are the odds that such fine synchronization could be achieved? What coincidences would achieve a system that can analyze and combine millions of bits of information every second? If the eyes did not work in harmony, the brain would receive confused signals and create a jumbled image for us to perceive. But since this is not the case, it's not possible to reason this system was developed through a series of coincidences. The flawlessness of God's creations is described in a verse as follows:

He Who created the seven heavens in layers. You will not find any flaw in the creation of the All-Merciful. Look again—do you see any gaps? (Qur'an, 67: 3)

How Distance Is Determined

In order to determine how far away something is, the brain considers how large it appears in the image on the retina. As long as that object's actual size is known, the brain makes a rough calculation—based on the perceived size of the image—of how far away that object really is.

One extraordinary aspect of this process is that it takes place completely below the conscious level. You don't notice it, but you are actively determining whether every object in view is nearby or far away. If this process never took place, you would be unable to drive or even walk. Without perspective,

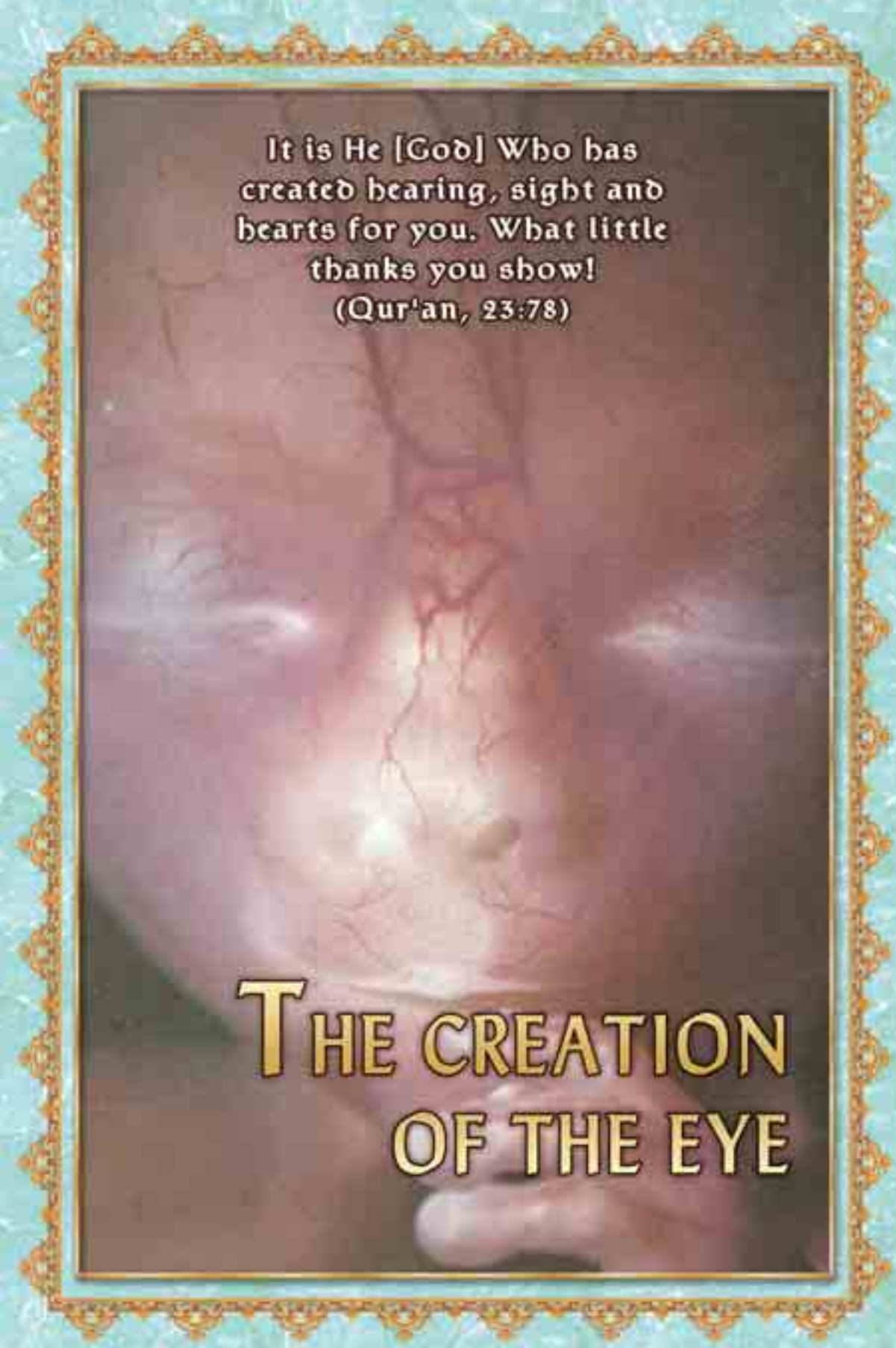
MIRACLE IN THE EYE

the outside world would become a jumble of shapes and colors.

God has given mankind countless blessings. Some we are aware of, but remain unaware of so many others. God treats His followers with mercy and compassion.

Do you not see that God has made everything on the Earth subservient to you and the ships running upon the sea by His command? He holds back the heaven, preventing it from falling to the Earth—except by His permission. God is All-Compassionate to mankind, Most Merciful. (Qur'an, 22: 65)





It is He [God] Who has
created hearing, sight and
hearts for you. What little
thanks you show!
(Qur'an, 23:78)

THE CREATION OF THE EYE



o far, we have covered the eye's structure, the unique and flawless structure of each component working in harmony, and the role of brain in seeing. We've emphasized how the eye, both in its segments and as a whole, is nothing short of a miracle. From the point on, we'll analyze the miracle of the eye's existence.

During our everyday lives, we come across countless eyes—those of parents, siblings, friends, relatives; and of course our own in the mirror. How did each of these equal miracles form?

A few years ago, the very eyes with which you read this page did not exist. The being you refer to as "me" was just a single cell. First you split into two cells, then into four. Millions of further splits followed, until you became a small sphere the size of a finger. Next, upon this ball two black spots appeared. As days passed, these spots became indentations and two unique organs began to develop on their own. From undifferentiated cells, you developed two eyes, each complete with a pupil, lens, cornea, retina, sclera, iris, eyelids, nutritious fluids and billions of blood capillaries. In a matter of weeks, the eyes with which you read these words were created completely. After birth, you opened them to the world for the first time.

To gain a better understanding of the eye's development, look at the development of the human body. As mentioned before, all mammals, humans included, develop from a single cell in the mother's womb. The secret of how this cell develops lies within that very cell, inside a molecule called DNA.

The Codes of Life

DNA contains millions of units of biological code written in a language which only cells can understand. They keep a record of every aspect of a person, from the structure of organs to physical details. One single cell develops into the human body according to the information within the cells' DNA.

Under normal conditions, the process of cell division should result in two identical cells. Therefore, one might expect the million-cell sphere that results to be composed of identical cells. But this is not so. During cell divi-

sion, differences begin to develop. Some cells become bone; others become nerve cells or eye cells. How can two newly-divided cells, each containing the identical DNA, be so different from each other?

Science has yet to explain how the cells decide to make such distinctions. We do know that if a cluster of cells "want" to be eye cells, to do so, they merely extract the necessary information from millions of lines of DNA. But this raises further questions: How do the cells know they want to be eye cells? How do they find and extract only the relevant "eye code" from millions of lines of DNA?

Besides choosing what kind of cell they want to be, cells also structurally organize themselves to bring about the different complicated organs we possess. How is this organization provided?

Conscious Cells

Let us consider the eye, made up of many different layers and components. Since different cells form the iris, cornea, pupil, lens and retina, each cell must surely know what it is supposed to do. How did these cells agree among themselves what feature they were going to become? How is it that cells from different layers and components never mix up? How do cells know how many times to divide, and when to stop?

Cells possess an interesting sense of timing. No individual component develops faster or slower than any other. Components that serve a common function, and the blood vessels that feed them, all develop simultaneously.

In other words, every single organ and its components developed from a single cell. We, their completed result, had no say over how this development took place, but merely found ourselves born out of what was once "nothing." When you look in the mirror, it's worth remembering that you had nothing to do with creating yourself. You simply found your eyes, ears, all your organs—and your soul—created and ready for use.

Can Mutations Describe the Creation of the Eye?

Thanks to effective propaganda enforced by some circles around the world, most people believe the theory of evolution has been scientifically ac-

MIRACLE IN THE EYE



(Figure 3.1). The eyes begin to develop from the first month of pregnancy. Within five weeks, they have already become black rings (left). By the end of the second month, the transparent eyelids are flawless (middle). By the fifth month, the eyelids are completely shut, and covered with a protective oily substance (right). After these phases, the development of the eyelid is complete. One of the world's greatest miracles has just taken place, appearing from a single cell in the mother's womb. As it reads in the Qur'an:

Does not man see that We created him from a drop yet there he is, an open antagonist! He makes likenesses of Us and forgets his own creation, saying, "Who will give life to bones when they are decayed?" Say: "He Who made them in the first place will bring them back to life. He has total knowledge of each created thing." (Qur'an, 36: 77-79)

cepted as undeniable truth.

But reality is quite the opposite. Evolution is not a scientifically-proven truth, but simply a belief imposed on people through forgery and deception. This theory rejects the basic truth that the universe's perfect system was brought into existence by a Creator. It alleges that all species came to be on their own, through a chain of coincidental occurrences.

Darwin first put forward this theory, but the development of technology in the following decades that allowed us to prove that his ideals are scientifically unacceptable. A change in environmental conditions cannot give new characteristics to body cells. Even if the impossible did happen and severe changes in conditions did bring notable changes to a certain species, such changes couldn't be transferred to the next generation. In

short, the theory of evolution collapsed from the start, but it remained a key-stone for the rapidly developing anti-religious forces in the world.

To keep that order alive, rejection of creation was crucial, so the anti-religionists came up with a new con: Neo-Darwinism, built upon the concept of Darwin's complete, deliberate rejection of God. Creation was still rejected, but this time, a different course was pursued. According to Neo-Darwinism, tiny mutations are the only way for one species to change into another, because each organism's physical properties are stored in genes, where any lasting change to a species would have to take place. Thus, the mechanism that evolution most relies upon—natural selection—would be rendered useless unless reinforced by mutations. But the theory of evolution still continues to raise question marks.

The first of these comes from the general effect of mutations. Statistics indicate that beneficial mutations are very rare, numbering about one in every thousand. If an existing species were exposed to numerous mutations, the outcome would be quite discouraging for the theory of evolution: A vast number of species with various defects. There would also come a rapid rise in extinction rates. But clearly this is not the case. Almost tragically, evolutionists don't even have any fossils to support their claims of mutation—either beneficial or harmful.

Genetics: The Final Stage of Collapse

Another reason why it wasn't possible to revive the theory of evolution is that micro-mutations have been unable to produce a completely new organ or structure with a new genetic code. This is because mutations can only change existing genetic structures; they cannot add new ones. What's more, any random genetic change is practically always detrimental to the creature experiencing it. Mutations are like earthquakes: They cannot build new cities, they can only destroy existing ones.

So what is necessary to build a new organ or structure? Again, the secret lies in a cell's DNA. In order to construct a new organ, the information for that organ must be added to the DNA. For example, were a liver to appear in a body, all the 2,309 genes associated with it must be completely and

MIRACLE IN THE EYE

flawlessly added into the body's DNA—alongside the 1,794 eye genes, 11,581 lung genes and millions of genetic codes—all at once. Only in this way can later generations also possess these organs. In other words, it's impossible for any organ to develop in a body step-by-step.

Pushing aside the impossible for a moment, let's assume that micro-mutations do allow for genetic additions. Let's also assume that the process takes place in stages, over time, and that these new additions don't disappear in following generations. Even with these assumptions, we cannot adequately explain the presence of complex organs (eyes, wings) and systems (respiratory, digestive) in the body. As we have mentioned throughout this book, all relevant parts need to exist together, at the same time, in order for complex systems to function. Therefore, parts already present in the system would be useless and over time, would disappear because—according to evolutionists—they have no function.

The Eyes as a Dead-End for Mutation

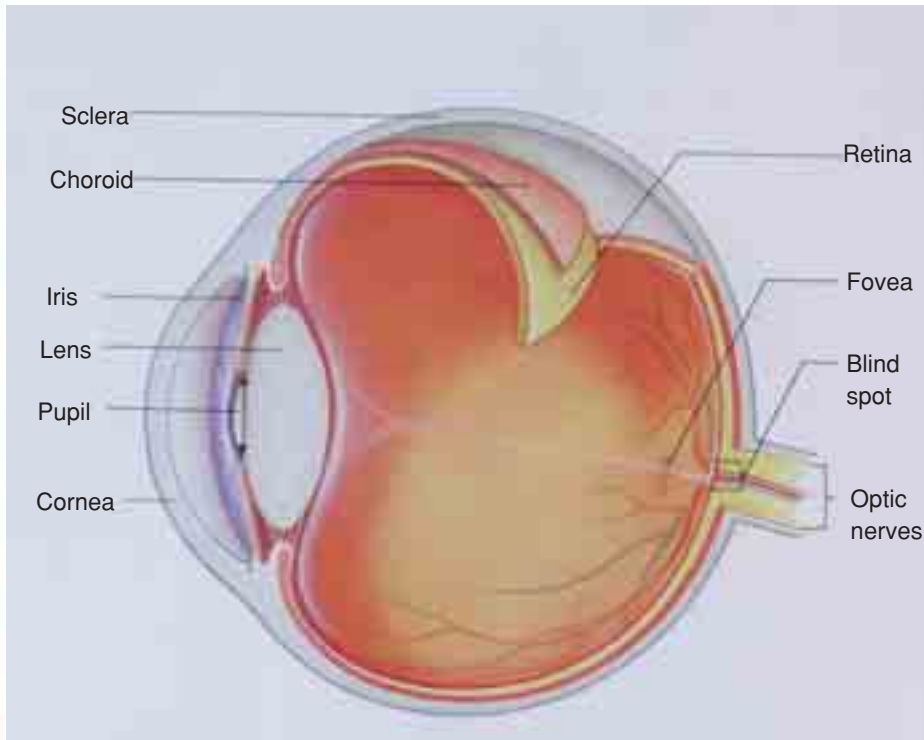
The eye is made up of many different layers and components, but works as a whole, such that the absence of any layer or component renders it blind. The cornea, iris, lens, retina, pupil muscles, pigments, tear glands, disinfectants contained in tears, the cone and rod cells, the nerves taking signals from these cells to the brain and the advanced visual center at the back of the brain—all are integral aspects of the visual system without which we cannot see (Figures 3.2-3.4).

About this topic, an article in the journal *Bilim ve Teknik* (Science and Technology) wrote the following:

The common trait of the eyes and the wings is that they can only function if they are fully developed. In other words, a halfway-developed eye cannot see; a bird with half-formed wings cannot fly.²⁴

This is true. Analyzing the eye, it is clear that without tear glands to regularly keep its surface clean, without a pupil to adjust the amount of light hitting the protective cornea, or without the lens to focus light on the retina's 130 million cone and rod cells, the eye would not be able to function at all.

Also worth noting is that excavated fossils show us that the eye has re-

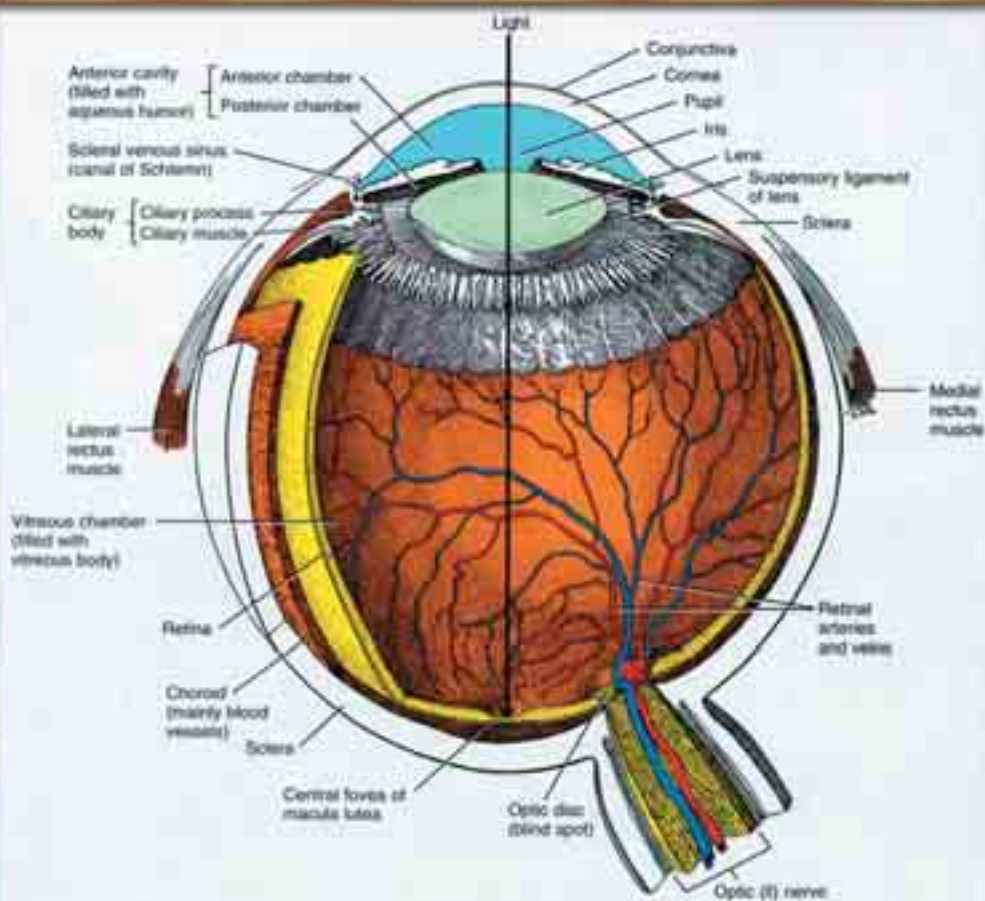


(Figure 3.2). The eye can function only if the cornea, iris, pupil, lens, choroid, sclera, retina, muscles, fovea and optic nerves are present at the same time, in their correct positions. This is why it's impossible for the eye to have developed gradually, over a period of time.

mained unchanged. Investigations on the eye structure of certain creatures have revealed that for millions of years, there has been no change to the seeing organs of even cephalopods. For example, a 155-million-year-old octopus fossil excavated in Ardèche in Southern France in 1983 is identical to the octopuses of today. This is solid evidence that the species has remained unchanged—its eyes included—for 155 million years. There has been no evolution involved.²⁵

The Forgery Confession

Even the evolutionists cannot use the theory of evolution to explain the eye's existence. Evolutionary scientists have discovered that the theory does



(Figure 3.3). The eye is made up of many different layers and components. Analyzing the eye, it is clear that without tear glands to regularly keep its surface clean, without a pupil to adjust the amount of light hitting the protective cornea, or without the lens to focus light on the retina's 130 million cone and rod cells, the eye would not be able to function at all.

not apply to the eye. Therefore, they've resorted to calling it "the miracle of evolution."

On this matter, Professor Ali Demirsoy, one of Turkey's leading evolutionist scientists, says the following:

The formation of a complete eye [including the mammal eye] was no more than a few hundred million years ago. It is a miracle of evolution that this complex organ formed in such a short period of time.²⁶

The word miracle is defined as "an event that appears to be contrary to the laws of nature and is regarded as an act of God."²⁷

As the above quote clearly displays, even evolutionists must admit that the eye is a miracle. But their theory cannot come up with an explanation as to how this miracle emerged. Evolutionists claim evolution to be a "force of nature," and a miracle is something beyond nature. But how can one expect from nature something "beyond nature"? Since there are hundreds of other mechanisms in the human body just as astounding as the eye, shouldn't it be accepted that the human body as a whole is a miracle?

The fact that eye works as a whole, and that it is too interconnected to have "evolved" over time has put evolutionary scientists into a difficult situation. Professor Demirsoy describes this situation, in the same essay, as follows:

It is rather hard to reply to a third objection... How could such a complicated organ possibly come about suddenly, even though it brought benefits with it? For example, how did the lens, retina, optic nerve, and all the other parts that play a role in seeing in vertebrates suddenly emerge? Natural selection cannot choose separately between the visual nerve and the retina. In the absence of a retina, the presence of a lens offers no advantage. The simultaneous development of all the structures for sight is inevitable. Since parts that develop separately are wholly useless, they will both be meaningless, and also perhaps disappear with time. At the same time, their simultaneous development requires the coming together of unimaginably small probabilities.²⁸

Regarding the origin of the octopus's eye, let us also look at Professor Demirsoy's words:

There are organs that developed separately from one another through

HARUN YAHYA

evolutionary development and have in fact no evolutionary ties. For example, the eyes of a mammal and an octopus have virtually identical structures and functions, but have emerged from different embryologic layers. They are therefore regarded as analogous organs.²⁹

As he points out, evolutionists claim that there are no evolutionary ties between a mammal's eyes and an octopus' eyes, that they developed completely independently of each other. Therefore according to Professor Demirsoy, the "miracle of the evolution of the eye" took place separately not only in mammals, but in octopuses, invertebrates and fish as well.

If we put aside the total impossibility of evolution and assume it to be true, there are still further inconsistencies—because the three sets of eyes (invertebrate, squid and vertebrate) would all have to have evolved independently of one another. The same impossible evolution would have to reflect itself in different species at the same geologic period.

Evolutionary biologist Frank Salisbury made this important point:

My last doubt concerns so-called parallel evolution... Even something as complex as the eye has appeared several times; for example, in the squid, the vertebrates, and the arthropods. It's bad enough accounting for the origin of such things once, but the thought of producing them several times according to the modern synthetic theory makes my head swim.³⁰

Using the Neo-Darwinist micro-mutation theory, it seems impossible to explain the presence of eyes, wings, lungs and similar complex organs. Even Darwin himself has confessed that this destroys his theory:

If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.³¹

A century has passed since Darwin wrote, "the very thought of the eye makes me cold all over," thus admitting he could not explain how eyes fitted into the theory of evolution. Yet to this day, scientists are still searching an evolutionary explanation to what Professor Demirsoy calls "a miracle of evolution."³² It is clear that the eye is no evolutionary miracle, but a miracle of creation, another of God's flawless masterpieces.

MIRACLE IN THE EYE

Learning to See

Even though they're equipped with visual organs, newborn babies cannot see their surroundings clearly. At first, they can only separate between light and dark. This is why an infant's situation is similar to your moving to a country where they speak a foreign language. At first, anything you hear will be completely incomprehensible. But as time passes, slowly you gain an understanding of these sounds and you get accustomed to associating them with certain phenomena.

A newborn child learns to see in exactly the same way. The first phase of this learning is following objects with the eyes. In a matter of days after birth, the baby can follow a source of bright light with its eyes. A few weeks later, the eye's lens begins to adjust itself, letting the baby focus on nearby objects. Soon, after discovering that it can grasp these objects with its hands, it finds that in order to see objects placed close, all it needs to do is move its eyes a little. Next comes the ability to gaze up and down in order to see high and low-placed objects, and three-dimensional vision. The baby also learns the sizes of objects, letting it compare distances.³³ But this is only the start of the visual learning process; not until the child's third year will it achieve a complete visual ability.

In the process just explained, the child effectively teaches itself. But how can a newborn possibly teach itself how to see, completely on its own? God, Who created people and their eyes, gives us the answer in His book. The Qur'an says that humans come out of their mother's womb knowing absolutely nothing; and that sight, hearing and hearts are blessed upon them:

God brought you out of your mothers' wombs knowing nothing at all, and gave you hearing, sight and hearts so that perhaps you would show thanks. (Qur'an, 16: 78)

The Role of Light in Seeing

Light is the medium through which the world is carried to human eyes. However, it has yet to be fully explained, from either a structural or a technical point of view. This is because light cannot be measured in terms of either mass or volume. If we were to pause at this point to cover some of the

investigations made into the nature of light, this book would become several volumes long and, in any case, would not surpass the quality of a physics book. Instead, therefore, we'll look at some of light's miraculous aspects.

How Do We Perceive Light?

Although sight is the one sense that gives us the greatest link with the outside world, many people do not realize that what they see is actually severely limited. Only 10% of the light entering the eye actually reaches the receptive cells. The remaining 90% is either reflected or absorbed by other parts of the eye.³⁴

The human eye is sensitive to only a specific few wavelengths of light. As a result, there are a number of forms we cannot see, including cosmic rays from space, X-rays, gamma rays, ultraviolet light, and infrared radiation from the human body. The range of light visible to the human eye falls between ultraviolet and infrared.

The word infrared means "beyond red," and refers to light with a wavelength longer than that of red light. Light energy is given off by every object, and the amount of energy depends on the object's temperature. We cannot see the infrared waves given off by stoves, our own bodies, the world, or even the stars. Were we able to see infrared rays, our vision would be determined by how hot or cold an object is.

The human eye also cannot see ultraviolet or X-rays, which are of even shorter wavelengths. These extremely short wavelengths have high quantum energy and may be dangerous enough to kill.

At this very moment, you are surrounded by thousands of light beams. Your eyes do not see them; thus, you are unaware of them. This is actually a blessing in disguise, because if you could see every possible form of light, the world would become confusing and complex. You would hardly be able to see anything for all the cosmic rays coming from space, and other people and objects would regularly change color, based on their temperature.

On the other hand, if you could see X-rays, then everyone would appear as a skeleton—hardly a pleasing sight. When God created man, He gave him skin and muscles to cover the internal organs, bone structure and

MIRACLE IN THE EYE

circulatory system. Never do we see them, because God chose to conceal these disturbing details and present the human body in the most beautiful form possible.

**[It is God Who]... formed you, giving you the best of forms...
(Qur'an, 40: 64)**

Color Vision

Through his life, man encounters millions of images, the most pleasant of which are images filled with color.

When you look at a landscape, you find the colors and beauty most agreeable. The magnificent color in a field of flowers, for example, seems to calm us down inside. Attractive tones of the sky and sea, and the beautiful artwork of flowers are all due to color.

If there was never anything on the planet that we could call "green," no one would ever be able to imagine the color in his mind. Similarly, we are unable to picture a color beyond the existing spectrum.

Color in Our Minds

What we call color in the outside world is actually the brain's interpretation of differing wavelengths. The difference between a red flower and a blue

car is actually the difference in the wavelengths of light that each reflects.

Different wavelengths stimulate

optic nerves at differing

intensities. When

these stimuli reach

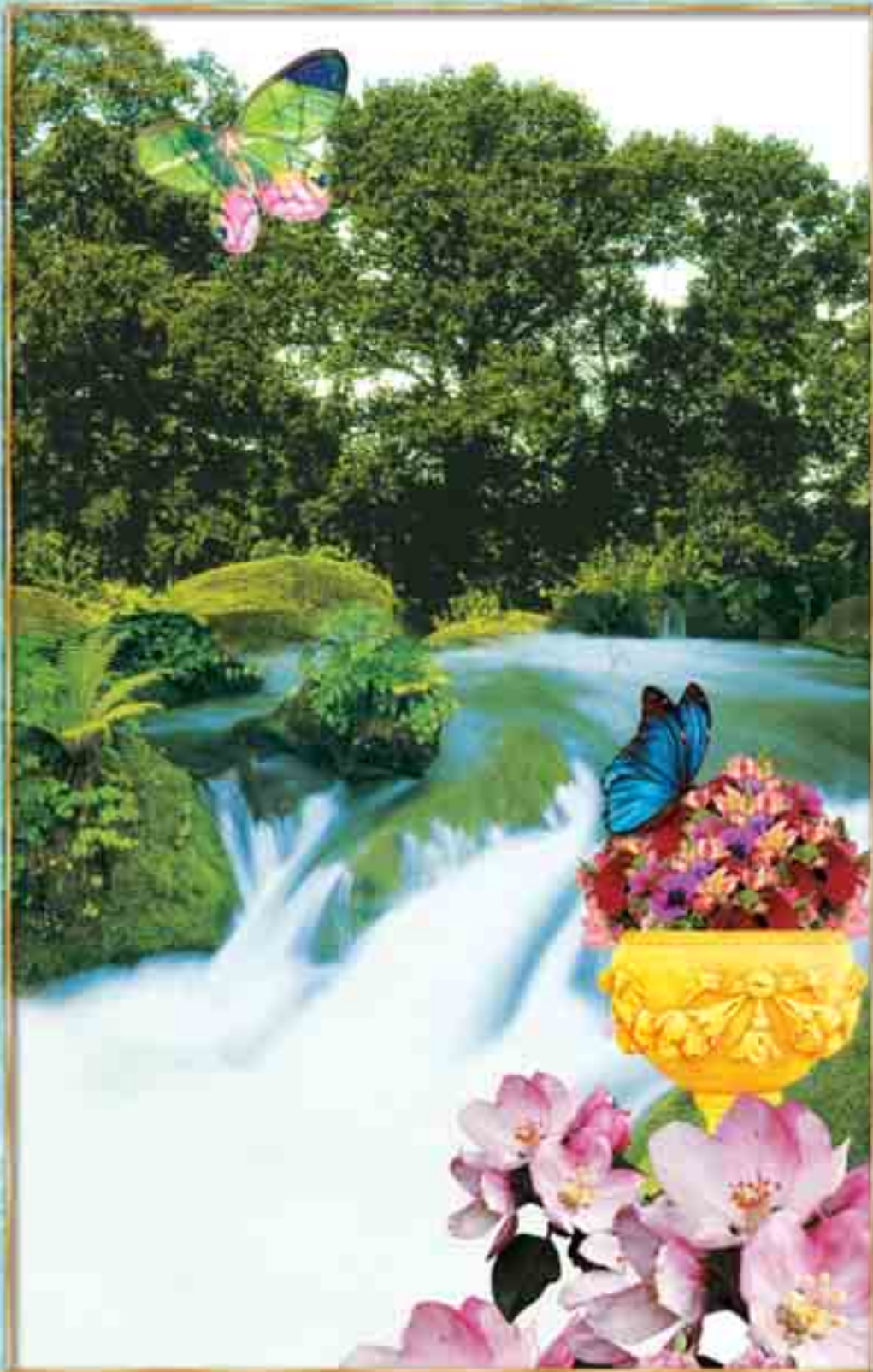
us, our brain interprets them as different

colors.

If there were no such thing as color, and if

everything was in differing tones of gray,





MIRACLE IN THE EYE

the world would become significantly less exciting. Our enjoyment of the sea, forests, fashion and even food would be drastically reduced.

However, all the colors of nature are created to please and agree with humans. It is a miracle by itself that the concept of color actually exists, but it's a great blessing that these colors are beautifully and harmoniously put to use by God.

The world and its inhabitants; the flowers, fruits and birds; the vast seas and all they contain, including the fish, coral and seaweed are all of different colors, patterns, and shapes. There are billions of such living beings on this planet—they could not have possibly evolved by means of a series of coincidences. How can coincidental occurrences have created the array of colors in a bird's feathers, or a fish's scales? Who created the colors of a peacock's feathers, or the patterns on a tiger's back, or the coral seabed? What makes these aesthetics so appealing to humans?

Imagine that an archaeological dig excavates a chest containing a wonderful painting. No one would assume that the paints on the canvas came together coincidentally to create the masterpiece. Clearly, an artist created the painting, and it is a reflection of a message the artist wanted to convey.

In the same way, it's clear that the landscape, skies, flowers, fruits, plants and animals are created by God in the most beautiful manner possible.

Have they not looked at the sky above them: How We structured it and made it beautiful and how there are no fissures in it? And the Earth: how We stretched it out and cast firmly embedded mountains onto it and caused luxuriant plants of every kind to grow in it, an instruction and a reminder for every penitent human being. (Qur'an, 50: 6-8)

THE EYE AND
TECHNOLOGY



long with the improvements in medical technology, we have come to realize how miraculous the human eye actually is. Whenever a new discovery about the eye is made, a new camera or optical system based on it is released very soon afterwards. The camera is the most common artificial impersonation of the eye and the human visual system. But however much technology may advance, no man-made optical equipment, including computerized cameras, can compete with the eye. No electronic systems have been anything more than primitive copies of the eye.

To support this claim, compare the features of a camera and the human eye.

The Camera

A basic camera lens is designed to focus a three-dimensional world on a two-dimensional surface. As a result, the picture is inverted and considerably smaller than the real-life scene.

Similarly, the eyes' cornea and lens are designed to focus the image inside the human eye, whose interior is like a dark room—although we shouldn't forget that this "room" is alive. The tissue whereon the inverted image is formed is called the retina. It works like the film in a camera, although its job is to transmit the images it receives to the brain, in the form of electrical signals.

Focus Adjustment

Before taking a photograph, the first thing you should do is focus the image to make it clear and sharp. In the eye, our lens adjusts itself according to its distance from the object we're looking at. With a camera, and also on instruments like microscopes and telescopes, adjustments must be done by hand, unless the machine is automatic. In each instance, this focusing takes some time.

In the human eye, however, focusing takes far less than a second,

HARUN YAHYA

using a method that no technology can copy. Surrounding muscles located within the eye can stretch or squeeze the lens and focus images on the retina without interruption. Thanks to its flexible structure, the lens changes its shape, ensuring that light constantly falls on the same spot on the retina.

If the lens couldn't adjust by itself, we'd have to find some other means to focus in on objects. This would require manual effort and great inconvenience on our part, since our vision would often remain foggy before we could complete the focusing process. Simply looking at an object would take time, slowing down our lives considerably.

But when we do want to focus in on an object at a certain distance, we need not make any measurements or optical calculations. To see, all we need to do is look. Everything else is done for us by the eye and the brain, automatically. What's more, it takes place in a fraction of a second.

Light Adjustment

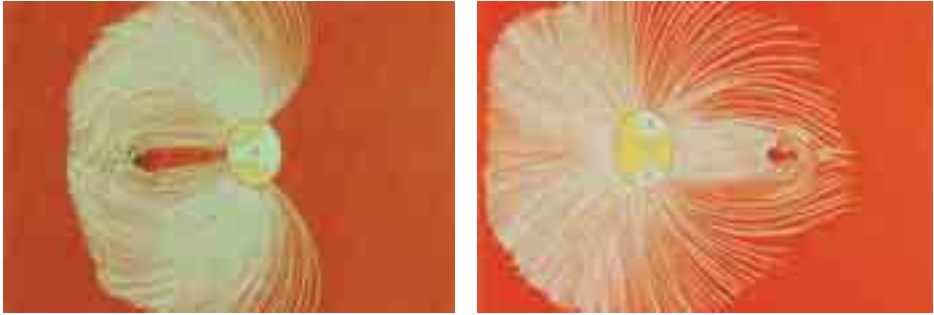
Photographs taken during the day generally come out clear. At night, however, a photograph taken with same film and camera tends to be extremely dark. But when we open our eyelids for even a fraction of a second, we can still see the stars, because, thanks to muscles around the pupil, the eye can adjust itself to differing levels of brightness. Under dark conditions, the pupil expands to admit more light. Similarly, in bright surroundings, the pupil contracts to allow less light inside the eye. This way, vision becomes clear as possible, both night and day.

A Window Opening to a World of Color

The human eye "photographs" its images in both black-and-white and in color. These images are then synthesized by the brain into the sights we see.

For example, when we look at a particular object, it is our rod cells that determine its shape. However, these cells can produce only an image in tones of gray; so an extra set of cells, the cones, are needed to determine the

MIRACLE IN THE EYE



(Figure 4.1). Nerve links connecting the eye to the brain. It is crucial that the two organs be in constant communication; and interesting that special lines are used to enable this.

If you come across a telephone, a computerized switchboard and a network connecting all three, you would not doubt that they were created for a common purpose. A telephone with no switchboard, a switchboard with no telephone, or a telephone network with no telephone or switchboard is completely useless. All three must be present at the same time.

Nobody claims that this system arose as the result of a series of coincidences. Yet the theory of evolution continues to claim that the eye, the brain, and the nerves connecting the two—a far superior system to any technological device—came to be as a result of a series of coincidences. It is clear that the Almighty God created the eye, the brain, and all the links between the two.

color. The final result, the combined effort of both types of cell, produces our window to the outside world.

Superior Technology

We have been comparing the eye to a camera solely as an analogy to assist in understanding. When any camera is placed next to the eye, it is clear which has the more primitive design. The eye's method of image transmission is many times superior to that of even the most advanced modern camera. Put another way, man cannot replicate the quality and perfection of the images transmitted by his own eyes.

HARUN YAHYA

To gain a better understanding, let's analyze a TV camera in greater detail. The television does not work by projecting whole images onto the screen, but by transmitting lines of dots to reproduce an image. The TV camera records an image by breaking it up into a series of lines, and so a procedure called "scanning" is used during broadcast. A photocell lamp scans the dots in each line, from left to right. When the scanning is complete, it gives off special signals, based on the levels of light of the dots. Once a line is scanned, the lamp goes on to scan the following line. In Europe, television images are broken down into 625 lines, and are scanned 25 times per second to produce an image on the television screen. The scanning process then begins all over again.

If you think the television's mechanism is amazing; the eye's is even more superior. What is more, its parts do not need changing, nor does it ever need to be serviced. This makes the eye, without question, the most staggeringly perfect optical organ in existence.

The Common Use of Routes

The retina's cells are connected to the brain by a network of nerve routes called the retinal ganglia, the medium through which cells send their signals. But there are significantly fewer ganglion cells than there are cells in the retina: only about one ganglion cell for every 140 retinal cells. Normally, this would be a grave problem leading to congestion and incomplete vision. But clearly such is not the case. So how do the visual signals of each cell manage to reach the brain so flawlessly?

Before answering this, let's analyze the current state of man-made telecommunication systems. A large number of advanced devices are used for intercontinental communication, with thousands of connections at any one moment. But there are far more connections made than there are lines. The latest technology allows for more than one telephone conversation, for example, to take place on a single line. The system works by sending each separate signal down in turn, at high speed, leading communicators to think they alone are using the line. Nobody notices that hundreds of connections are made, transferred and finished

MIRACLE IN THE EYE

on a single line every second. This system saves huge amounts of resources, but the concept is identical to that used in eye-to-brain communications. Just as one telephone line can support hundreds of calls, a ganglion can support hundreds of electrical signals on their way to the brain at any one time.

As this example demonstrates, the human body is made up of countless advanced systems. Now, pushing aside impossibility for a moment, let's try to explain this system in line with the theory of evolution.

Assume that all the layers that make up the eye—including the lens, cornea and eye muscles, the brain, one million ganglion cells, 140 million retina cells, eyelids, tears and blood vessels—all evolved at the same time, through a series of coincidences. But if this impossibility were so, the eye would still not function, because there wouldn't be an adequate number of nerve routes connecting the retina to the brain, with the result of broken and missing signals. Only one in every 140 signals would be able to reach the brain.

How was this obstacle overcome? Did all the nerve cells and retina cells communicate and make a plan? Or did they attend a telecommunications course and consequently, devise a system by which one route could be used for 140 separate signals? The obvious answer is that the cells somehow organized themselves and unanimously adopted the current system. Eventually, every ganglion started to support the signals of an average of 140 sources—shifting the order of the sources and transmitting thousands of signals every second.

But simply devising this system was not enough; the system had to be passed onto succeeding generations. This meant that thousands of lines of genetic information had to be placed flawlessly inside the reproductive cells, which were quite a distance away from the eye cells. If this never took place, children would be born blind, and eventually mankind would become extinct.

If this problem concerning the retina and nerve cells had not been solved, other eye components—such as the cornea, lens, pupil and eye

HARUN YAHYA

muscles—would be rendered completely useless. These superior mechanisms would disappear when the host body died, never to be seen again.

Every component and layer of this system has to be together for it to function as a whole, meaning that the eye had to appear in the body whole and complete. This is proof that the eye, and the entire human body, was created by God.

Say: "Have you thought about your partner gods, those you call upon besides God? Show me what they have created of the earth; or do they have a partnership in the heavens?" Have We given them a Book whose clear signs they follow? No indeed! The wrongdoers promise each other nothing but delusion. (Qur'an, 35: 40)





A detailed close-up photograph of an insect's head, focusing on its large, dark, oval-shaped compound eye. The eye has a distinct hexagonal pattern of facets. A reddish-brown antenna is visible, extending from the top of the head. The insect's body is covered in fine, light-colored hairs. The background is dark and out of focus. The entire image is framed by a decorative border with a repeating floral or scrollwork pattern in a light blue and gold color scheme.

**ANIMAL AND
INSECT EYES**

T

n order to better understand the perfection of God's creation, look at only a few of the millions of other examples of His art. As it says in the Qur'an, all creatures are under His complete control:

... There is no creature He does not hold by the forelock...

(Qur'an, 11: 56)

A countless number of organisms are living on this planet; and millions of different insect species alone. Of all the different types of eye, the human eye is the most superior overall, although the eyes of some species boast of features that are superior to those of humans. There are as many different types of eye as there are species, and we have already shown how impossible it is for such a variety to evolve through mutations and natural selection.

God has given every organism an eye that suits their lifestyle and feeding habits. In this section, we'll examine the eye structures of many different species.





Insects view the world through thousands of tiny eyes.

Insect Eyes

Compared to human eyes, the eyes of insects are considerably different. Their structures come in one of two types, simple or complex.

Simple-structured eyes are round and small, capable only of separating light and dark. Compound eyes, on the other hand, are larger and more complex, made up of hundreds of small pieces. Each "piece" is actually a small eye because it contains light sensitive cells, a lens, and connections to the brain.

As mentioned before, a human eye's lens can change shape, letting us focus on objects at various distances. The lens in an insect's eye cannot change shape, however, and so insects cannot focus.

The compound eye works by each of the eye's six-sided compartments (called ommatidia) detecting a tiny portion of the visual field. The informa-



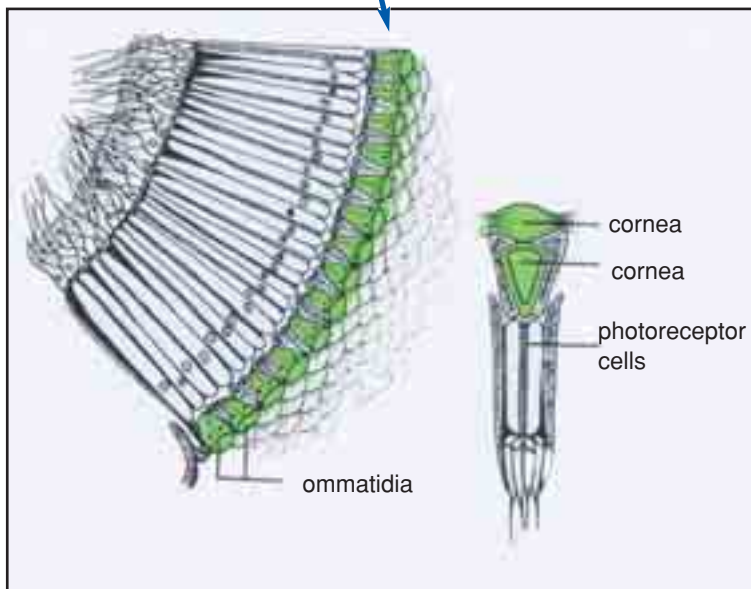
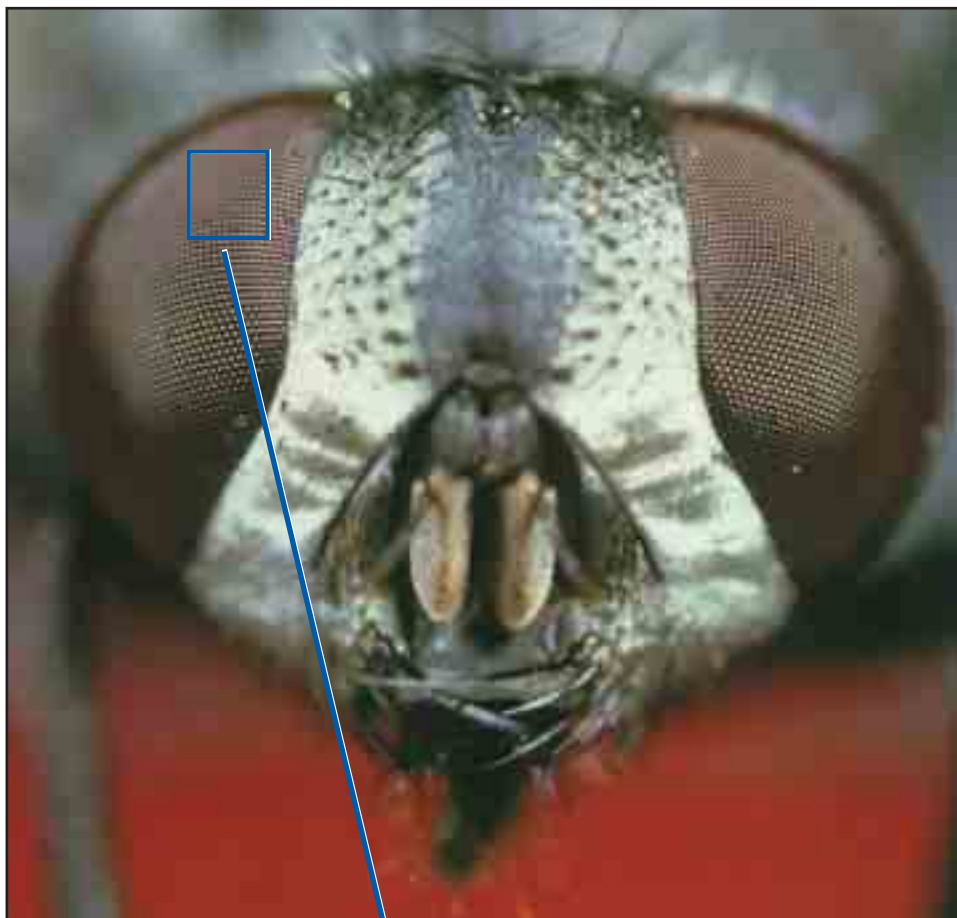
The wide visual perspective of a fly's eyes.

tion from each ommatidium is then combined, like pieces of a mosaic, to form a single image of the outside world. The higher the number of ommatidia, the keener the vision becomes, with each unit contributing a different part of the complete picture.³⁵

The head of the common housefly is dominated by a pair of large compound eyes containing approximately 4,000 ommatidia. In wingless insects such as female fireflies there are 300 ommatidia, 5,100 in mayflies, 9,000 in yellow-winged coleopterans and between 10,000 and 28,000 in dragonflies and damselflies.

A Visual Range of 360 Degrees

The housefly's eye contains 4,000 small, simple ommatidia which can be moved at will. Since each ommatidium faces a different direction, the fly is able to see to the front, back, left, right, top and bottom, giving it a 360 degree perspective of the world.



Thanks to the flawless design of its eyes, the housefly can look 360 degrees around. At left, a detailed diagram of an ommatidium, of which the fly's eye contains some 4,000.

MIRACLE IN THE EYE

Each ommatidium is sensitive to light shining in its direction, and uses its own lens and eight sensitive cells to process it. House flies have a combined total of 48,000 light-sensitive cells, allowing them to see 100 images per second. In this regard, their vision is ten times superior to the human eye. Two-thirds of the fly's brain is devoted purely to sight. The total number of light-sensitive cells means that 48,000 signals are sent here every tenth of a second.

Most people think of the fly as one of the most basic forms of life, but its visual system is in fact one of the most complicated we know.

A tiny fly did not evolve or mutate its 4,000 eyes over a period a time. Clearly. This is a special creation. Of course, the fly is not composed of merely its visual system—it also has special digestive, reproductive and flight systems. Only with all its systems intact can the fly thrive. It is not possible for a fly to exist, for example, without a digestive or respiratory system. Nor are there any blind insects flying around! This is solid evidence that the fly was created by God in its current state, as mentioned in the Qur'an:

Mankind! An example has been made, so listen to it carefully. Those whom you call upon besides God are not even able to create a single fly, even if they were to join together to do it. And if a fly steals something from them, they cannot get it back. How feeble are both the seeker and the sought! (Qur'an, 22: 73)

An Insect with 56,000 Eyes

Among all known species, dragonflies have the greatest number of ommatidia. Each eye contains 30,000 of them,³⁶ which can clearly see objects up to 20 feet away.³⁷

To recap this phenomenon, a single tiny insect has a total of 56,000 eyes, each of which has a lens, retina, and thousands of nerves connecting it to the central nervous system. As a result of this, the dragonfly can see its prey and understand what it is seeing.

The presence of just a single eye with a single neuron and the ability to evaluate a single signal is a miracle on its own. But there are thousands of these eyes, all working in complete harmony. This is just another of God's countless phenomenon. God is the One Who has no equal in creation.



Ultraviolet Vision

Butterflies and bees both possess a special sense of sight, allowing them to reach sources of food with ease.

In some flowers, the pigments form distinct patterns that are invisible to us, but visible to bees and butterflies, who can see ultraviolet light. Called nectar guides, these patterns are like the landing strips of an airport, directing the insects to the nectar within the flower. It is as if their food sources were lit up and signposted especially for them. To our eyes, the coneflower appears to be a uniformly yellowish orange, but to a bee or butterfly, it appears as a corona of yellow with a glowing ultraviolet bull's eye in its center. This pattern guides the bee to where it can collect the nectar or pollen.

Bees feed on the pollen produced by plants. The plants, on the other hand, need the bees to spread their pollen among other flowers of the same species in order to reproduce. Therefore, the flower uses its petals to attract the bee and sticks pollen onto the bee's legs as it feeds. Both partners possess the necessary features to enable this collaboration. Imagine a situation wherein flowers continued to reflect in the ultraviolet range, but bees were



Bees' eyes are sensitive to ultraviolet light; enabling them to find pollen in flowers with ease. Their eyes were designed by the All-Knowing and All-Seeing God.

unable to see that portion of the spectrum. Both species would swiftly go extinct, because the bee would not be able to feed, nor the flower to reproduce. This is proof that these co-dependent organisms were created by the same Creator.

Birds

For a flying creature, the most important sense is sight, because the miracle of flight would become a very dangerous affair without the ability to see. Birds, therefore, have been blessed by God with a superior sense of sight, in addition to the ability to fly.

A bird's sense of sight has a wider perspective and can operate much more quickly than a human's can. An object or view that we humans have to regard at length, a bird can see as a whole, in one quick glance.

Eyes are crucial for the predator owl, which can see ten times more



powerfully than humans at night.³⁸

Unlike a human, a bird cannot move its eyes in their sockets. But birds can quickly move their heads and necks around to expand their perspective. Without moving its head, an owl has an 80-degree field of vision. But some species of owl can rotate their heads to up to 360 degrees—a full circle!

The visual field of one human eye is 150 degrees laterally, and only 180 degrees binocularly, or a half circle.³⁹

As mentioned already, predators such as the owl have very keen night vision, often six times greater than that of humans. This allows them to perform precisely accurate hunting maneuvers.

Larger eyes contain more visual cells, providing better vision. A predator bird can have more than a million visual cells in each of its eyes.

At night, owls and similar nocturnal birds can see much better than

MIRACLE IN THE EYE



other species. Looking for food, these predator birds search for small animals on the ground, and their eyes can pick up the slightest movements, thanks to a high number of light-sensitive rods in their retinas. As we explained, the more rod cells, the keener night vision becomes. But for this vision, predator birds do pay a price: They sacrifice the sense of color. They see the world in black and white but, owing to their lifestyle, they do not need to see color. So cone cells are quite fewer in the eyes of nocturnal birds.

During the past minute, as you read this book, you blinked 22 times. That's how your eyes maintained their moisture and cleanliness. But for that split-second that you blinked, your eyes stopped doing their job. For the relatively sedate lifestyle of a human, this may not be a problem. But for a bird in

flight, that split-second may be critical.

This is why birds have a third eyelid—a transparent layer that blinks and cleans—without their having to close their outer eyelids. This lid sweeps sideways across the eyeball, starting from the side nearest the beak. For birds that dive underwater, it also acts as goggles, protecting the eye from harm. In a sense, birds have been equipped with goggles and aviator glasses from birth.

Although nocturnal birds cannot see color, some smaller birds feed on seeds and insects, and therefore do need to discern colors. The eyes of these smaller birds are placed on either side of the head, which lets them see a wide area with minimal movement of the head and neck.

The umbrella birds, also known as black herons, encounter a number of difficulties when they hunt in water. As is well-known, most light reflects off the water—which has a negative effect on the bird's ability to see objects under the water's surface. The black heron solves this problem by spreading its wings. This cuts the sunlight and any reflections, allowing it to see more clearly and hunt for fish underwater.

If the black heron didn't use its wings this way, it would be unable to see its food and therefore starve. But seabirds are somehow born knowing the laws of optics, and take the needed precautions accordingly. Could it be that all the seabirds came together to find a practical solution to their problem? Or did they take a mass physics lesson and arrive at a solution by experimenting?

Hunting Eyes

Eagles fly at an altitude of thousands of meters, in a manner similar to modern war planes, yet are able to comb the landscape below in staggering detail. The eagle can detect even the slightest of movements or color changes while in flight. It owes this ability to a very special eye structure.

In humans, the portion of the retina with the most acute vision is the fovea centralis, which has the highest concentration of cone cells. Eagles have two foveae, giving them an incredibly sharp sense of sight. Humans have only one fovea in each eye—for binocular, or forward vision. When we

MIRACLE IN THE EYE



look at an object, both our eyes are directed toward the object. This allows our brain to merge both the images to create a sense of depth. The eagle contains a binocular fovea like ours, but also has a fovea for monocular vision that allows each eye to look sideways and see a separate image. So eagles can see both forward and to the side at the same time.⁴⁰

The eagle has a visual perspective of some 300 degrees, as well as an extra focusing power. Humans change the shape of their lenses to focus. But an eagle can change the shape of both lens and cornea. This gives it extra focusing power.⁴¹ It can also scan a 30,000-hectare (116-square mile) field from an altitude of 4,500 meters (14,700 feet), or spot a camouflaged rabbit from 90 meters (300 feet) with ease.⁴²

To attain this super-sharp vision, an eagle's retinal cells are tinted with special colored oil droplets, increasing the contrast for objects seen against the blue sky or green forest. Thanks to this, the eagle can spot minute changes in contrast from thousands of meters above and swoop down to hunt. The fact that a mere drop of oil makes this possible is doubtlessly one of God's countless blessings.

Flying is a miracle in itself. If one aspect of the present structure or position of a bird's wing were changed, it would be unable to fly. Therefore, it isn't possible for wings to have evolved over time.



As mentioned before, something else that couldn't possibly have evolved is the visual system. This is reinforced by the flawless nature of an eagle's eye. An eye with two foveae cannot form over time, as a result of coincidences. That second fovea was deliberately created to answer the bird's needs.

For an eagle, that droplet of oil in its retina cells is of staggering importance... But who made this fine optical adjustment? Did the eagle add the oil himself, or on other animals' recommendation? Of course not. The eagles have

enjoyed this feature from birth, for thousands of years.

So why are our eyes not as sharp as an eagle's? If human eyes contained the same features, they'd each be the size of a grapefruit. Moreover, humans don't need to spot a camouflaged rabbit from a kilometer away. This is why God gave humans their present eyes in a most aesthetic form.

Jumping Spiders

Compared to ordinary spiders, the jumping spider leads a very unusual life. Rather than make a web and wait for a catch, these spiders hunt their prey instead. This is why—unlike ordinary spiders, which are almost blind—they have exceptionally acute vision.

A jumping spider hunts by securing itself to the branch of a tree with the thread it secretes. Then it throws itself toward an insect flying nearby, catching it in midair. In order to snare its catch, the spider needs to see its prey, and determine the direction and speed at which the target is traveling. Also, of course, it must determine its own speed and the duration of the leap.

MIRACLE IN THE EYE

In order to do all this, the spider needs not only an advanced visual system, but an information processing center to make all the necessary calculations.

Jumping spiders have four pairs of eyes, for a total of eight. The front two are the most impressive, perhaps the best eyes one can find in any arthropod. The retina inside the eye can move in three dimensions, enabling the spider to look in all directions and focus on its subject. The other six eyes are positioned around the head, affording 360-degree vision.⁴³

The jumping spider's visual acuity is actually very similar to our own, such that they even perceive images on a television screen. When most animals look at a television, they see only a series of moving dots. But research has indicated that jumping spiders respond to televised pictures of other spiders and insects.

The jumping spider's visual system is highly complex and, in some respects, surpasses even a human's. A tiny spider can look in different direc-



tions, detect motions, and estimate speed and distance. Of course, the spider never asked for these abilities, nor did it develop them on its own, over time. Everything the spider possesses was given to him by God.

The Protection of Animal Eyes

As the body's most sensitive organs, the eyes must therefore be well protected. This is why animal skulls have been constructed in such a way as to provide their eyes with maximum protection.

In animals like cats and dogs, the majority of the eye lies inside the skull, with only a small portion protruding outside. The bones surrounding the eye effectively act as a shield against impacts, and the eyelids help protect against direct injury.

The eyes of a camel—a mammal that lives under incredibly harsh conditions—are provided with the protection they need. The bone structure around its eye not only protects it from impacts, but also from harsh sun-rays. Not even violent sandstorms can harm a camel's eyes, thanks to its eyelashes, which are long and intertwined, preventing any dust from entering.

Eyes in the Sea

There are considerable differences between land and underwater creatures, because under the surface is effectively another world, whose inhabitants have been modeled to best suit their environment. But just because they spend their lives underwater doesn't mean that their basic requirements are any different from ours. To stay alive, they still need to breathe, feed and avoid being hunted. They have to be able to see the world around them, so that they can distinguish between prey and foe—and require special eyes that let them see clearly underwater.

Fish view their world through a transparent layer that covers their eyes, similar in principle to the goggles worn by human divers. But be it a whale or a herring, an underwater creature's field of vision is restricted. Deeper than 30 meters (99 feet) below the surface, distant vision becomes unnecessary. Most of the time, in fact, fish need to see only those objects directly in front of them, and their eyes are created to meet this need. Their rigid, globular lens is particularly adapted for seeing close objects. But when

MIRACLE IN THE EYE

they do need to see at a distance, a set of special muscles pulls the entire lens back toward the retina.⁴⁴

The spherical lens in a fish's eye works well underwater. Because of the higher degree of refraction (the bending of light) in water than in air, a fish's lens has to be much more curved than a human's. To produce a clear image, the lens bends the light a lot more than does a flatter one—such as those in humans and other land animals.⁴⁵

Water creatures are always in danger of becoming food for larger creatures. But they do have a special defense mechanism not seen in mammals:



Fish can perceive more than one image at the same time.

A fish's eyes are placed on either side of its head. The image seen by each eye is recorded in the opposite half of its brain. But since the image is viewed by one eye only, it is two-dimensional, which prevents the fish from judging distances. This is why, when it spots some potential threat, both eyes focus in the same direction to judge the distance. Straight ahead, the visual arcs of the two eyes overlap to provide a narrow band, where the fish enjoys binocular vision.

With the exception of a few species, fish cannot see in color. They have no need to, because only a few meters underwater, most colors are absorbed and disappear. A fish's entire world is mostly shades of blue and green.

Fish are more sensitive than land animals to dim light, because their retinas contain a higher number of cells sensitive to low intensities, letting them make use of every amount of light possible.

Sea turtles generally feed on fish. In the process, they also consume a large quantity of sea salt, which could be unhealthy if they digested it. Rather than simply eject salt from the body, the turtle transfers it to special sacs located on to the side of its eyes. Here, the salt is cleverly recycled and used to produce tears.⁴⁶

Octopus Eyes

Of all the invertebrates, the octopus has one of the most complex eye structures. As in vertebrates, each of the octopus's two large, complex eyes is like a camera, in structure, and the creature's vision is acute.

The octopus eye and the vertebrate eye are extraordinarily similar. Each includes a cornea, an iris, an accommodating lens, a fluid-filled vitreous humor, and a retina. However, there are major differences. For instance, octopi change their range of focus by moving the entire lens closer or farther away from the retina, whereas we change the shape of our cellular lens in order to bring objects into focus.

As mentioned earlier, one of the biggest struggles for evolutionists was in forming some explanation of how octopus eyes originated. According to evolutionary theory, octopi (which are invertebrates) and men (vertebrates) developed completely independently of each other, over time. And yet both

MIRACLE IN THE EYE



man and octopus have equally well-developed visual systems, with similar structures performing similar functions.

But if the two species developed separately, why are their eyes so similar? It seems that the impossible has taken place not just once, but at several times and in several places. If the human eye is the product of coincidences and not creation, then shouldn't it be considerably different than the octopus's eye? The theory of evolution simply cannot answer thousands of basic questions like this.

The Archer Fish

This fish is famous for being a living water pistol—filling its mouth with water and squirting it at insects resting on branches or twigs above the water. The element of surprise causes the insect to lose its grip and plunge into the water, where it becomes an easy catch.

What's remarkable about the process is that even as the archer fish prepares itself, it doesn't raise its head out of the water. While still submerged, it can accurately determine the insect's location. But the apparent position of objects outside the water is distorted by the refraction of light. For example, if you wanted to shoot an arrow from beneath a swimming pool at a point in the air outside, you'd have to know at what angle light refracts upon the water and adjust your aim accordingly.

But this fish seems to overcome this problem and shoots on target every time. It is able to hit a tiny insect with no difficulty.⁴⁷ All archer fish possess this ability, but not through lessons and physical calculations. It is God Who inspires this creature.



Archer fish hunt by firing mouthfuls of water at nearby insects. Their superior sense of sight allows them to make acute geometric calculations from underwater so as to estimate the correct location of the prey in the outside air. This intelligent behavior surely is not the work of the fish itself. It is God Who inspires the Archer fish and all other creatures how to act.

The Crab's Periscope

A crab has two eyes on the ends of stalks. These act like little periscopes, allowing the crab to see what's going on above, even if it is hiding beneath the sand. At any sign of danger, the stalks can be lowered for protection into sockets on the carapace.

Reptile Eyes

Most reptiles can see a large array of colors, allowing them to pick out even the most effectively camouflaged insects. This gives them a major hunting advantage.

Chameleons feed on insects, and their hunting tactics are most unusual because their eyes play a greater role than usual. Chameleons can move each eye independently of the other, allowing them scout the surroundings and watch their insect prey at the same time, as they edge closer to their objective.⁴⁸ When it is close enough, a chameleon turns both eyes upon its prey, determines its position, and then shoots out its long sticky tongue to catch the meal.

MIRACLE IN THE EYE

Double Vision

On most species of snakes, the eyes are placed on either side of the head, which produces two different images in the snake's brain. However, this location of the eyes doesn't stop the snake from seeing forward. In fact, this positioning gives the snake a wide visual perspective, allowing it to look forwards, backwards and upwards with ease.

Infrared Vision

As you've seen, the human eye can perceive only a specific range of wavelengths of light. Some species of snake are capable of seeing greater wavelengths than humans, including infrared light, which humans can sense only as heat.

Snakes have small pit organs that can visually register infrared radiation. These organs are a hundred thousand times more sensitive to infrared than human skin and can detect even the slightest change in a body's temperature.

For example, the rattlesnake can locate a warm-blooded animal or human even in pitch darkness, because such creatures radiate off heat waves that the snake can detect—an incredible advantage for any creature hunting at night.

The principle of detecting objects and soldiers by the heat they emit is also used in recent optical military equipment. It took years of research to develop the technology behind this kind of equipment, but snakes enjoy the same ability from the moment they hatch from their eggs. It took decades for humans to develop heat-sensing equipment, but snakes have always had it.





Eyelids

There are vast differences between a reptile's eyelids and the eyelids of other creatures. It may appear as if snakes do not have eyelids, for example, but their eyes are in fact covered by an immobile, transparent layer of scales.

Lizards, on the other hand, have movable eyelids. But in the desert lizard especially, the eyelids are upturned. This keeps out the sand, preventing it from harming the eye when the lizard buries itself in the sand.

The Sensitive Eyes of a Frog

Recent research has revealed some of the frog's eye's interesting abilities. One kind of retinal cell responds strongly to small, dark, round moving objects and is most active when those objects moved irregularly. It is as if the neurons of the frog eyes were designed especially to detect flies. Some scientists call their eyes "bug detectors."⁴⁹

MIRACLE IN THE EYE

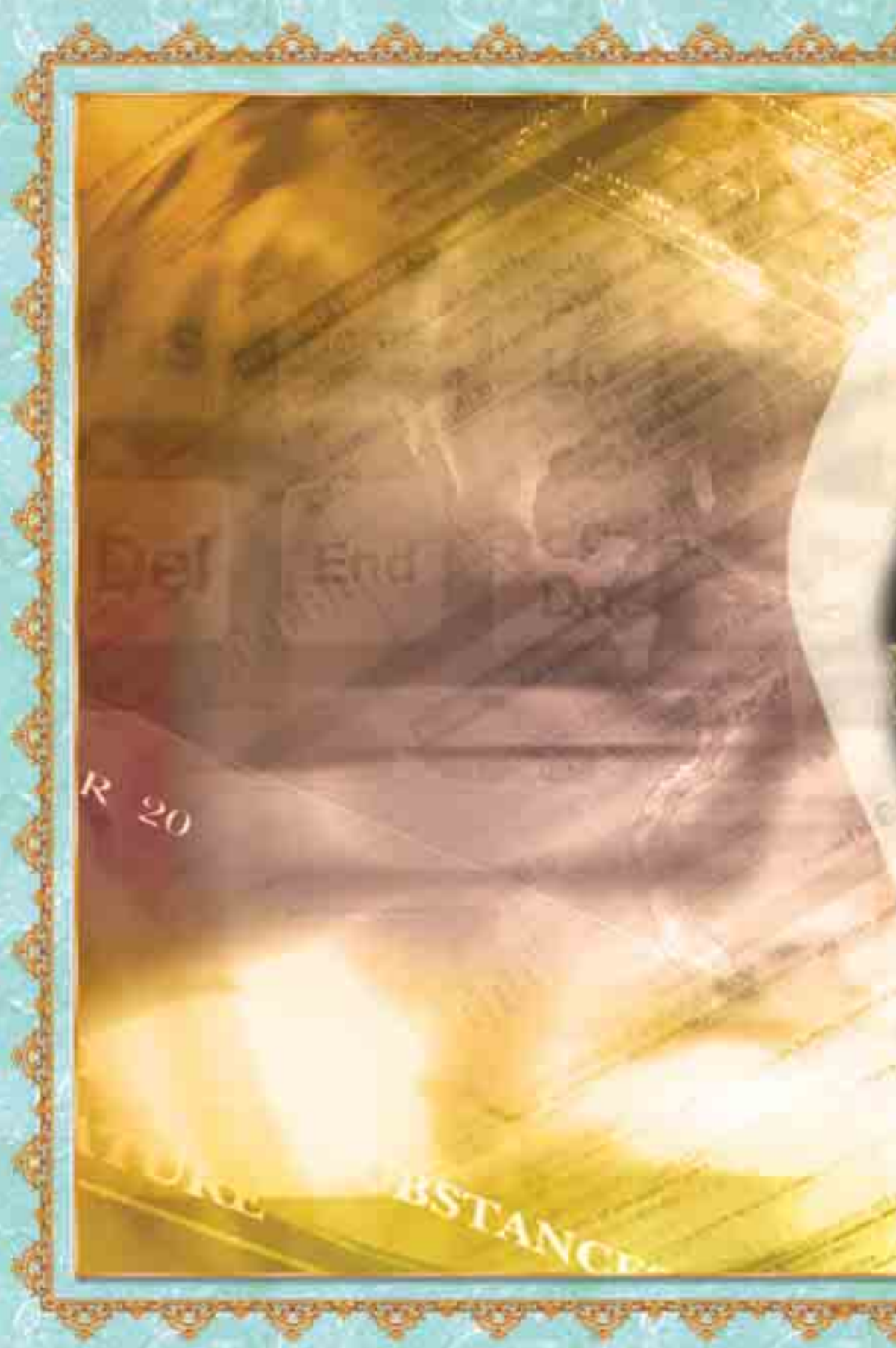




Cats' Eyes

The eye of a cat contains a layer called the *tapetum lucidum*, not found in humans. Positioned immediately behind the retina, it reflects incoming light, doubling the amount of light the eye can use and allowing cats to see in much dimmer light than we can. This layer is also the reason why cat eyes seem to glow when a flashlight beam is shined directly at them.

Cat eyelids are prized wide open at night, allowing as much light as possible to enter. Another reason why cats can see so well in the dark is because their retinas contain more rod cells than cone cells. Thanks to this system created by God, wild cats can comfortably hunt at night.



R 20

FORCE

STANCE



WHO SEES?



rom the moment a person is born, he becomes subject to the steady indoctrination of the society. Part of this indoctrination, possibly the most persuasive, holds that reality is what the hands can touch and the eyes can see.

This understanding, which is quite influential in the majority of the society, is carried without question from one generation to another.

But without being subjected to any indoctrination, a moment of objective thought would make one realize an astonishing fact:

Everything we confront from the moment we come into existence—human beings, animals, flowers, their colors, odors, fruits, tastes of fruits, planets, stars, mountains, stones, buildings, space—are perceptions presented to us by our five senses. To further clarify this, it will help to examine the senses, the agents that provide us with information about the exterior world.

All of man's sensory faculties—sight, hearing, smell, taste and touch—function in the same way. Stimuli (lights, sounds, smells, tastes, textures) from objects in the external world are carried through nerves to the sensory centers in the brain. All these stimuli that reach the brain consist of electric signals. For example, during the process of vision, light rays (or photons) radiating from sources in the exterior world reach the retina at the back of the eye and, through a series of processes, are transformed into electric signals. These signals are transferred along nerves to the brain's vision center. There, a colorful, bright and three-dimensional world is perceived within the space of a few cubic centimeters.

The same system applies to other senses as well. Cells on the surface of the tongue transform chemical traces into electric signals that become tastes. Odors are transformed into electric signals by cells in the epithelium of the nose. Special sensors lodged beneath the skin transform impulses of touch (such as the sensations of hardness or softness) into electric signals, and a special mechanism in the ear does the same with sound. All these signals are sent to appropriate centers in the brain, where they are perceived.

To clarify the point, assume that you're drinking a glass of lemonade. The hard, cool surface of the glass you're holding is transformed into electric

HARUN YAHYA

signals by special receptors under your skin and sent to the brain. Simultaneously, the smell of the lemonade, its taste, and yellowish color all become signals that reach the brain. Likewise, the clink you hear when the glass touches the table is perceived by the ear and transmitted to the brain as an electric signal. All these perceptions are interpreted in the brain's relevant centers, which work harmoniously with one another. As a cumulative result of these impulses, you sense that you are drinking a glass of lemonade.

Concerning this important fact, consider the thoughts of B. Russell and L. J. J. Wittgenstein, two famous philosophers:

For instance, whether a lemon truly exists or not and how it came to exist cannot be questioned and investigated. A lemon consists merely of a taste sensed by the tongue, an odor sensed by the nose, a color and shape sensed by the eye; and only these features of it can be subject to examination and assessment. **Science can never know the physical world.**⁵⁰

In other words, it is impossible for us to reach the physical world. All objects we're in contact with are actually collection of perceptions such as sight, hearing, and touch. Throughout our lives, by processing the data in the sensory centers, our brain **confronts not the "originals" of the matter existing outside us, but rather copies inside our brain.** At this point, we are misled to assume that these copies are instances of real matter outside us.

This obvious fact has been proven by science today. Any scientist would tell you how this system works, and that the world we live in is really an aggregate of perceptions formed in our brains. The English physicist John Gribbin states that our senses are an interpretation of stimulations coming from the external world—as if there were a tree in the garden. He goes on to say that our brain perceives the stimulations that are filtered through our senses, and that the tree is only a stimulation. So, he then asks, which tree is real? The one formed by our senses, or the tree in the garden?⁵¹

No doubt, this reality requires profound reflection. As a result of these physical facts, we come to the following indisputable conclusion: Everything we see, touch, hear, and call "matter," "the world" or "the universe" is nothing more than electrical signals interpreted in our brain. We can never reach the original of the matter outside our brain. We merely taste, hear and see an

MIRACLE IN THE EYE

image of the external world formed in our brain.

In fact, someone eating an apple confronts not the actual fruit, but its perceptions in the brain. What that person considers to be an apple actually consists of his brain's perception of the electrical information concerning the fruit's shape, taste, smell, and texture. If the optic nerve to the brain were suddenly severed, the image of the fruit would instantly disappear. Any disconnection in the olfactory nerve traveling from receptors in the nose to the brain would interrupt the sense of smell completely. Simply put, that apple is nothing but the interpretation of electrical signals by the brain.



We see all the colors around us inside the darkness of our brains, just as this garden's colors appear from the window of a darkened room.

HARUN YAHYA

Also consider the sense of distance. The empty space between you and this page is only a sense of emptiness formed in your brain. Objects that appear distant in your view also exist in the brain. For instance, someone watching the stars at night assumes that they are millions of light-years away, yet the stars are within himself, in his vision center. While you read these lines, actually you are not inside the room you assume you're in; on the contrary, the room is inside you. Perceiving your body makes you think that you're inside it. **However, your body, too, is a set of images formed inside your brain.**

Millions of Colors in a Pitch-Black Location

Considering this subject in greater detail reveals some even more extraordinary truths. Our sense centers are located in the brain, a three-pound piece of tissue. And this organ is protected inside an array of bones called the skull, which neither light, nor sound, nor odors can penetrate. The inside of the skull is a dark, silent place where all smells are absent.

But in this place of complete darkness occur millions of color shades and sound tones, as well countless different tastes and smells.

So how does this happen?



While we are in a room, we may be inclined to think that we're in a narrow space; and when at the seaside, we are in a wide space. But this is a mistake: Both locations are perceived in our heads.

MIRACLE IN THE EYE

What makes you perceive light in a location without light, odors in a place without smell, sounds in total silence and the objects of all other senses? Who created all of this for you?

In every moment of your life, a variety of miracles take place. As mentioned earlier, anything your senses can detect in this room you're in, are sent as electrical signals to your brain, where they then combine. Your brain interprets them as a view of a room. Put another way, while you assume that you are sitting in this room, that room is actually inside you, in your brain. The "place" where the room is assembled and perceived is small, dark, and soundless. And yet a whole room or a whole landscape, regardless of its size, can fit into it. Both a narrow closet and a wide vista of the sea are perceived in the exact same place.

Our brains interpret and attribute meaning to the signals relating to the "external world." As an example, consider the sense of hearing. It's our brain that in fact interprets and transforms the sound waves into a symphony. That is to say, music is yet another perception created by our brain. In the same manner, when we perceive colors, what reaches our eyes is merely light of different wavelengths. Again, it's our brain that transforms these signals into colors. There are no colors in the "external world"; neither is an apple red, nor the sky blue, nor the leaves green. They appear as they do simply because we perceive them to be so.

Even a slight defect in the eye's retina can cause color blindness. Some sufferers perceive blue and green as the same, some red as blue. At this point, it does not matter whether or not the outside object is colored.

The prominent thinker George Berkeley also addresses this fact:

At the beginning, it was believed that colors, odors, etc., "really exist," but subsequently such views were renounced, and it was seen that they only exist in dependence on our sensations.⁵²

In conclusion, the reason we see objects in colors is not because they are actually colored or have a material existence in the outer world. The truth, rather, is that the qualities we ascribe to objects are all inside us.

And this, perhaps, is a truth you have never considered before.

Mankind's Limited Knowledge

One implication of the facts described so far is that actually, man's knowledge of the external world is exceedingly limited.

That knowledge is limited to our five senses, and there is no proof that the world we perceive by means of those senses is identical to the "real" world.

It may, therefore, be very different from what we perceive. There may be a great many dimensions and other beings of which we remain unaware. Even if we reach the furthestmost extremities of the universe, our knowledge will always remain limited.

Almighty God, the Creator of all, has complete and flawless knowledge of all beings who, having been created by God, can possess only the knowledge that He allows them. This fact is related in the Qur'an thus:

God, there is no god but Him, the Living, the Self-Sustaining. He is not subject to drowsiness or sleep. Everything in the heavens and the earth belongs to Him. Who can intercede with Him except by His permission? He knows what is before them and what is behind them but they cannot grasp any of His knowledge save what He wills. His Footstool encompasses the heavens and the Earth and their preservation does not tire Him. He is the Most High, the Magnificent. (Qur'an, 2: 255)

During sleep, you can dream of being on a tropic island. You live that moment in all its reality. At that moment, nobody can convince you that you are dreaming. Only when you awaken you realize it was all just a dream.



MIRACLE IN THE EYE

Who Is the Perceiver?

In order to perceive, no external world is necessary. Given the right kind of stimulation to the brain, sensations of touch, sight, and sounds, can be recreated in the brain. The best example of this process is dreams.

During dreams, your body typically remains still and motionless in a dark and quiet bedroom, and your eyes remain shut. Neither light nor sound nor any other stimuli from the exterior world is reaching your brain for it to perceive. Yet in your dreams, you still perceive experiences very similar to real life. In your dreams you also get up and go to work, or go on vacation and enjoy the warmth of the sun.

Furthermore, in dreams you never feel doubts about the reality of what you experience. Only after you wake up you realize your experiences were only dreams. You not only experience such feelings as fear, anxiety, joy and sadness but also see different images, hear sounds and feel matter. Yet there is no physical source producing these sensations and perceptions; you lie motionless inside a dark and quiet room.

René Descartes, the renowned philosopher, offered the following reasoning on this surprising truth about dreams:

In my dreams I see that I do various things, I go to many places; when I wake up, however, I see that I have not done anything or gone anywhere and that I lie peacefully in my bed. Who can guarantee to me that I do not also dream at the present time, further, that my whole life is not a dream?⁵³

We are therefore looking at a manifest truth: There is no justification for our claiming that we establish direct contact with the original of the world that we claim to exist and to be living in.

Is Our Brain Distinct from the Outside World?

If everything we know as the outside world is only perceptions produced internally, what about the brain which we think does the seeing and hearing? Isn't it composed of atoms and molecules like everything else? The brain, too, is a piece of tissue that we perceive through our senses. This being so, what is it, if not the brain, that perceives everything—that sees, hears,

touches, smells and tastes?

At this point, we face the obvious fact: that man, a being of consciousness who can see, feel, think and exercise reason, is much more than a mere assemblage of atoms and molecules. What defines a human being is the "soul" granted to him by God. Otherwise, it would be highly unreasonable to attribute his consciousness and other faculties to a three-pound piece of flesh:

He Who has created all things in the best possible way. He commenced the creation of man from clay; then produced his seed from an extract of base fluid; then formed him and breathed His Spirit into him and gave you hearing, sight and hearts. What little thanks you show! (Qur'an, 32: 7-9)

The Being Nearest to Us Is God

Since a human being is not merely a lump of matter but a "soul," then who makes that soul feel the sum of perceptions which we call the external world? Who continues to create all these perceptions, ceaselessly?

The answer is obvious. God, Who breathed into man His spirit, is the Creator of all things. He is also the real source of all perceptions. The existence of anything is possible only through God's creation. God informs us that He creates continuously and that whenever He stops creating, everything will disappear:

God keeps a firm hold on the heavens and the Earth, preventing them from vanishing away. And if they vanished no one could then keep hold of them. Certainly He is Most Forbearing, Ever-Forgiving. (Qur'an, 35: 41)

This verse is describing how the material universe is maintained under the might of God. God created the universe, the Earth, mountains, and all living and non-living things, and maintains all these under His power at every moment. God manifests His name al-Khaliq in this material universe. God is al-Khaliq, in other words, the Creator of all things, the Creator from nothing. This shows that there is a material universe, outside our brains, consisting of entities created by God. However, as a miracle and manifestation of the superior nature of His creation and His omniscience, God shows us this mater-

MIRACLE IN THE EYE

ial universe in the form of an “illusion,” “shadow,” or “image.” As a consequence of the perfection in His creation, human beings can never reach the world outside their brains. Only God knows this real material universe.

Another interpretation of the above verse is that God constantly maintains the images of the material universe that people see. (God knows best.) If God wished not to show us the image of the world in our minds, the entire universe would disappear for us, and we could never again make contact with it.

Faced with such facts, one must conclude that the only absolute being is God, Who encompasses everything in the heavens and the Earth:

What! Are they in doubt about the meeting with their Lord? What! Does He not encompass all things! (Qur'an, 41: 54)

Both East and West belong to God, so wherever you turn, the Face of God is there. God is All-Encompassing, All-Knowing. (Qur'an, 2: 115)

What is in the heavens and in the Earth belongs to God. God encompasses all things. (Qur'an, 4: 126)

When We said to you, "Surely your Lord encompasses the people with His knowledge"... (Qur'an, 17: 60)

... His Footstool encompasses the heavens and the Earth and their preservation does not tire Him. He is the Most High, the Magnificent. (Qur'an, 2: 255)

God's knowledge and ability surrounds us from the front and back, from right and left—that is to say, He encompasses us completely. He observes us everywhere, at every moment. He holds absolute control over us, from inside and outside. He, the Owner of infinite might, is closer to us than our own jugular veins.

Conclusion

It is of the utmost importance to understand correctly the secret beyond matter explained in this chapter. **Mountains, plains, flowers, people, seas—briefly everything we see and everything that God informs us in the Qur'an that exists and that He created out of nothing is created and does indeed exist.** However, people cannot see, feel or hear the real nature of these beings

HARUN YAHYA

through their sense organs. What they see and feel are only their copies that appear in their brains. This is a scientific fact taught at all schools of medicine. The same applies to the book you are reading now; you can not see nor touch the real nature of it. The light coming from the original book is converted by some cells in your eyes into electrical signals, which are then conveyed to the visual center in the back of your brain. This is where the view of this book is created. In other words, you are not reading a book which is before your eyes through your eyes; in fact, this book is created in the visual center in the back of your brain. The book you are reading right now is a "copy of the book" within your brain. The original book is seen by God.

It should be remembered, however, that the fact that the matter is an illusion formed in our brains does not "reject" the matter, but provides us information about the real nature of the matter: that no person can have connection with its original. Moreover, the matter outside is seen not just by us, but by other beings too. The angels God delegated to be watchers witness this world as well:

And the two recording angels are recording, sitting on the right and on the left. He does not utter a single word, without a watcher by him, pen in hand! (Qur'an, 50: 17-18)

Most importantly, God sees everything. He created this world with all its details and sees it in all its states. As He informs us in the Qur'an:

... Heed God and know that God sees what you do. (Qur'an, 2: 233)

Say: "God is a sufficient witness between me and you. He is certainly aware of and sees His servants." (Qur'an, 17: 96)

It must not be forgotten that God keeps the records of everything in the book called Lawh Mahfuz (Preserved Tablet). Even if we don't see all things, they are in the Lawh Mahfuz. God reveals that He keeps everything's record in the "Mother of the Book" called Lawh Mahfuz with the following verses:

It is in the Source Book with Us, high-exalted, full of wisdom. (Qur'an, 43: 4)

... We possess an all-preserving Book. (Qur'an, 50: 4)

Certainly there is no hidden thing in either heaven or Earth which is not in a Clear Book. (Qur'an, 27: 75)

THE DECEPTION OF EVOLUTION



arwinism, in other words the theory of evolution, was put forward with the aim of denying the fact of creation, but is in truth nothing but failed, unscientific nonsense. This theory, which claims that life emerged by chance from inanimate matter, was invalidated by the scientific evidence of clear "design" in the universe and in living things. In this way, science confirmed the fact that God created the universe and the living things in it. The propaganda carried out today in order to keep the theory of evolution alive is based solely on the distortion of the scientific facts, biased interpretation, and lies and falsehoods disguised as science.

Yet this propaganda cannot conceal the truth. The fact that the theory of evolution is the greatest deception in the history of science has been expressed more and more in the scientific world over the last 20-30 years. Research carried out after the 1980s in particular has revealed that the claims of Darwinism are totally unfounded, something that has been stated by a large number of scientists. In the United States in particular, many scientists from such different fields as biology, biochemistry and paleontology recognize the invalidity of Darwinism and employ the concept of intelligent design to account for the origin of life. This "intelligent design" is a scientific expression of the fact that God created all living things.

We have examined the collapse of the theory of evolution and the proofs of creation in great scientific detail in many of our works, and are still continuing to do so. Given the enormous importance of this subject, it will be of great benefit to summarize it here.

The Scientific Collapse of Darwinism

Although this doctrine goes back as far as ancient Greece, the theory of evolution was advanced extensively in the nineteenth century. The most important development that made it the top topic of the world of science was Charles Darwin's *The Origin of Species*, published in 1859. In this book, he denied that God created different living species on Earth separately, for he claimed that all living beings had a common ancestor and had diversified over time through small changes. Darwin's theory was not based on any concrete scientific finding; as he also accepted, it was just an "assumption." Moreover,

as Darwin confessed in the long chapter of his book titled "Difficulties on Theory," the theory failed in the face of many critical questions.

Darwin invested all of his hopes in new scientific discoveries, which he expected to solve these difficulties. However, contrary to his expectations, scientific findings expanded the dimensions of these difficulties. The defeat of Darwinism in the face of science can be reviewed under three basic topics:

- 1) The theory cannot explain how life originated on Earth.
- 2) No scientific finding shows that the "evolutionary mechanisms" proposed by the theory have any evolutionary power at all.
- 3) The fossil record proves the exact opposite of what the theory suggests.

In this section, we will examine these three basic points in general outlines:

The First Insurmountable Step:

The Origin of Life

The theory of evolution posits that all living species evolved from a single living cell that emerged on the primitive Earth 3.8 billion years ago. How a single cell could generate millions of complex living species and, if such an evolution really occurred, why traces of it cannot be observed in the fossil record are some of the questions that the theory cannot answer. However, first and foremost, we need to ask: How did this "first cell" originate?

Since the theory of evolution denies creation and any kind of supernatural intervention, it maintains that the "first cell" originated coincidentally within the laws of nature, without any design, plan or arrangement. According to the theory, inanimate matter must have produced a living cell as a result of coincidences. Such a claim, however, is inconsistent with the most unassailable rules of biology.

"Life Comes from Life"

In his book, Darwin never referred to the origin of life. The primitive understanding of science in his time rested on the assumption that living beings had a very simple structure. Since medieval times, spontaneous generation, which asserts that non-living materials came together to form living organisms, had been widely accepted. It was commonly believed that insects came into being from food leftovers, and mice from wheat. Interesting experiments were conducted to prove this theory. Some wheat was placed on a dirty piece

MIRACLE IN THE EYE

of cloth, and it was believed that mice would originate from it after a while.

Similarly, maggots developing in rotting meat was assumed to be evidence of spontaneous generation. However, it was later understood that worms did not appear on meat spontaneously, but were carried there by flies in the form of larvae, invisible to the naked eye.

Even when Darwin wrote *The Origin of Species*, the belief that bacteria could come into existence from non-living matter was widely accepted in the world of science.

However, five years after the publication of Darwin's book, Louis Pasteur announced his results after long studies and experiments, that disproved spontaneous generation, a cornerstone of Darwin's theory. In his triumphal lecture at the Sorbonne in 1864, Pasteur said: "Never will the doctrine of spontaneous generation recover from the mortal blow struck by this simple experiment."⁵⁴

For a long time, advocates of the theory of evolution resisted these findings. However, as the development of science unraveled the complex structure of the cell of a living being, the idea that life could come into being coincidentally faced an even greater impasse.

Inconclusive Efforts of the Twentieth Century

The first evolutionist who took up the subject of the origin of life in the twentieth century was the renowned Russian biologist Alexander Oparin. With various theses he advanced in the 1930s, he tried to prove that a living cell could originate by coincidence. These studies, however, were doomed to failure, and Oparin had to make the following confession:

Unfortunately, however, the problem of the origin of the cell is perhaps the most obscure point in the whole study of the evolution of organisms.⁵⁵

Evolutionist followers of Oparin tried to carry out experiments to solve this problem. The best known experiment was carried out by the American chemist Stanley Miller in 1953. Combining the gases he alleged to have existed in the primordial Earth's atmosphere in an experiment set-up, and adding energy to the mixture, Miller synthesized several organic molecules (amino acids) present in the structure of proteins.

Barely a few years had passed before it was revealed that this experiment, which was then presented as an important step in the name of evolution, was invalid, for the atmosphere used in the experiment was very different from the real Earth conditions.⁵⁶

HARUN YAHYA

After a long silence, Miller confessed that the atmosphere medium he used was unrealistic.⁵⁷

All the evolutionists' efforts throughout the twentieth century to explain the origin of life ended in failure. The geochemist Jeffrey Bada, from the San Diego Scripps Institute accepts this fact in an article published in *Earth* magazine in 1998:

Today as we leave the twentieth century, we still face the biggest unsolved problem that we had when we entered the twentieth century: How did life originate on Earth?⁵⁸

The Complex Structure of Life

The primary reason why the theory of evolution ended up in such a great impasse regarding the origin of life is that even those living organisms deemed to be the simplest have incredibly complex structures. The cell of a living thing is more complex than all of our man-made technological products. Today, even in the most developed laboratories of the world, a living cell cannot be produced by bringing organic chemicals together.

The conditions required for the formation of a cell are too great in quantity to be explained away by coincidences. The probability of proteins, the building blocks of a cell, being synthesized coincidentally, is 1 in 10^{950} for an average protein made up of 500 amino acids. In mathematics, a probability smaller than 1 over 10^{50} is considered to be impossible in practical terms.

The DNA molecule, which is located in the nucleus of a cell and which stores genetic information, is an incredible databank. If the information coded in DNA were written down, it would make a giant library consisting of an estimated 900 volumes of encyclopedias consisting of 500 pages each.

A very interesting dilemma emerges at this point: DNA can replicate itself only with the help of some specialized proteins (enzymes). However, the synthesis of these enzymes can be realized only by the information coded in DNA. As they both depend on each other, they have to exist at the same time for replication. This brings the scenario that life originated by itself to a deadlock. Prof. Leslie Orgel, an evolutionist of repute from the University of San Diego, California, confesses this fact in the September 1994 issue of the *Scientific American* magazine:

It is extremely improbable that proteins and nucleic acids, both of which are structurally complex, arose spontaneously in the same place

MIRACLE IN THE EYE

at the same time. Yet it also seems impossible to have one without the other. And so, at first glance, one might have to conclude that life could never, in fact, have originated by chemical means.⁵⁹

No doubt, if it is impossible for life to have originated from natural causes, then it has to be accepted that life was "created" in a supernatural way. This fact explicitly invalidates the theory of evolution, whose main purpose is to deny creation.

Imaginary Mechanism of Evolution

The second important point that negates Darwin's theory is that both concepts put forward by the theory as "evolutionary mechanisms" were understood to have, in reality, no evolutionary power.

Darwin based his evolution allegation entirely on the mechanism of "natural selection." The importance he placed on this mechanism was evident in the name of his book: *The Origin of Species, By Means of Natural Selection...*

Natural selection holds that those living things that are stronger and more suited to the natural conditions of their habitats will survive in the struggle for life. For example, in a deer herd under the threat of attack by wild animals, those that can run faster will survive. Therefore, the deer herd will be comprised of faster and stronger individuals. However, unquestionably, this mechanism will not cause deer to evolve and transform themselves into another living species, for instance, horses.

Therefore, the mechanism of natural selection has no evolutionary power. Darwin was also aware of this fact and had to state this in his book *The Origin of Species*:

Natural selection can do nothing until favourable individual differences or variations occur.⁶⁰

Lamarck's Impact

So, how could these "favorable variations" occur? Darwin tried to answer this question from the standpoint of the primitive understanding of science at that time. According to the French biologist Chevalier de Lamarck (1744-1829), who lived before Darwin, living creatures passed on the traits they acquired during their lifetime to the next generation. He asserted that these traits, which accumulated from one generation to another, caused new species to be formed.

For instance, he claimed that giraffes evolved from antelopes; as they struggled to eat the leaves of high trees, their necks were extended from generation to generation.

Darwin also gave similar examples. In his book *The Origin of Species*, for instance, he said that some bears going into water to find food transformed themselves into whales over time.⁶¹

However, the laws of inheritance discovered by Gregor Mendel (1822-84) and verified by the science of genetics, which flourished in the twentieth century, utterly demolished the legend that acquired traits were passed on to subsequent generations. Thus, natural selection fell out of favor as an evolutionary mechanism.

Neo-Darwinism and Mutations

In order to find a solution, Darwinists advanced the "Modern Synthetic Theory," or as it is more commonly known, Neo-Darwinism, at the end of the 1930s. Neo-Darwinism added mutations, which are distortions formed in the genes of living beings due to such external factors as radiation or replication errors, as the "cause of favorable variations" in addition to natural mutation.

Today, the model that stands for evolution in the world is Neo-Darwinism. The theory maintains that millions of living beings formed as a result of a process whereby numerous complex organs of these organisms (e.g., ears, eyes, lungs, and wings) underwent "mutations," that is, genetic disorders. Yet, there is an outright scientific fact that totally undermines this theory: Mutations do not cause living beings to develop; on the contrary, they are always harmful.

The reason for this is very simple: DNA has a very complex structure, and random effects can only harm it. The American geneticist B. G. Ranganathan explains this as follows:

First, genuine mutations are very rare in nature. Secondly, most mutations are harmful since they are random, rather than orderly changes in the structure of genes; any random change in a highly ordered system will be for the worse, not for the better. For example, if an earthquake were to shake a highly ordered structure such as a building, there would be a random change in the framework of the building which, in all probability, would not be an improvement.⁶²

Not surprisingly, no mutation example, which is useful, that is, which is observed to develop the genetic code, has been observed so far. All mutations

MIRACLE IN THE EYE

have proved to be harmful. It was understood that mutation, which is presented as an "evolutionary mechanism," is actually a genetic occurrence that harms living things, and leaves them disabled. (The most common effect of mutation on human beings is cancer.) Of course, a destructive mechanism cannot be an "evolutionary mechanism." Natural selection, on the other hand, "can do nothing by itself," as Darwin also accepted. This fact shows us that there is no "evolutionary mechanism" in nature. Since no evolutionary mechanism exists, no such any imaginary process called "evolution" could have taken place.

The Fossil Record: No Sign of Intermediate Forms

The clearest evidence that the scenario suggested by the theory of evolution did not take place is the fossil record.

According to this theory, every living species has sprung from a predecessor. A previously existing species turned into something else over time and all species have come into being in this way. In other words, this transformation proceeds gradually over millions of years.

Had this been the case, numerous intermediary species should have existed and lived within this long transformation period.

For instance, some half-fish/half-reptiles should have lived in the past which had acquired some reptilian traits in addition to the fish traits they already had. Or there should have existed some reptile-birds, which acquired some bird traits in addition to the reptilian traits they already had. Since these would be in a transitional phase, they should be disabled, defective, crippled living beings. Evolutionists refer to these imaginary creatures, which they believe to have lived in the past, as "transitional forms."

If such animals ever really existed, there should be millions and even billions of them in number and variety. More importantly, the remains of these strange creatures should be present in the fossil record. In *The Origin of Species*, Darwin explained:

If my theory be true, numberless intermediate varieties, linking most closely all of the species of the same group together must assuredly have existed... Consequently, evidence of their former existence could be found only amongst fossil remains.⁶³

Darwin's Hopes Shattered

However, although evolutionists have been making strenuous efforts to

HARUN YAHYA

find fossils since the middle of the nineteenth century all over the world, no transitional forms have yet been uncovered. All of the fossils, contrary to the evolutionists' expectations, show that life appeared on Earth all of a sudden and fully-formed.

One famous British paleontologist, Derek V. Ager, admits this fact, even though he is an evolutionist:

The point emerges that if we examine the fossil record in detail, whether at the level of orders or of species, we find—over and over again—not gradual evolution, but the sudden explosion of one group at the expense of another.⁶⁴

This means that in the fossil record, all living species suddenly emerge as fully formed, without any intermediate forms in between. This is just the opposite of Darwin's assumptions. Also, this is very strong evidence that all living things are created. The only explanation of a living species emerging suddenly and complete in every detail without any evolutionary ancestor is that it was created. This fact is admitted also by the widely known evolutionist biologist Douglas Futuyma:

Creation and evolution, between them, exhaust the possible explanations for the origin of living things. Organisms either appeared on the earth fully developed or they did not. If they did not, they must have developed from pre-existing species by some process of modification. If they did appear in a fully developed state, they must indeed have been created by some omnipotent intelligence.⁶⁵

Fossils show that living beings emerged fully developed and in a perfect state on the Earth. That means that "the origin of species," contrary to Darwin's supposition, is not evolution, but creation.

The Tale of Human Evolution

The subject most often brought up by advocates of the theory of evolution is the subject of the origin of man. The Darwinist claim holds that modern man evolved from ape-like creatures. During this alleged evolutionary process, which is supposed to have started 4-5 million years ago, some "transitional forms" between modern man and his ancestors are supposed to have existed. According to this completely imaginary scenario, four basic "categories" are listed:

MIRACLE IN THE EYE

1. *Australopithecus*
2. *Homo habilis*
3. *Homo erectus*
4. *Homo sapiens*

Evolutionists call man's so-called first ape-like ancestors *Australopithecus*, which means "South African ape." These living beings are actually nothing but an old ape species that has become extinct. Extensive research done on various *Australopithecus* specimens by two world famous anatomists from England and the USA, namely, Lord Solly Zuckerman and Prof. Charles Oxnard, shows that these apes belonged to an ordinary ape species that became extinct and bore no resemblance to humans.⁶⁶

Evolutionists classify the next stage of human evolution as "homo," that is "man." According to their claim, the living beings in the *Homo* series are more developed than *Australopithecus*. Evolutionists devise a fanciful evolution scheme by arranging different fossils of these creatures in a particular order. This scheme is imaginary because it has never been proved that there is an evolutionary relation between these different classes. Ernst Mayr, one of the twentieth century's most important evolutionists, contends in his book *One Long Argument* that "particularly historical [puzzles] such as the origin of life or of *Homo sapiens*, are extremely difficult and may even resist a final, satisfying explanation."⁶⁷

By outlining the link chain as *Australopithecus* > *Homo habilis* > *Homo erectus* > *Homo sapiens*, evolutionists imply that each of these species is one another's ancestor. However, recent findings of paleoanthropologists have revealed that *Australopithecus*, *Homo habilis*, and *Homo erectus* lived at different parts of the world at the same time.⁶⁸

Moreover, a certain segment of humans classified as *Homo erectus* have lived up until very modern times. *Homo sapiens neanderthalensis* and *Homo sapiens sapiens* (modern man) co-existed in the same region.⁶⁹

This situation apparently indicates the invalidity of the claim that they are ancestors of one another. Stephen Jay Gould explained this deadlock of the theory of evolution, although he was himself one of the leading advocates of evolution in the twentieth century:

What has become of our ladder if there are three coexisting lineages of hominids (*A. africanus*, the robust australopithecines, and *H. habilis*), none clearly derived from another? Moreover, none of the three display any evolutionary trends during their tenure on earth.⁷⁰

Put briefly, the scenario of human evolution, which is "upheld" with the help of various drawings of some "half ape, half human" creatures appearing in the media and course books, that is, frankly, by means of propaganda, is nothing but a tale with no scientific foundation.

Lord Solly Zuckerman, one of the most famous and respected scientists in the U.K., who carried out research on this subject for years and studied *Australopithecus* fossils for 15 years, finally concluded, despite being an evolutionist himself, that there is, in fact, no such family tree branching out from ape-like creatures to man.

Zuckerman also made an interesting "spectrum of science" ranging from those he considered scientific to those he considered unscientific. According to Zuckerman's spectrum, the most "scientific"—that is, depending on concrete data—fields of science are chemistry and physics. After them come the biological sciences and then the social sciences. At the far end of the spectrum, which is the part considered to be most "unscientific," are "extra-sensory perception"—concepts such as telepathy and sixth sense—and finally "human evolution." Zuckerman explains his reasoning:

We then move right off the register of objective truth into those fields of presumed biological science, like extrasensory perception or the interpretation of man's fossil history, where to the faithful [evolutionist] anything is possible—and where the ardent believer [in evolution] is sometimes able to believe several contradictory things at the same time.⁷¹

The tale of human evolution boils down to nothing but the prejudiced interpretations of some fossils unearthed by certain people, who blindly adhere to their theory.

Darwinian Formula!

Besides all the technical evidence we have dealt with so far, let us now for once, examine what kind of a superstition the evolutionists have with an example so simple as to be understood even by children:

The theory of evolution asserts that life is formed by chance. According to this claim, lifeless and unconscious atoms came together to form the cell and then they somehow formed other living things, including man. Let us think about that. When we bring together the elements that are the building-blocks of life such as carbon, phosphorus, nitrogen and potassium, only a heap is formed. No matter what treatments it undergoes, this atomic heap cannot form even a

MIRACLE IN THE EYE

single living being. If you like, let us formulate an "experiment" on this subject and let us examine on the behalf of evolutionists what they really claim without pronouncing loudly under the name "Darwinian formula":

Let evolutionists put plenty of materials present in the composition of living things such as phosphorus, nitrogen, carbon, oxygen, iron, and magnesium into big barrels. Moreover, let them add in these barrels any material that does not exist under normal conditions, but they think as necessary. Let them add in this mixture as many amino acids and as many proteins—a single one of which has a formation probability of 10^{-950} —as they like. Let them expose these mixtures to as much heat and moisture as they like. Let them stir these with whatever technologically developed device they like. Let them put the foremost scientists beside these barrels. Let these experts wait in turn beside these barrels for billions, and even trillions of years. Let them be free to use all kinds of conditions they believe to be necessary for a human's formation. No matter what they do, they cannot produce from these barrels a human, say a professor that examines his cell structure under the electron microscope. They cannot produce giraffes, lions, bees, canaries, horses, dolphins, roses, orchids, lilies, carnations, bananas, oranges, apples, dates, tomatoes, melons, watermelons, figs, olives, grapes, peaches, peafowls, pheasants, multicolored butterflies, or millions of other living beings such as these. Indeed, they could not obtain even a single cell of any one of them.

Briefly, unconscious atoms cannot form the cell by coming together. They cannot take a new decision and divide this cell into two, then take other decisions and create the professors who first invent the electron microscope and then examine their own cell structure under that microscope. Matter is an unconscious, lifeless heap, and it comes to life with God's superior creation.

The theory of evolution, which claims the opposite, is a total fallacy completely contrary to reason. Thinking even a little bit on the claims of evolutionists discloses this reality, just as in the above example.

Technology in the Eye and the Ear

Another subject that remains unanswered by evolutionary theory is the excellent quality of perception in the eye and the ear.

Before passing on to the subject of the eye, let us briefly answer the question of how we see. Light rays coming from an object fall oppositely on the eye's retina. Here, these light rays are transmitted into electric signals by cells and

HARUN YAHYA

reach a tiny spot at the back of the brain, the "center of vision." These electric signals are perceived in this center as an image after a series of processes. With this technical background, let us do some thinking.

The brain is insulated from light. That means that its inside is completely dark, and that no light reaches the place where it is located. Thus, the "center of vision" is never touched by light and may even be the darkest place you have ever known. However, you observe a luminous, bright world in this pitch darkness.

The image formed in the eye is so sharp and distinct that even the technology of the twentieth century has not been able to attain it. For instance, look at the book you are reading, your hands with which you are holding it, and then lift your head and look around you. Have you ever seen such a sharp and distinct image as this one at any other place? Even the most developed television screen produced by the greatest television producer in the world cannot provide such a sharp image for you. This is a three-dimensional, colored, and extremely sharp image. For more than 100 years, thousands of engineers have been trying to achieve this sharpness. Factories, huge premises were established, much research has been done, plans and designs have been made for this purpose. Again, look at a TV screen and the book you hold in your hands. You will see that there is a big difference in sharpness and distinction. Moreover, the TV screen shows you a two-dimensional image, whereas with your eyes, you watch a three-dimensional perspective with depth.

For many years, tens of thousands of engineers have tried to make a three-dimensional TV and achieve the vision quality of the eye. Yes, they have made a three-dimensional television system, but it is not possible to watch it without putting on special 3-D glasses; moreover, it is only an artificial three-dimension. The background is more blurred, the foreground appears like a paper setting. Never has it been possible to produce a sharp and distinct vision like that of the eye. In both the camera and the television, there is a loss of image quality.

Evolutionists claim that the mechanism producing this sharp and distinct image has been formed by chance. Now, if somebody told you that the television in your room was formed as a result of chance, that all of its atoms just happened to come together and make up this device that produces an image, what would you think? How can atoms do what thousands of people cannot?

If a device producing a more primitive image than the eye could not have been formed by chance, then it is very evident that the eye and the image seen

MIRACLE IN THE EYE

by the eye could not have been formed by chance. The same situation applies to the ear. The outer ear picks up the available sounds by the auricle and directs them to the middle ear, the middle ear transmits the sound vibrations by intensifying them, and the inner ear sends these vibrations to the brain by translating them into electric signals. Just as with the eye, the act of hearing finalizes in the center of hearing in the brain.

The situation in the eye is also true for the ear. That is, the brain is insulated from sound just as it is from light. It does not let any sound in. Therefore, no matter how noisy is the outside, the inside of the brain is completely silent. Nevertheless, the sharpest sounds are perceived in the brain. In your completely silent brain, you listen to symphonies, and hear all of the noises in a crowded place. However, were the sound level in your brain measured by a precise device at that moment, complete silence would be found to be prevailing there.

As is the case with imagery, decades of effort have been spent in trying to generate and reproduce sound that is faithful to the original. The results of these efforts are sound recorders, high-fidelity systems, and systems for sensing sound. Despite all of this technology and the thousands of engineers and experts who have been working on this endeavor, no sound has yet been obtained that has the same sharpness and clarity as the sound perceived by the ear. Think of the highest-quality hi-fi systems produced by the largest company in the music industry. Even in these devices, when sound is recorded some of it is lost; or when you turn on a hi-fi you always hear a hissing sound before the music starts. However, the sounds that are the products of the human body's technology are extremely sharp and clear. A human ear never perceives a sound accompanied by a hissing sound or with atmospheric sounds as does a hi-fi; rather, it perceives sound exactly as it is, sharp and clear. This is the way it has been since the creation of man.

So far, no man-made visual or recording apparatus has been as sensitive and successful in perceiving sensory data as are the eye and the ear. However, as far as seeing and hearing are concerned, a far greater truth lies beyond all this.

To Whom Does the Consciousness that Sees and Hears within the Brain Belong?

Who watches an alluring world in the brain, listens to symphonies and the twittering of birds, and smells the rose?

The stimulations coming from a person's eyes, ears, and nose travel to the

brain as electro-chemical nerve impulses. In biology, physiology, and biochemistry books, you can find many details about how this image forms in the brain. However, you will never come across the most important fact: Who perceives these electro-chemical nerve impulses as images, sounds, odors, and sensory events in the brain? There is a consciousness in the brain that perceives all this without feeling any need for an eye, an ear, and a nose. To whom does this consciousness belong? Of course it does not belong to the nerves, the fat layer, and neurons comprising the brain. This is why Darwinist-materialists, who believe that everything is comprised of matter, cannot answer these questions.

For this consciousness is the spirit created by God, which needs neither the eye to watch the images nor the ear to hear the sounds. Furthermore, it does not need the brain to think.

Everyone who reads this explicit and scientific fact should ponder on Almighty God, and fear and seek refuge in Him, for He squeezes the entire universe in a pitch-dark place of a few cubic centimeters in a three-dimensional, colored, shadowy, and luminous form.

A Materialist Faith

The information we have presented so far shows us that the theory of evolution is incompatible with scientific findings. The theory's claim regarding the origin of life is inconsistent with science, the evolutionary mechanisms it proposes have no evolutionary power, and fossils demonstrate that the required intermediate forms have never existed. So, it certainly follows that the theory of evolution should be pushed aside as an unscientific idea. This is how many ideas, such as the Earth-centered universe model, have been taken out of the agenda of science throughout history.

However, the theory of evolution is kept on the agenda of science. Some people even try to represent criticisms directed against it as an "attack on science." Why?

The reason is that this theory is an indispensable dogmatic belief for some circles. These circles are blindly devoted to materialist philosophy and adopt Darwinism because it is the only materialist explanation that can be put forward to explain the workings of nature.

Interestingly enough, they also confess this fact from time to time. A well-known geneticist and an outspoken evolutionist, Richard C. Lewontin from Harvard University, confesses that he is "first and foremost a materialist and

MIRACLE IN THE EYE

then a scientist":

It is not that the methods and institutions of science somehow compel us accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our a priori adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, so we cannot allow a Divine Foot in the door.⁷²

These are explicit statements that Darwinism is a dogma kept alive just for the sake of adherence to materialism. This dogma maintains that there is no being save matter. Therefore, it argues that inanimate, unconscious matter created life. It insists that millions of different living species (e.g., birds, fish, giraffes, tigers, insects, trees, flowers, whales, and human beings) originated as a result of the interactions between matter such as pouring rain, lightning flashes, and so on, out of inanimate matter. This is a precept contrary both to reason and science. Yet Darwinists continue to defend it just so as "not to allow a Divine Foot in the door."

Anyone who does not look at the origin of living beings with a materialist prejudice will see this evident truth: All living beings are works of a Creator, Who is All-Powerful, All-Wise, and All-Knowing. This Creator is God, Who created the whole universe from non-existence, designed it in the most perfect form, and fashioned all living beings.

The Theory of Evolution:

The Most Potent Spell in the World

Anyone free of prejudice and the influence of any particular ideology, who uses only his or her reason and logic, will clearly understand that belief in the theory of evolution, which brings to mind the superstitions of societies with no knowledge of science or civilization, is quite impossible.

As explained above, those who believe in the theory of evolution think that a few atoms and molecules thrown into a huge vat could produce thinking, reasoning professors and university students; such scientists as Einstein and Galileo; such artists as Humphrey Bogart, Frank Sinatra and Luciano Pavarotti; as well as antelopes, lemon trees, and carnations. Moreover, as the scientists and professors who believe in this nonsense are educated people, it is quite justifi-

able to speak of this theory as "the most potent spell in history." Never before has any other belief or idea so taken away peoples' powers of reason, refused to allow them to think intelligently and logically and hidden the truth from them as if they had been blindfolded. This is an even worse and unbelievable blindness than the Egyptians worshipping the Sun God Ra, totem worship in some parts of Africa, the people of Saba worshipping the Sun, the tribe of Prophet Abraham (pbuh) worshipping idols they had made with their own hands, or the people of the Prophet Moses (pbuh) worshipping the Golden Calf.

In fact, God has pointed to this lack of reason in the Qur'an. In many verses, He reveals that some peoples' minds will be closed and that they will be powerless to see the truth. Some of these verses are as follows:

As for those who do not believe, it makes no difference to them whether you warn them or do not warn them, they will not believe. God has sealed up their hearts and hearing and over their eyes is a blindfold. They will have a terrible punishment. (Qur'an, 2: 6-7)

... They have hearts with which they do not understand. They have eyes with which they do not see. They have ears with which they do not hear. Such people are like cattle. No, they are even further astray! They are the unaware. (Qur'an, 7: 179)

Even if We opened up to them a door into heaven, and they spent the day ascending through it, they would only say: "Our eyesight is befuddled! Or rather we have been put under a spell!" (Qur'an, 15: 14-15)

Words cannot express just how astonishing it is that this spell should hold such a wide community in thrall, keep people from the truth, and not be broken for 150 years. It is understandable that one or a few people might believe in impossible scenarios and claims full of stupidity and illogicality. However, "magic" is the only possible explanation for people from all over the world believing that unconscious and lifeless atoms suddenly decided to come together and form a universe that functions with a flawless system of organization, discipline, reason, and consciousness; a planet named Earth with all of its features so perfectly suited to life; and living things full of countless complex systems.

In fact, the Qur'an relates the incident of Prophet Moses (pbuh) and Pharaoh to show that some people who support atheistic philosophies actually influence others by magic. When Pharaoh was told about the true religion, he told Moses (pbuh) to meet with his own magicians. When Moses (pbuh) did so, he told them to demonstrate their abilities first. The verses continue:

MIRACLE IN THE EYE

He said: "You throw." And when they threw, they cast a spell on the people's eyes and caused them to feel great fear of them. They produced an extremely powerful magic. (Qur'an, 7: 116)

As we have seen, Pharaoh's magicians were able to deceive everyone, apart from Moses (pbuh) and those who believed in him. However, his evidence broke the spell, or "swallowed up what they had forged," as the verse puts it.

We revealed to Moses, "Throw down your staff." And it immediately swallowed up what they had forged. So the Truth took place and what they did was shown to be false. (Qur'an, 7: 117-118)

As we can see, when people realized that a spell had been cast upon them and that what they saw was just an illusion, Pharaoh's magicians lost all credibility. In the present day too, unless those who, under the influence of a similar spell, believe in these ridiculous claims under their scientific disguise and spend their lives defending them, abandon their superstitious beliefs, they also will be humiliated when the full truth emerges and the spell is broken. In fact, world-renowned British writer and philosopher Malcolm Muggeridge, who was an atheist defending evolution for some 60 years, but who subsequently realized the truth, reveals the position in which the theory of evolution would find itself in the near future in these terms:

I myself am convinced that the theory of evolution, especially the extent to which it's been applied, will be one of the great jokes in the history books in the future. Posterity will marvel that so very flimsy and dubious an hypothesis could be accepted with the incredible credulity that it has.⁷³

That future is not far off: On the contrary, people will soon see that "chance" is not a deity, and will look back on the theory of evolution as the worst deceit and the most terrible spell in the world. That spell is already rapidly beginning to be lifted from the shoulders of people all over the world. Many people who see its true face are wondering with amazement how they could ever have been taken in by it.

**They said, "Glory be to You!
We have no knowledge except
what You have taught us. You are
the All-Knowing, the All-Wise."
(Qur'an, 2: 32)**

NOTES

1. Francis Darwin, *The Life and Letters of Charles Darwin, Volume II, From Charles Darwin to Asa Gray*, April 3rd, 1860
2. Jillyn Smith, *Senses and Sensibilities*, Wiley Science Edition, New York, 1989, p. 55
3. "Bell's Palsy," *Neurology Channel*, September 26, 2003;
www.neurologychannel.com/bellspalsy/treatment.shtml
4. Daniel Vaughan, MD, Taylor Asbury, MD, *General Ophthalmology*, translated by Unal Bengisu, LANGE Medical Publications, California, 8th edition, p. 144
5. "Drooping Eyelid (Ptosis)," Medical Content Reviewed by the Faculty of the Harvard Medical School, Health A to Z;
<http://www.intelihealth.com/IH/ih/IH/WSIHW000/9339/9845.html>
6. Daniel Vaughan, MD, Taylor Asbury, MD, *General Ophthalmology*, translated by Unal Bengisu, LANGE Medical Publications, California, 8th edition, p. 77-78
7. Jillyn Smith, *Senses and Sensibilities*, Wiley Science Edition, New York, 1989, p. 55
8. Arthur C. Guyton, *Textbook of Medical Physiology*, Harcourt International Edition, 10th edition, 2000, p. 583
9. Jillyn Smith, *Senses and Sensibilities*, Wiley Science Edition, New York, 1989, p. 62
10. *Ibid.*, p. 63
11. Arthur C. Guyton, *Textbook of Medical Physiology*, Harcourt International Edition, 10th edition, 2000, p. 573-574
12. "Albinism," March 1, 2002;
<http://www.wcs.edu/phs/academics/faculty/cousineau/publish/Albinism/Albinism.htm>
13. Meliha Terzioğlu, *Fizyoloji Ders Kitabı* (Textbook of Physiology), vol. 1, Cerrahpasa Tıp Fakültesi Yayınları, İstanbul, p. 492
14. "The whirling dance of Working Memory," Bernard J. Baars, *Science and Consciousness Review*, August 2002;
<http://psych.pomona.edu/scr/news/articles/20020803.html>
15. Arthur C. Guyton, *Textbook of Medical Physiology*, Harcourt International Edition, 10th edition, 2000, p. 570
16. "Disturbed Vision," Dr. A. Vincent Thamburaj;
<http://www.thamburaj.com/disturbedvision.htm>
17. John Horgan, *The Undiscovered Mind: How the Brain Defies Explanation*, [1999], Phoenix, London, 2000, p. 23;
<http://members.iinet.net.au/~sejones/cequc206.html>
18. Meliha Terzioğlu, *Fizyoloji Ders Kitabı* (Textbook of Physiology), vol. 1, Cerrahpasa Tıp Fakültesi Yayınları, İstanbul, p. 494
19. Meliha Terzioğlu, *Fizyoloji Ders Kitabı* (Textbook of Physiology), Volume I, Cerrahpasa Tıp Fakültesi Yayınları, İstanbul, p. 494
20. Anthony Smith, *İnsan Beyni ve Yasami, İnkılap Kitabevi*, İstanbul, p. 227
21. *Ibid.*, p. 224
22. Anthony Smith, *İnsan Beyni ve Yasami, İnkılap Kitabevi*, İstanbul, p. 227
23. <http://www.mercksource.com>
24. Engin Korur, "Gözlerin ve Kanatların Sirri" (The Mystery of the Eyes and the Wings), *Bilim ve Teknik* (Science and Technology Journal), no. 203, October 1984, p. 25
25. "Were you right?," Oxford University Museum of Natural History Timescales;
<http://www.oum.ox.ac.uk/children/fossils/juoceto.htm>
26. Prof. Dr. Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, 1984, p. 16
27. Encarta Reference Library 2003. 1993-2002 Microsoft Corporation
28. Prof. Dr. Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, 1984, p. 475
29. *Ibid.*, p. 523
30. Frank Salisburry, "Doubt about the modern synthetic theory of Evolution," *American Biology Teacher*, September 1971, p. 338
31. Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 189
32. Prof. Dr. Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, 1984, p. 16
33. "Your Baby's Developing Sight,"
http://www.preventblindness.org/children/baby_developing.html
34. "The speed of human sight, second champ migrant, how terns fly farther," April Holladay, *USA TODAY*, January 18, 2003
35. Niko Tinbergen, *Animal Behavior*, Life Nature Library-Time Life Books, Hong Kong, 2nd edition, 1980, p. 38
36. *Ibid.*, p. 13
37. "The Dragonfly," Norma Jean Weeks, Miami Valley Water Garden Society;
<http://www.mvws.org.dragonflies.htm>
38. "OWL HOUSES: Providing houses for cav-

- ity-nesting owls,"
<http://www.coveside.com/merchant/owls.html>
39. <http://medfmt.8k.com/mf/eye.html>
 40. "Structure & Anatomy,"
<http://peabody.vanderbilt.edu/projects/fundedsft/eagle/stru.htm>
 41. "Animal Eyes," <http://www.astc.org/exhibitions/eyes/texteyes.htm>; "Vision: An In-Depth Look at Eagle Eyes,"
<http://www.learner.org/jnorth/tm/eagle/VisionA.html>
 42. Tony Feddon, *Animal Vision*, BLA Publishing Ltd., New York, 1988, p. 25
 43. "The Zebra-Spider in 3D," Wim van Egmond, *Micscape Magazine*;
<http://www.microscopy-uk.org.uk/mag/indexmag.html>?<http://www.microscopy-uk.org.uk/mag/artmay00/zebra.html>
 44. "The Sensory World of Fishes,"
<http://www.csuchico.edu/~pmaslin/ichthy/Snsry.html>
 45. "Seeing in Water, Seeing in Air,"
<http://www.foothill.net/~malamud/web/aquatic/light.html>
 46. "Turtles That Went To Sea," Flotsam and Jetsam A Newsletter for Massachusetts Marine Educators, Fall and Summer 2002, Volume 31, no. 1; http://www.massmarineeducators.org/journal/f_j_summer-fall2002.pdf
 47. Tony Feddon, *Animal Vision*, BLA Publishing Ltd., New York, 1988, p. 40-41
 48. "Chameleons Head," <http://freespace.virgin.net/chameleon.hh/head.htm>
 49. "Chapter 6, Vision I: The Eye,"
<http://www.utsc.utoronto.ca/~milgram/nro/c64/vision1.htm>
 50. Orhan Hancerlioglu, *Dusunce Tarihi* (The History of Thought), (Istanbul: Remzi Bookstore, 6th edition, 1995) p. 447.
 51. John Gribbin, *In the Search of the Big Bang*; Taşkın Tuna, *Uzayın Otesi* (Far Beyond the Universe), p. 194
 52. *Treaties Concerning the Principle of Human Knowledge, 1710, Works of George Berkeley*, vol.1, ed. A. Fraser, Oxford, 1871
 53. Macit Gökberk, *Felsefe Tarihi* (History of Philosophy), p. 263
 54. Sidney Fox, Klaus Dose, *Molecular Evolution and The Origin of Life*, W.H. Freeman and Company, San Francisco, 1972, p. 4
 55. Alexander I. Oparin, *Origin of Life*, Dover Publications, New York, 1936, 1953 (reprint), p. 196
 56. "New Evidence on Evolution of Early Atmosphere and Life," *Bulletin of the American Meteorological Society*, vol 63, November 1982, p. 1328-1330
 57. Stanley Miller, *Molecular Evolution of Life: Current Status of the Prebiotic Synthesis of Small Molecules*, 1986, p. 7
 58. Jeffrey Bada, *Earth*, February 1998, p. 40
 59. Leslie E. Orgel, "The Origin of Life on Earth," *Scientific American*, vol. 271, October 1994, p. 78
 60. Charles Darwin, *The Origin of Species by Means of Natural Selection*, The Modern Library, New York, p. 127
 61. Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 184
 62. B. G. Ranganathan, *Origins?*, Pennsylvania: The Banner of Truth Trust, 1988, p. 7
 63. Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 179
 64. Derek A. Ager, "The Nature of the Fossil Record," *Proceedings of the British Geological Association*, vol 87, 1976, p. 133
 65. Douglas J. Futuyma, *Science on Trial*, Pantheon Books, New York, 1983. p. 197
 66. Solly Zuckerman, *Beyond The Ivory Tower*, Toplinger Publications, New York, 1970, pp. 75-14; Charles E. Oxnard, "The Place of Australopithecines in Human Evolution: Grounds for Doubt," *Nature*, vol 258, p. 389
 67. "Could science be brought to an end by scientists' belief that they have final answers or by society's reluctance to pay the bills?," *Scientific American*, December 1992, p. 20
 68. Alan Walker, *Science*, vol. 207, 7 March 1980, p. 1103; A. J. Kelso, *Physical Antropology*, 1st ed., J. B. Lipincott Co., New York, 1970, p. 221; M. D. Leakey, *Olduvai Gorge*, vol. 3, Cambridge University Press, Cambridge, 1971, p. 272
 69. Jeffrey Kluger, "Not So Extinct After All: The Primitive Homo Erectus May Have Survived Long Enough To Coexist With Modern Humans," *Time*, 23 December 1996
 70. S. J. Gould, *Natural History*, vol. 85, 1976, p. 30
 71. Solly Zuckerman, *Beyond The Ivory Tower*, p. 19
 72. Richard Lewontin, "The Demon-Haunted World," *The New York Review of Books*, 9 January, 1997, p. 28
 73. Malcolm Muggeridge, *The End of Christendom*, Grand Rapids: Eerdmans, 1980, p. 43