# SCIENCE AND FAITH

## ——A Letter To Intellectual Friends

(English Version)

# Cover Picture: Old Faithful Geyser of Yellowstone National Park

# Science And Faith (English Version)

by Wei Yan

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#### **FOREWORD**

This is a letter to one of my former classmates. In the early fifties he was one of the most politically progressive students in our class at the university. He had repeatedly criticized my religious faith in public meetings with very sharp words. I did not argue with him, because under that particular circumstance it would have been very impractical and unprofitable. And I still treated him sincerely afterwards. After graduation we were assigned to work at different places, and did not have any chance to meet again. We both experienced profound unfortunate changes. After I came to the USA he learned of my where-abouts indirectly. He wrote to me twice to express his regards, and to apologize for past criticisms he made to me. Now I feel compelled to talk about the Christian faith more clearly, both to him and to all my classmates as well, lest I should deeply regret keeping silent. Some of our classmates have already passed away, and I can never have any chance to talk with them again. Therefore. I squeezed as much time as I could out of my daily work to write this letter. I intend to make copies and send them to all my classmates and friends I can find. These classmates and friends are presently all high ranking intellectuals, possessing a high level of cultural and technical knowledge. Having lived most of their lives in the special social environment of China, they have some peculiarities in their ways of thinking. Therefore, I had to take this particular background into consideration when I wrote this letter. I had to make some proper emphasis.

Certain sisters and brothers in the Lord, having seen the rough draft of this letter, advised me to make some revisions so that it could be shared with other friends in similar state. Expurgations and revisions were made according to their advice, and some proper names have been omitted.

In this last era God will win many souls to Himself. We believe that God will win different kinds of people in different ways. I beg the Lord to bestow blessings on this rough letter and make it suitable to help many more intellectual friends to know the only true God, the Creator of the universe. This is my goal and I will be content with it.

In this letter some information is derived from books such as Israel—A Nation of Enigma, The Focus of History—The Middle East and The Great Dying. Herewith I want to express my gratitude to the authors of these books.

For since the creation of the world God's invisible qualities—— his eternal power and divine nature——have been clearly seen, being understood from what has been made, so that men are without excuse.——Romans 1:20 NIV.

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The heavens declare the glory of God; the skies proclaim the work of his hands.

—— Psalm 19:1 NIV.

The fear of the LORD is the beginning of knowledge.

---- Proverbs 1:7 NIV.

### Dear Brother,

In your recent letter you mentioned the divergent views in faith between us forty years ago when we were in Beijing. You apologized for criticizing me at that time. Such criticism was actually a result of that particular political circumstance. I didn't mind it at all. Nevertheless, at that time I really had no way to express all that I wanted to say. Now the situation has changed, and everything involved has changed also, so we can discuss this topic freely and objectively. Faith is the foundation of human life. It determines the direction of our present and eternal life. No one should take it lightly. What I would like to do now is to explain my humble views. Let us start our talk from science, since we both work in scientific fields and share a common language in this respect.

The most popular concept among current Chinese intellectuals is that science and religion are incompatible; therefore, to believe in God is superstitious and non-scientific. Of course, there are many superstitions among people, but real religious faith is quite another thing. These two should not be mentioned in the same breath. Moreover, we should by no means take all faith to be superstition. To think that science and religious faith (here referring to Christian faith) contradict each other, presuming science can deny the existence of God, is only a misconception. In other words, it is a superstition imposed upon science. The reason for this is very simple: the object of science and the method of scientific research are all materialistic. Without material, science can do nothing. But God is not material; He is the Creator of all material. As God is above all material, hence He is beyond the scope of scientific research. Therefore, no science has any effective means to investigate God. All scientific research must have suitable methods to realize its purpose; otherwise, it will achieve nothing. If you want to explore the universe, you must have powerful telescopes (optical or radio). If you want to research into the microstructure of material or micro-organisms, you need to have high powered microscopes (optical or electronic, or even electronic scanning).

If you want to investigate cardiovascular function, you need to have equipment such as stethoscope, sphygmomanometer, electrocardiograph, ultrasound scanner, optical fiber endoscope, and X-ray machine. What method then can scientists use, and what means can they apply to investigate God? Up to this day, science cannot even give a satisfactory explanation for the mystery of life or all the wonderful phenomena of the human body, let alone explain God! Such a topic as "The existence of God" is obviously beyond the scope of scientific research. Up to this very moment, there is not one single science which takes investigation of God as its goal. Therefore, this topic will never have an answer in science. In other words, science cannot directly prove the existence of God, and neither can it by any means disprove the existence of God. Therefore, on this topic for which science is entirely impotent, to say that science has denied God's existence is itself presumptuous and non-scientific. Those who hold this concept usually just echo what someone else has said, thinking that is the modern trend; not even one out of ten has thoroughly thought it over. If you seriously ask them, "Which science and how does it disprove the existence of God?" the majority of them do not know what to say at all. A few of them might give some answer reluctantly, but those answers are usually unreasonable.

#### SCIENCE AND RELIGIOUS FAITH

Since the late stage of the Qing dynasty, Chinese intellectuals, surprised by the strength of invading warships, overwhelming artillery attacks, and scientific and technological advancements of the west, tended to over-estimate the function of science, thinking that science was able to determine everything. Some even advocated slogans such as "science to save the country," and "science is omnipotent." These accounts were really exaggerated. Western scientists did not think that science was so marvelous and predominant, or use science to expel religion. Many famous scientists, especially those great pio-

neers of science, were pious Christians. The foundation of modern scientific development was actually established by Christian scholars. In a Gallop investigation of three hundred famous scientists of the last three hundred years, 38 persons were excluded because of the impossibility of finding out their faith; among the remaining 262 scientists, 20 of them (less than 8%) were atheists, while 242 of them (more than 92%) believed in God. The latter group included almost all of the great scientists who made enormous contributions to science, such as Faraday, Volta, Ohm, Ampere, Maxwell, Mondel, Pasteur, Boyle, Pascal, Dalton, Joule, Edison, Roentgen and the modern atomic specialists, Compton and Fermi.

Three hundrd years ago, Copernicus and Galileo were persecuted by the Catholic Church for believing that the earth and all the other planets were revolving around the sun. But they did not think that their scientific works went against their religious faith. At that time the Catholic Church believed that the earth was the center of the universe, and that all other celestial bodies revolved around the earth. Therefore, they thought that the theory of these two men was a heresy to be eradicated. But the "Geocentric Theory" did not originate from the Bible. It was the concept of the ancient Greeks. The Catholic Church erred in mixing this up with Christianity. Recently, the Roman Catholic Church corrected this misstatement against Galileo. The Reformation initiated by Martin Luther broke down the autocracy of the Roman Catholic Church and paved the way for the development of science and art. The works of Copernicus and Galileo, prohibited by the Catholic Church, were respected and disseminated widely in countries where reformed Christianity was followed. The famous and highly respected Russian physiologist Pavlov was a devoted Christian also, even though the Soviet Government did its best to keep this secret from the public.

Newton and Einstein are the most typical examples among all scientists. Newton was the great tutor who laid down the foundation of classical physics; almost all of the modern sciences were developed on the foundation of his work. However, Newton devoted most of his energy to theological study. He considered science an instrument to prove the greatness of God's creative work. In his final days he was highly praised for his great scientific achievements, but he said humbly that his work, in contrast with the great creation of God, was just like a child occasionally picking up one or two beautiful shells from the seashore. Einstein, another great physicist, whose epoch-making contribution to modern physics was the Theory of Relativity, also believed in God. He said, "My religion consists of a humble admiration of the illuminant superior Spirit who reveals himself in the slight details we are able to perceive with our frail and feeble minds. That deeply emotional conviction of the presence of a superior reasoning power, which is revealed in the incomprehensible universe, forms my idea of God."(a) Newton and Einstein are the greatest scientists the world has ever known. They are bright stars that shine through all these ages. With respect to their achievements and contributions to scientific development, no one can be compared with them even now. But science did not lead them away from God. On the contrary, it deepened their reverence for God.

Considering these brilliant examples, it is very surprising that so many people still use science as an excuse to deny the existence of God. If science and religion were really as incompatible as fire and water, then the first one to deny the existence of God should have been Newton or Einstein. But the facts were just the opposite of this supposition. Why was that? Can it be that Newton and Einstein did not really know science, and only atheists can truly understand the essence of science? But how many atheistic scientists can be ranked up there with Newton and Einstein?

Needless to say, there certainly are some scientists who do not believe in God. But this is only because everybody has

his or her own preference, which has nothing to do with science. This does not mean that their scientific work could deny the existence of God, because this is absolutely impossible. First, logically speaking, it is much more difficult to deny the existence of something than to confirm it. For example, someone may announce that there is a very precious thing in the world called a pearl. To prove it, he just needs to show a single pearl. Even if he has no pearl on hand, he can still show some other reasonable evidence for it, such as a picture of a pearl, a pearl-producing shell, or a witness who has seen a pearl. Whether to believe or not, is one's own decision, and no one can force the issue. However, to deny the existence of pearls entirely would be extremely difficult. You would have to search all the lakes, seas, land, and every cubic inch of space all around the world to make certain that no pearl really existed. Putting aside the existence of pearls for a moment, such a search, speaking from a purely technical aspect, would be impossible. Any scientist, no matter how brilliant his achievements may be, has only limited knowledge and experience. The time and scope of his work are also limited. As a limited person, who cannot even count the number of his own hair follicles, how can he possibly determine that God, who created the universe and everything in it, does not exist? If a person could deny the existence of God, then he must be superior to, or at least equal to, God. But is this possible?

Second, the science of matter itself cannot absolutely prove or disprove the existence of God. I have read some arguments between atheists and Christian scholars. The Christian scholars might refer to various scientific facts to verify the wisdom of God's creation. But contrary to the expectation of most people, the arguments of atheists had nothing to do with science at all. They said that scientific fads come and go and are very much subject to change. You cannot guess what science will look like one hundred years from now. Therefore science is not reliable. The atheists said, "It seems very very risky to center an argument on something that relies heavily on these scientific theories." What they have said verifies the fact that science cannot

deny the existence of God. If atheists could directly deny the existence of God with some clear and definite scientific proofs, they would be more than happy to do so! Just because they cannot do this, they prefer to argue abstractly with words and ideas. The atheists said that the concept of God in Judaism, Christianity, and Islam (the origins of these three religions were correlated) is incoherent, and therefore unbelievable. And they said that all experiences with God are subjective and cannot be taken as objective evidence. Moreover, they said that in practical daily life we do not need to rely on God; without God, we can still live very well. But actually, none of these arguments is reliable. The concept of God in Judaism and Christianity is not incoherent at all, and the experiences with God are not merely subjective. It is only because of unbelief that atheists have no way to understand God's revelation in the Bible. This lack of faith causes them to turn a blind eye to abundant, objective facts related to the existence of God. It is easy for everybody to see the condition of life of those people without God right now: morals decay, people are flooded with lusts they cannot control, and the human personality deteriorates day by day. People do not live very well, but get worse and worse. Somebody asked, "Did you become atheists only because you could not see solid proof of God's existence?" They replied, "No." Of course. it is not because they have any positive evidence to verify atheism, either. They said the real meaning of atheism is just "lack of belief in God" and not "denial of God's existence." If people "believe" in something, they do need proof of it. But if it is only a matter of "not believing," then they really don't need any proof. So they do not need to pay attention to any proof at all. This is the statement of some atheists. In reality, these atheists simply do not acknowledge God. but cannot deny the existence of God. Strictly speaking, they are just a group of people who do not believe in God.

There is still another group of atheists who are not as elusive in their argument as those above. They announce absolutely that there is nothing in the universe besides matter, and so, of course, there will not be any god or spirit. But how can they be certain of this? Certainly they cannot give any proof, either. Ultimately, it is just a kind of philosophical concept which somewhat resembles religion, but is not as convincing as religious faith. Such a concept philosophically belongs to the realm of self-defeat. For instance, many people used to say, "there is no absolute Truth in the world; everything is just relative." This concept is self-defeating. Because if this concept is correct, then the concept itself will become an absolute truth, thus defeating itself. Materialism is also like this. If there is really nothing in the universe besides the material world, then man's knowledge will not be able to exceed the material realm; that is to say, outside the material realm man will know nothing. But if you know nothing, how can you know there is nothing besides the material world? So it is apparent that materialism is also self-defeating. None of self-defeating concepts can stand; therefore, materialism cannot stand either. "Material" does exist, but materialism means that "only the material exists." The word only is groundless.

It has been said that the emergence of religion was due to the underdeveloped knowledge of ancient people. People then could not understand natural phenomena correctly. When confronted with dreadful events such as raging floods, fierce fires, thunderstorms, earthquakes, mountain slides, roaring seas, volcanoes, and solar eclipses, they became terrified. Then they personified these phenomena, leading to the concept of gods and spirits, which gradually developed further into religious faith. Therefore, gods were made by men themselves. Now science is highly advanced, and men have thoroughly understood the essence of all these natural phenomena. As a result, the basis for the existence of gods is eliminated.

This statement reflects only the subjective view and concept of the modern atheists. It is not consistent with the historical facts, lacks solid proof, and reverses the cause and effect relationship. Many people worship things such as idols and other natural objects as gods, but actually they are not. This is just an improper recognition of God.

The reason for this mistake is obviously that they already have a concept of god, just as one must have a sensation first before he can have an illusion. Only the child who has lost his mother would mistakenly recognize some other woman as his mother. The reason for this improper recognition is that the child already had the image of his own mother in mind. If a child does not have any idea of his mother since babyhood, then he will never have this kind of improper recognition: moreover, he will never make up an image of a mother from nothing. Monkeys and other animals are also afraid of some phenomena such as thunder-bolts, fierce fires, or earthquakes, but why don't we ever see them displaying behaviors of worship? The reason is very simple: they have no concept of god at all. On the other hand, human beings have had the inclination to worship since ancient times. This has been revealed by various kinds of utensils used for sacrificial offerings found in human cultural remains. If there were no god and spirit in the world, mankind could not develop a concept of god or spirit. Let's imagine, if there were no light at all in the external world, could we have any concept of colors like green and red, white and black, or of landscapes and pictures? If there were no sound at all, could we have any concept of a piano, violin, bell, drum, or of language and music? We know that all the parasites that inhabit animal bodies, as well as water animals living in underground streams, have no visual sensation, or even no eyes at all, because there is no light in their living environment. So we can say that if there is no light and sound in the world, then we will have no eyes and ears, and there will be no concept of light and sound. Similarly, if there is no god and spirit at all, how can men develop the concept of god and spirit?

Some people might say, "Chinese people have developed the concept of dragon from nothing. After all, who has seen a real Chinese dragon?" However, the Chinese concept of dragon was not developed from nothing. In history, the earliest Chinese dragon was basically like a snake, with no horns or paws, only with a bigger head. Later on, a horse head, deer horns, fish fins and beard, and eagle

claws were added on, until it became what it looks like today. Without inspiration from these animals, people could not have developed such an image of the dragon.

According to the Bible, we know that ancient people did not worship idols; they worshipped the only true God. Just as men betrayed and strayed away from God, they also began to worship idols and every kind of false god. This happened with the Jews and also with the Chinese. The earliest concept of God with the Chinese people was "Heaven," which referred to the only supreme Dominator in the universe, without any specific image. This is very similar to the only true God mentioned in the Bible. Only later on did they begin to develop the concept of multiple gods and the worship of idols. Therefore, the worship of idols (including the worship of all natural objects) was not the beginning of real religious faith. On the contrary, it was a manifestation of the downfall of mankind and religious faith. The development of science only reveals the absurdity of idol worship, but has nothing to do with the existence of God. There are lots of scientific workers among Christians, and many are famous scientists. However, their scientific knowledge does not jeopardize their faithfulness to God, but on the contrary, strengthens it. Therefore, it is irrational to think that true understanding of natural phenomena will eliminate faith in God.

Science, even today, cannot explain all phenomena or solve all problems. From the authentic experiences of many, people realized that some intelligent beings superior to human beings really exist in the world. Just because of these undeniable facts, people realized the existence of God and of a spiritual realm. Not only is there God, but there are also demons (evil spirits). Mankind has been called "the most intelligent of all creatures." Nevertheless, there is a big limitation for human beings: man cannot predict the future. In science, there is a so-called "science of the future," or "the scientific foreseeing." However, it is limited to general conjecture about future possibilities according to the rules of material development. It is never involved in

details, and it is entirely incapable of dealing with special cases or accidental events. It is only a rough pre-estimation, not real prediction. For example, according to statistics on the average life expectancy of human populations and assuming advances in medical science, we can anticipate that most people in the next century will be able to live to about eighty years of age, and some may even live to one hundred years. However, as to the life-span of a particular person, or the predictions of the next century, such as whether there will be large scale atomic war or other crises which will endanger lots of human lives, no one can know anything for certain. A person cannot really predict what might happen to himself tomorrow or the day after. God and other spirits can accurately predict the future, including accidental incidents, but human beings cannot do that.

Now, let me take an example from my own experience. In the spring of 1931, a grandmother of a distant family in my native clan became mentally ill. But the symptoms were so different from usual mental disorders that even people in the countryside could distinguish them. People did not take it as madness, but named it "enchantedness" (which means being possessed by some evil spirit). This grandmother was a typical uneducated village woman who rarely contacted strangers. She had a meek temper and upright personality, and was wellrespected by people in the village. But she changed dramatically during her sickness. Her language and behavior became rough and fierce. Sometimes she said dirty things, and sometimes she talked about a lot of historical or current events. Many of the things she talked about were quite beyond her actual experiences and educational level. People were astonished. Her family members called for medical treatments from various doctors for her, but neither the traditional Chinese doctors nor the Western trained doctors could help. Since what she suffered from was not a regular disease, there was, of course, no response to any regular medication. She was very fearful of Christians, even those she never knew before. But without hesitation she cursed and beat a so-called "Christian," who had no real faith. I

recalled her behavior many years later when I studied psychiatry and could not interpret it in the light of any modern medical knowledge. For example, during her sickness she could casually talk about many private things of some unrelated residents in surrounding villages. This was obviously not what a normal person could do. What was even more incredible was that she could accurately predict the death of someone else.

At that time there was a business man named Su who was very famous in our area. This man had abundant properties in the countryside and kept a banking business in the city. He was also the chairman of the County Commercial Association. Of course, he had prominence and prosperity. Although he was not an honorable elder, no serious crime or charge of misconduct was known of him. One day during this grandmother's sickness, she suddenly said, "In spite of the fact that Mr. Su is so prosperous, as you see, he has only twelve more years of good luck left. After those twelve years disaster will befall him." I heard those words personally. Upon hearing these unreasonable words, others could only take them as crazy talk. Some time later she spontaneously recovered, and could not even remember what she had said during her illness. Six years later when the Sino-Japanese war broke out, the city was captured by Japanese troops. Mr. Su had to go back to his native village and lived there. quietly and peacefully, for many years until the spring of 1943. Then one night some people broke into his house and killed him. No one ever knew the exact cause. I immediately recollected what the distant grandmother had said when she was sick, and it had been exactly 12 years, just as she had said. It was really unbelievable. Please tell me, how can this be explained by science? Can scientists predict a matter of life and death like this? Real instances such as this one can only lead to one conclusion: some supernatural intelligent beings that are far beyond human capability really must exist. This kind of intelligence is either from God or from other spirits, there can be no other possibility. But both are beyond the capability of science and cannot

be denied by science.

The reason some people think that science can deny religion, of course, is not that science can directly disprove the existence of God, but rather that some scientific concepts are not consistent with records in the Bible. So those who believe in scientific concepts think that science has denied the Bible and is therefore indirectly denying God. The most obvious example is the argument about the origin of human beings. The Bible says God created man, but evolutionists say that man developed from apes. Those who believe in evolution would then think that the Bible was not believable, and further think that there was no God. Of course, there are still some people who deny God first, and then accept evolution.

At this point we should first understand that science and religion are two entirely different realms and should not be mingled together in discussion. The two should not be treated equally, and in addition, cannot replace each other. Science helps us to know more about the material world, including man himself, but the Bible helps us to know God. Science solves the problems between man and the material world, including the problems between men themselves, while the Bible solves the problems between man and God. As for the problems between man and the material world, the Bible rarely mentions them, because they are within the range of human intelligence to solve and do not need God's revelation. Therefore, one cannot take the Bible as a textbook of science. Conversely, one cannot use any scientific books to replace the Bible, because science cannot solve any problems besides material ones. Science makes human life more comfortable and convenient, but it also aggravates dwindling resources, creates pollution, and hastens the destruction of the environment. Science greatly strengthens the ability of human beings to massacre each other, and forces people to live fearfully under the shadow of atomic, chemical, and biological war. Science did not make the world safer and happier, but rather more dangerous and more dreadful. Science gives men more knowledge and power, but it cannot make men more

righteous and kindhearted. Science can give us new thoughts, but not new life. Therefore, science cannot satisfy the deep need in man's heart and spirit.

Mankind has gradually developed knowledge about the material world, and this knowledge needs continuous revision and correction. If it gets to the point that science cannot be revised any further, it means that scientific development has ended. The Bible, on the other hand, cannot be changed. But man's knowledge of the Bible has gradually deepened and increased with time. A great many of the Biblical words, especially the predictions about the future and historical records of ancient times, have not been understood very well until now. Certainly the Bible is the revelation of God, but it was written in human language according to man's comprehension level at the time when it was written. Otherwise it would not be understood by men and would be useless. Since most great developments of science have only occurred in the past century, and the last book of the Bible (Revelation) was written about two thousand years ago, it was both impossible and unnecessary for the Bible to use modern scientific language. If there seems to be some conflict between science and the Bible, this only means there is still something in our knowledge that is not quite right. Either our knowledge about the material world (science) is still not accurate enough, or our knowledge about the Bible (theology) is still not complete and precise. It by no means indicates that the Bible is incorrect; furthermore, no one can then say that God does not exist. Actually, the more a man knows about the objective material world, the more he will be surprised by the accuracy of the Biblical records, and the more he will believe that the words of the Bible are from God. Here are just a few examples.

#### Reliability of the Bible

(1) Various nations all over the world have their own ancient and erroneous concepts about the heaven and earth in which we live.

The ancient Chinese thought that "the heaven is round and the earth is square," and that the heaven and the earth were supported by posts and ropes (so-called "columns of heaven" and "cords of earth" in Chinese). The Asian Indians thought that the earth was carried on the back of a huge turtle, and the Western peoples thought that the earth was carried on the back of a giant; but it was never mentioned where the great turtle and the giant were anchored. Only in the Bible was it said that God "hung the earth upon nothing." This was written in the earliest book of the Bible (Job) about four thousand years ago. This statement came long before modern astronomy declared the Law of Universal Gravitational Force and the relationships between the earth and the solar system. Who could say anything like this?

(2) The Bible says, "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life, and man became a living being."(2) We know of about thirty elements in the human body. No matter whether they are trace elements or abundant ones, and no matter what kind of food they are directly derived from, their ultimate source is the earth. You would probably say, "Isn't the most important element in the human body, nitrogen, present chiefly in the air?" That's correct, but one should notice that the human body cannot utilize the nitrogen in its gaseous state. Nitrogen must be converted into solid or liquid compounds (components of the earth) before it can be utilized by plants and then by the human body. Others may ask, "Isn't the human body able to absorb oxygen directly in its gaseous state?" This is true. However, the oxygen absorbed by the human body in this way cannot be converted into body constituents, but is used to consume it; that is, the gaseous oxygen is used to oxidize and decompose the intrinsic body constituents to obtain energy to maintain life. The oxygen that composes the human body must be derived from solid foods and water. Therefore, to absorb gaseous oxygen is a characteristic which occurs only after man has been created as a "living being." Once life ends, there is no more need to do so, and respiration stops. What is left is

a body which has come from dust and will eventually return to dust. The chemical composition of this body is still the same as a living person; nevertheless, it is not a living person any more. The difference is "the breath of life." See how simple and accurate the Bible is! Who could know all this before modern biochemistry discovered the chemical compositions of the human body along with all their metabolic processes?

(3) Of the human cultural sciences, the most persuasive one is history. History is based on the facts of the past that no one can change. There are many prophecies in the Bible. Some of them have already been fulfilled, others are being fulfilled, and still others are yet to come. The fact that Biblical prophecies are fulfilled precisely is the most convincing indication that the Bible is reliable. There are many examples in the Bible.

Let's take one. In chapter 26 of the Book of Ezekiel there is a prophecy about the famous historic city of Tyre. Ezekiel was a prophet of Israel in the sixth century B.C.. At that time Tyre and Sidon were two large cities of the Phoenicians, located along the seashore which belongs to Lebanon today. At that time the Phoenicians assumed the monopoly position on the Mediterranean sea, and accumulated huge wealth through trade. The two cities were very prosperous, and at the same time, full of various evils. People in these two cities worshipped the obscene false god Baal, by which they defiled the pure faith of the Israelites; they also took pleasure in Israel's calamities. Both these things were detested by God. So Ezekiel said in a prophecy, "Therefore thus says the Lord God: Behold, I am against you, O Tyre, and will cause many nations to come up against you, as the sea causes its waves to come up. And they shall destroy the walls of Tyre, and break down her towers; I will also scrape her dust from her, and make her like a bare rock. It shall be a place for spreading nets in the midst of the sea,.....and you shall never be rebuilt, for I the Lord have spoken, says the Lord God."(3) Tyre was located on the east coast of the Mediterranean Sea, a very

good location and environment. Besides the main city on the seashore, Tyre also included an island which was less than one kilometer away from the seashore, with a city and walls built on it also. Three years after the prophecy Tyre was first attacked by the king of Babylon, Nebuchadnezzar. Because Tyre was backed by mountains on the east, faced the sea on the west, and had steep rocky cliffs on both the south and the north, it was easy to defend and difficult to attack. Nebuchadnezzar had attacked the city for thirteen years before he captured it. However, the inhabitants of Tyre had already transferred their wealth to the island city, so when Nebuchadnezzar captured the city on shore, he didn't gain much at all. Phoenicians were expert sailors, and by taking advantage of the island, continued to fight with all their effort. Unlike Tyre, Babylon was an inland country with no naval facilities, so Nebuchadnezzar could do nothing at sea. Filled with anger, he thoroughly destroyed the main city of Tyre which he had captured. After that he turned his troops southward to conquer Egypt. So the main city of Tyre on the seashore was destroyed, but the island city still stood firm and unaffected as a famous city for more than two hundred years.

With only Tyre's walls destroyed and her towers broken, but nothing else, it seemed that the prophecy of the Bible had not been completely fulfilled. And the description "scrape her dust" seemed impossible to fulfill, because conquerors usually capture wealth, people, and cattle; rarely will someone scrape the dust. However, by meticulous inspection of the Biblical description, "will cause many nations, ...as the sea causes its waves to come up," it is evident that the prophecy would not be fulfilled by just one event. In 300 B.C., Alexander the Great of Greece rose up. No other contemporary country of the known world could stand before his overwhelming troops. Finally his great army was like another big wave rushing over Tyre. Inhabitants of Tyre, relying on the natural barrier of the strait, fought fiercely one more time and refused to surrender. Alexander conquered the world chiefly by cavalry. When faced with the strait of

Tyre, his soldiers on horseback had no way to go across. Alexander angrily commanded that the strait be filled. So from the vast area around the ruins of the old city of Tyre all sand, soil, dirt, wood and stones, and all things that could be used to fill up the sea were scraped down to the bottom and poured into the strait. After seven months of strenuous labor, the strait was finally converted into a wide causeway leading to the island city of Tyre. After the capture of the island city, Alexander also ordered it to be thoroughly destroyed. Thus Tyre vanished completely and became a place without inhabitants. After years it became a desolate peninsula, and part of the original island sank below the sea level, making it impossible to recover. As for the old city area of Tyre, since all its debris was scraped away and only the rocky base was left, the flushing of rainfall made this area "a bare rock" and entirely useless. Finally it became "a place for spreading nets," and has been like that up to today. Thus the Biblical prophecy about Tyre, every single word of it, was completely fulfilled. To illustrate further, prophets also predicted tragedies about the ancient city of Sidon, but it was not predicted that Sidon would completely vanish, and "shall be no more." So although Sidon has undergone many more wars than Tyre, it still exists today. See how authoritative and accurate the Biblical prophecies are! Are there any other books published in the world that can precisely predict something that will happen after hundreds or thousands of years? Moreover, can any intelligent scientist or philosopher do something like that? Absolutely not! Because it is something beyond the scope of human wisdom.

(4) Right now the greatest miracle in the world, which fully illustrates that the Bible is true and reliable, is the history of the Jews (Israelites). The World Knowledge Publisher of China recently published a book entitled *Israel* to introduce this Jewish country specifically. Its subtitle is *A Nation of Enigma*, because from the general historic point of view, Israel's history has been extremely peculiar and inconceivable. How could a weak and small nation such as Israel.

having been subjugated for more than twenty five hundred years (which corresponds to the "Spring and Autumn" period in China), and having had its people driven away from their own land and dispersed to different places in the world for almost two thousand years, not have perished or been assimilated? Why did continuous calamities and catastrophes always cling tightly to this nation which is so small and weak but boasts of extraordinary achievements? How could such a despised and persecuted small nation rebuild its own country two thousand years after its original country perished and its people were driven away from their own land? How could such a small country, surrounded and attacked by strong enemies and suffering from continuous wars, not have been destroyed? But on the contrary, how could it grow stronger and stronger through all the wars, and transform the desolate and barren land into fertile and well-cultivated farms, building up a country with modern industry and agriculture within mere decades? All these, from the view point of man, are unbelievable miracles. However, seen from the perspective of the Bible, they are just facts which should definitely come true. All these events which happened to the Israelites in later years were clearly predicted in the Bible as early as two or three thousand years before. Of course, this goes far beyond the capability of man. That was the work of God, so it does seem miraculous in man's eye. The authors of the book Israel acknowledge that the Bible has made great contributions to human culture, but being constrained by prejudice, they do not believe that the Bible was the revelation of God, but merely consider it to be the traditional legends of the Jewish people. Therefore, they could never find the right answer, and that is why this book started with "enigma" and also ended up with "enigma." The Israelites have a special position in the Bible. They are called "the chosen people of God," and this is why they are different from all the others. If one does not know this, he can never understand the Israelites. Therefore, it is necessary for us here to review briefly the history of Israel and the origin of the chosen people.

From the very beginning when mankind's ancestor, Adam, sinned and fell, God instituted His plan of salvation for mankind. In order to carry out His plan, God first had to find some people who would be loyal to Him and cooperate with Him, and then He took this as a starting point to spread His salvation to the whole world. In the nineteenth century B.C., God first chose Abraham. Abraham's outstanding quality was that he believed in and followed God's words without any hesitation, so he was called the Father of Faith. Abraham originally lived in Ur of Chaldea (now in Iraq), which was a flourishing city filled with idol worship. God called him to leave his native land and go to Canaan (which corresponds to present-day Palestine). God made a covenant and promised to give that land to his descendants, saying, "through your offspring all the nations on earth will be blessed." So it is clear that God's purpose is to have all men saved.

Later on Abraham begot Ishmael (the ancestor of the Arabs) and Isaac. God chose Isaac. And Isaac begot Esau and Jacob. God chose Jacob. God renewed His covenant with Abraham to Isaac and Jacob. Jacob was later named Israel, and his descendants were called Israelites. In his later years Jacob and his whole family moved down to Egypt because of famine. His descendants lived there for 430 years, and grew into a big tribe of two million in population. Due to jealousy, the Egyptians enslaved and persecuted them harshly.

Around the fourteenth century B.C., God sent Moses to deliver the Israelites from Egypt to go to Canaan. On their way in the desert of Sinai, God made a covenant with the Israelites through Moses to make the Israelites God's people (chosen people). He instituted a full set of laws and ordinances for them, centered on the Ten Commandments. The first commandment was "I am the Lord your God, you shall have no other gods before Me." The second commandment was "You shall not make to you any carved image." (Besides these were also "honor your father and mother," "you shall not kill," "you shall not commit adultery," "you shall not steal," etc.)<sup>(5)</sup> At that time all other people in the world worshipped many

gods, idols, ancestors or other dead people. God wanted the Israelites to stay far away from idolatry and false gods, and to worship Jehovah solely. Then in this way they could lead all the other nations in the world to worship this only true God and be saved.

However, as God's chosen people, the Israelites' performance was not successful. Only a few exceptional people in all the generations were loval to God and maintained the tradition of the chosen people; the Israelites as a whole completely failed. They were often rebellious to God, and did things that were wicked in God's sight to provoke God to anger. When the Israelites walked in God's path, God did love them deeply and blessed them in many ways. But the more God loved them, the more He demanded from them. So when they turned away from God and kept doing evil, God punished them even more severely. Moses, in his later years, foreseeing the serious outcome in store for Israel, was severly tortured in his heart. (6) Therefore, he heartily warned them over and over to walk in God's commandments, or God would punish them seriously for their disobedience. He said, "Behold, I set before you this day a blessing and a curse. A blessing, if you obey the commandments of the Lord your God, which I command you this day. And a curse, if you will not obey the commandments of the Lord your God, but turn aside out of the way which I command you this day, to go after other gods, which you have not known."(7) "I call heaven and earth to witness against you this day, that you will soon utterly perish from the land which you cross over the Jordan to possess; you shall not prolong your days in the land. And the Lord shall scatter you among the peoples, and you shall become troublesome to all the kingdoms of the earth, and you shall become an astonishment, a proverb, and a byword, among all the nations. And among these nations shall you find no rest. And your life shall hang in doubt, and you shall fear day and night, and shall have no assurance of your life. The sword without, and the terror within, shall destroy both the young man and the virgin. You shall be left few

in number."(8) Unfortunately, the Israelites did not listen to the warning of Moses, and what happened to them later was exactly as Moses had predicted.

After the death of Moses, his successor Joshua led the Israelites into the land of Canaan and took it over for their property. The kingdom of Israel was established in the eleventh century B.C.. Among Israel's early rulers, only King David was a righteous one. The third king, Solomon, committed serious sin, resulting in his downfall in later years. The nation then divided into two. The northern part was still called Israel; the southern part was called Judah. Among the kings of Judah, there were more wicked ones than good ones. Among all the kings of Israel, no one was good. These kings did not care at all about the advice of Moses. Not only would they not follow the commandments of God, but they even worshipped idols and the false gods of the Gentiles, and led the people into sin. Everyone did what was right in his own eyes, flattering those in power, and committing all kinds of evil. God sent prophets again and again to warn them and call them back to the right way. But they just turned a deaf ear to them, delighted in evil, refused to repent, and even killed the prophets. They sinned deliberately despite repeated admonitions. Then, finally, came God's wrath. In 722 B.C., the northern kingdom of Israel perished at the hands of Assyria. Most of the Israelites were captured and taken to foreign countries. (A few survivors left on site mixed later with forcibly immigrated Gentiles, lost their racial and religious purity, and became Samaritans in later ages). The southern kingdom of Judah did not repent, continued to do evil, and in 586 B.C. was captured by Babylon. Its capital city Jerusalem and the holy temple were destroyed. Most of the people were slain or taken to Babylon as slaves. At this point the nation of Israel completely perished.

Fifty years later, Babylon was captured by the Persians and the Medes, and the Israelites became slaves of Persia. About seventy years later, Cyrus and Artaxerxes, Kings of Persia, successively allowed the remnant of Israelites to go back to their homeland to rebuild Jerusalem and the Holy Temple. However, the rebuilt Judah was just a province of Persia, no longer an independent country. And the Israelites have been called the Jews ever since then. In 300 B.C., Greece defeated Persia, and Judah was also captured by the Greeks. However, Greece quickly collapsed because of the sudden death of Alexander The Great. So the Jews were ruled successively by Egypt and some other nations. Later, the Roman Empire arose. In 63 B.C., the Roman general Pompey captured Judea and killed 12,000 Jewish people; then Judea was ruled by Rome. It was during the years of Augustus the emperor of Rome (in 4 B.C.) that Jesus was born in Judea and grew up in a carpenter's family.

The Jews suffered greatly from the subjugation of their country. According to the predictions of Moses and other prophets, they longed for the Messiah (which means "Christ" in Greek) to come and save them. However, when Jesus Christ came, they would not accept him. The upper class of the Jews, the elders, priests and scribes, despised and rejected him because Jesus came from a humble family and would not be restricted to the doctrines of Judaism. In addition, because Jesus was deeply loved and esteemed by the common people, they became very jealous, and made up their minds to put Him to death. They bribed the renegade Judas and captured Jesus by trickery. They gathered a large group of Jews together, and made a big uproar to coerce the Roman governor Pilate to crucify Jesus. Crucifixion was the cruelest Roman penalty at that time. (The most serious penalty of the Jews themselves was stoning a person to death, which was not as cruel as crucifixion. This made the request of the Jews unjustifiable and malicious.) Pilate repeatedly cross-examined Jesus according to the Roman regime of justice and could not find any guilt in Him. There was no evidence to prove the charges against him. Pilate did not want to execute Jesus perfunctorily. He wanted to release him according to a routine practice that one prisoner would be released during their festival, but the Jews preferred to release a murderer instead of Jesus.

The only thing that could satisfy them was to put Jesus to death and Pilate yielded to their pressure. He washed his hands before the Jews and said, "I am innocent of the blood of this righteous man, see to it yourselves." Then the Jews answered aloud, "His blood be on us and on our children!" Thus, the Jews committed another heinous crime consistent with their past evil doings: crucifying Jesus Christ the Son of God, "The Righteous One," for no reason. Therefore, they and their children must take full responsibility for their evil conduct.

When Jesus went to Jerusalem the last time before being sacrificed, he foresaw the tragedy which would take place there later. He wept, and prophesied, "O Jerusalem, the city that kills the prophets and stones those who are sent to it! The days shall come, that your enemies shall cast a trench about you, and compass you around. And shall lay you even with the ground, and your children within you, and you shall fall by the edge of the sword, and shall be led away captive into all nations. Behold, your house is left unto you desolate."(10) In 70 A.D., forty years after the death of Jesus, the great tragedy at last came to the Jews. At that time the Roman Prince Titus took his great army to suppress the rebellion of the Jews. After intense and fierce fighting he finally captured Jerusalem. The city and the temple were destroyed once again. As many as one million Jews were slain, and countless others were starved to death or captured. In 132 A.D., the Roman army suppressed the rebellion of the Jews one more time, and this time half a million Jews were slain or captured. All the rest of the Jews were expelled from their homeland, "removed into all the kingdoms of the earth," and wandered about in a desperate plight up until now, just as predicted by Moses and other prophets. This is the historic "Great Scattering" of the Jews.

After being scattered to other countries, the Jews were rejected, mocked, and despised everywhere. The Jews are endowed with superior talents, as witnessed by some of these outstanding people: Freud, Goethe, Hegel, Einstein and Marx. The Jews make up only

0.3% of the world's population, but they have 15% of the Nobel prize winners. The Jews are very astute and strong in commercial business. In many countries, including the USA, the Jews have a dominant influence in economy. They also assume important positions in academic circles. However, the Jews are not well respected by others. People often speak of Jews with admiration mixed with hostility. In Shakespeare's famous play, *The Merchant of Venice*, the merchant, who practiced usury and wanted to cut one pound of flesh from his borrower, was a Jew. This is exactly what Moses and other prophets predicted about the Jews, "And you shall become an astonishment, a proverb and a byword, among all the nations."

The most frightening incidents were the persecutions and massacres the Jews suffered. From ancient times to the present, disasters of sword and bloodshed have never left them. There is no other nation that can compare with the Jews in the tribulations and disasters that they have suffered. Besides the distresses of war caused by Assyria, Babylon and the Roman Empire, the persecutions which they suffered at the hands of European nations were almost as relentless. Jews suffered during the Middle Ages from the Crusaders who killed them due to religious prejudice. In 1881 A.D., the Czar of Russia was assassinated; consequently one million Jews were slain in retaliation. During World War I, the Czar of Russia compelled the Jews to leave, and anyone who wouldn't leave was slain by machine gun or grenade. In World War II, Hitler of Germany conducted a great massacre of the Jews. Within the area of German rule there were nine million Jews, and six million of them were slain mercilessly. Only a small portion of them escaped and survived. When the Jews were enslaved in Egypt for 430 years, their population increased from seventy to two million, an increase of twenty thousand-fold, which means the natural reproduction rate of the Jews is very high. But since they lost their country, their population almost has not increased, because generation after generation, too many of them have died from natural disasters and artificial tragedy. Today, 2500 years later, the Jewish

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population in the whole world is only slightly more than ten million. Just as Moses predicted, "You shall be left few in numbers."

Israel, as a nation which suffered tremendons calamities, was diminished in population, scattered to many different countries, stripped of its own land and nation, yet was never assimilated or destroyed. It has suffered great distresses yet survived as a peculiar tribe preserving its special national tradition. This is a marvel unique in all of human history. Commonly in history, once a nation was conquered by others, it would not last over five hundred years. What usually followed would be its termination: the entire nation would either be destroyed or assimilated, and surely disappear. Powerful countries in history, such as Babylon, Egypt, and Rome, could not escape this fate, so why was this weak and small country of Judea an exception? Historians cannot give an explanation. But it was explained clearly in the Bible. It was predestined by God. Three thousand years earlier God had already warned the Israelites through Moses, that if they should forsake God and turn away to do evil things, they would definitely suffer, and their country would perish. After that God would "scatter them in all the nations," and let them suffer various distresses. But God did not say that they would completely perish. Because even though the Israelites were rebellious and unfaithful, God is still faithful. As Moses also said, "For the Lord your God is a merciful God, he will not forsake you, neither destroy you, nor forget the covenant of the fathers which He swore unto them."(11) This is the exact reason why the Israelites could, even after multiple deaths and numerous tragedies, still stubbornly survive.

Perhaps someone would ask, "China has been conquered twice in her history, yet she is still thriving, right?" China, however, has certain conditions Israel cannot be compared with: (1) China is a country of vast land, and huge population, and a brilliant enduring history. Its invaders, on the contrary, were all minor, relatively primitive tribes that could not fundamentally change China. (2) These minor tribes, even though they could be temporarily stronger in military strength than the Han people (the chief portion of Chinese people), lagged far behind the Han people in economics, politics and culture. Soon after their invasion they were assimilated and became the new blood of the Chinese people. (3) The invading tribes' rule over China was relatively short and temporary. And Chinese people have always inhabited their own inherited land and never departed from it. So in many ways the conditions of the Israelites were just the opposite of those of the Chinese. If Chinese people had been in the same situations as the Israelites, the result would be deplorable. For instance, some Chinese people migrated overseas and lived under weakened conditions of population, economy and culture for a long time, they could hardly maintain their own tradition after only two or three generations. In this respect they were far inferior to the Jews. The chief reason is that the Chinese people do not have a peculiar profound religious tradition comparable to the Jews.

God not only destined that the Israelites would not be entirely destroyed, He also predestined that the Israelites would go back to their own land at a later time to rebuild a new country. So Moses predicted further, "That the Lord your God will bring you back from captivity, and have compassion on you, and gather you again from all the nations, where the Lord your God has scattered you. If any of you are driven out to the farthest parts under heaven, from there the Lord your God will gather you, and from there He will bring you."(12) The prophet Ezekiel prophesied, "Thus says the Lord God, 'Behold, I will take the children of Israel from among the nations, wherever they have gone, and will gather them from every side, and bring them into their own land, and I will make them one nation in the land, on the mountains of Israel;...they shall no longer be two nations, nor shall they ever be divided into two nations."(13) All these predictions were written in the Bible thousands of years ago. The fact that the Jews were not completely destroyed is already miraculous; who would imagine that they could return to their own land and rebuild their own country? Until the last

century nobody could believe it, because it would be impossible from the human viewpoint. First of all, since the Jews departed from their own land, it has been occupied by Persians and Arabians who have lived there for over one thousand years and consider it their own motherland. Especially when Islam arose in the seventh century, the Muslims soon became the strongest religious and political power of the Middle East and North Africa. Judea had already become the power center. Two Muslim temples were built right on the original site of the Jewish Holy Temple in Jerusalem. The Muslims also took Jerusalem as their holy place. The Muslims and Jews are deadly enemies, so the Muslims would never allow the Jews to rebuild their country. Second, the Jews were few in number and scattered all over the world. They had no common place to live, no common organization, no government, no common language, no military force, and no international political support. Of all the necessary conditions to rebuild a country, they had not even a single one. In such a case, to talk about rebuilding a country was like a daydream of a crazy person. Nevertheless, what was predestined by God must eventually take place.

The rebuilding and reconstruction process of the country of Israel is like a legendary tale filled with miraculous and mind-blowing scenarios. At the close of the last century, certain Jewish people, who understood the real plight of their people all over the world, saw that the only way out was to build their own Jewish nation. So they initiated an organization called The Movement of Zion (Zion is a mountain in Jerusalem and the Jewish Holy Temple was built on it) to encourage the Jews to go back to their motherland and rebuild an independent Jewish nation. But the conditions were not ready yet, and their achievement was limited. However, during World War I, conditions changed dramatically with an important turning point. At that time Great Britain and France planned to attack the Dardanelles Strait with their superior naval forces to cut off the connection between Germany and Turkey, and gain control of the general war situation.

However, the heavey German-made coastal artillery with extra strong fire power, accompanied by the submarine torpedo attacks, heavily damaged the English and French fleets. The English government then realized their urgent need for high quality explosives to remedy their losing situation. At that time there was a Jewish chemist at Manchester University, Dr. Chaim Weizmann. He was Russian-born, raised in Poland, educated in Germany, and teaching in England. He was also one of the leading members of The Zion movement. He was appointed an explosive specialist by the British Department of Navy, and before long he had successfully developed a high-quality, lowpriced smokeless explosive. His discovery immediately turned the situation of the English Navy from defeat to victory. Dr. Weizmann then became an honored person among the high-ranking politicians in the English government. To reward his grand achievement, the English government decided to support his Jewish rebuilding movement. Of course this decision was also consistent with the interests of England. After the Minister of the Navy, Balfour, was shuffled to the position of Minister of Foreign Affairs in 1917, he announced the famous document known as the Announcement of Balfour which supported the return of Jews to their motherland in Palestine. In December of the same year, English troops captured Jerusalem from Turkish occupation. Then Dr. Weizmann, leading the committee of The Zion movement, arrived at this city; the Jews finally got back to their own land in Palestine. During the 1930's, German fascists brutally expelled the Jews. This action forced many Jews to go back to Palestine. During World War II, due to the efforts of Dr. Weizmann, the movement to rebuild the Jewish nation was supported by both England and the USA. Tens of thousands of young Jews enrolled in the English army to fight against Germany. This action prepared military personnel needed to rebuild the country of Israel.

After World War II, the miracle began to take place. The United Nations(UN) decided to establish two separate countries in Palestine: Israel and Arabia. On May 14, 1948, the English army with-

drew, and on the same day, it was announced publicly that a new nation of Israel was established. Israel became the 59th nation in the United Nations. The scene, foretold by the Bible 2500 years ago, came true at that moment. Since the establishment of the UN, the Soviet Union did her best to boycott almost every action of it, and support was rarely seen. But concerning Israel's rebuilding, the Soviet Union, departing from her usual behavior, acknowledged the newborn Israel before other nations. This was unusual and surprising.

However, the Arabs, spread all over the Middle East and North Africa, would not allow the nation of Israel to exist. The twenty-two Arab countries have 500 times the territory of Israel. Their total population was up to 150 million while the population of the newborn Israel was only about 650 thousand (even now it is only three million). The Arab countries have plenty of petroleum sources, and military weapons bought with petroleum dollars. Israel not only has no petroleum, but also lacks other mineral products. The territory of Israel is small, narrow, and irregular, easy to attack and hard to defend. Therefore, the Arabs had absolute superiority over the Israelites. And the Western nations would not offend the Arabs due to their reliance on petroleum, so they did not support Israel heartily.

Since the rebuilding of Israel, there have been four large-scale wars between the Arabs and the Jews. Three of these four wars were launched by the Arabs in an attempt to eliminate Israel. Within twelve hours of the announcement of Israel's establishment, the united Arab troops immediately initiated a general attack upon this newborn nation, attempting to strangle her in the cradle. Egypt attacked Gaza and Tel Aviv (the temporary capital of Israel) from the south, Syria attacked Galilee from the north, and Jordan and Iraq attacked the West Bank of the Jordan River and Jerusalem from the east. At that time Israel did not even have a unified regular army, much less a navy or air force. She was attacked from three different directions, and the situation was critical. But the Israelites knew that it had been so difficult to rebuild their nation that they could not risk losing it again. Therefore, they waged a heroic fight to protect their newborn country. After ten months of bitter fighting, they overcame this serious situation and won the victory. The war stopped.

The second war was due to the recapture of the Suez Canal by Egypt in 1956. England and France united with Israel to assault Egypt in order to take the canal back. A few days later, England, France, and Israel withdrew under the pressure exerted by both the USA and the Soviet Union.

What caused the third war was the unification of Egypt and Syria in 1958 to form a United Arabian Nation. They combined their military headquarters and put Israel under a pincer attack. Their military forces were greatly strengthened by military aid from the Soviet Union. They were also provoked by false information from the Soviet Union and decided to attack Israel again. On May 16, 1967, Syria deployed thirteen mechanized brigades at the frontier of the Golan Heights, ready to attack Galilee again. Egypt requested first the withdrawal of the peace-keeping troops of the United Nations, and then sent three army divisions to the Sinai Peninsula, aiming towards the southern area of Israel. Also, on May 22 Egypt blockaded the Madiq Tiran strait to shut off Israel's export. Surrounded by massive military forces and sensing war was about to break out at any moment, Israel had to react quickly to protect herself. On June 5, at 7 a.m., all of Israel's fighter-bombers set out to fight. They flew low above the Mediterranean Sea in groups toward the west to avoid Egyptian radar. Upon reaching Egyptian waters, they made a sudden turn toward the south, swooped down directly over every Egyptian airport, and fiercely attacked the Egyptian military planes. Within two hours, all of Egypt's 200 military planes were totally destroyed, and more than 100 pilots died. The Egyptian Air Force was almost completely lost. After the success of the air attack, the mobile armored ground forces of Israel took action immediately. Without support from the air, the Egyptian ground force collapsed quickly; 700 tanks were destroyed, and more than 10,000 soldiers died or were wounded.

The Sinai Peninsula was captured by Israel. In the north frontier, Israel made a sudden attack upon Syria with similar military action, and the Syrian army also collapsed. The Golan Heights were occupied by Israel. In the eastern frontier Israel at first suggested mutual peace with Jordan. But Jordan refused and joined in the military action to attack Israel. After three days of severe fighting, Jordan was also defeated by Israel. The West Bank of the Jordan river and Jerusalem were all seized by the Israeli army. This war lasted only six days. Israel won brilliant victories in all three battles, and the land occupied was about six times the size of her original territory. Egypt's President Nasser died in a severe depression.

After this Six Day War, Egypt and Syria, having suffered grievous losses, threw themselves upon the Soviet Union for help. This was exactly what the Soviet Union wanted. The Soviet Union gave them even greater military support. Within a few years, the military forces of Egypt, Syria, and Iraq had reached an unprecedented high standard. To suppress the ambition of the Soviet Union, the USA vigorously supported Israel. So, the two sides continued to stand in confrontation. The new Egyptian president, Sadat, in order to avenge their previous insult, conspired secretly with Syria to launch a largescale attack on Israel again. The day chosen for the attack was Oct. 6, 1973, because it was the Day of Atonement for the Jews. The whole country of Israel would be celebrating the holiday, and hence could be attacked unexpectedly.

At 1:50 p.m. that day, the Egyptian and Syrian troops attacked Israel on both the southern and northern frontiers simultaneously. Israel was almost completely overturned because it was caught offguard while celebrating. This is the so-called "War of Atonement Day." It was the fourth war between the Jews and the Arabs. The military intelligence agency of Israel had made a serious misjudgment, thinking that the possibility of war was pretty low. Even though the foreign intelligence agency of Israel had issued warnings beforehand, they were overlooked. The military forces of Israel were caught abso-

lutely unaware. The Egyptian crack troops of all three armed forces on the southern frontiers took action at the same time. Their ground forces rushed across the canal like high tides. The Israeli army could not withstand this assault, and the defense line along the canal burst. The Egyptian troops, after capturing the beachhead positions, quickly pushed in depth. On the northern frontiers, Syria dispatched three mechanized divisions (totalling 60,000 soldiers, 1300 tanks, 600 cannons and 100 missile teams) to press on with overwhelming superiority to the frontier of Israel at the Golan Heights. The Israeli troops were much fewer in number and could not withstand such great forces. They could only fight fiercely and with deadly intent at strategic spots. The commander of the 188th Brigade of Israel died in battle. The Syrian tanks were gradually approaching the last strategic point, Bano-Yakov bridge. If this bridge were lost, there would be no more strategic point for Israel's troops to defend. The Syrian troops would be able to break through and sweep over the whole territory of Israel. Just at this critical, perilous moment, the Syrian troops suddenly ran out of gasoline, and the tank troops were immediately paralyzed. Israeli fighters flew low through the Jordan Valley in the transient afterglow of the setting sun and destroyed all the tanks with napalm bombs. The situation of the northern frontier changed right away. The reserve forces of Israel were so well-trained that they assembled within 48 hours and were ready to rush to the front for rescue operations. Three reserve brigades arrived just in time, drove all the Syrian troops out of the Golan Heights, and, in addition, continued to push on into Syria towards the capital, Damascus.

At the same time, some unexpected things happened on the southern frontier. When the Egyptian army pushed eastward in the flush of their victory, the main force of the central route army fought against the Israeli army near an important mountain pass. The battle started at daybreak. After both sides deployed their forces, the morning sun was just rising slowly behind the Israeli side of the front. The intense, dazzling sunshine dazed the Egyptian army which was fighting

against the bright light. The soldiers could not see objects across from them clearly, and could not take precise aim. But the Israeli soldiers, fighting with their backs to the light, could shoot accurately at the Egyptian tanks and destroyed 250 Egyptian tanks that day. The Egyptian force was seriously thwarted. Some days later, General Sharon of Israel took advantage of heavy fog and led three armored brigades to bypass the flank of the Egyptian army and penetrate to its rear. Some Egyptian sentries had already realized their action, but never expected that these camouflaged troops were the assault force of the Israeli army. Therefore, the Israeli army crossed the Suez Canal right before the eyes of the Egyptian sentries. Such an isolated force penetrating deep into enemy territory would usually be considered a military taboo, because the enemy could easily take advantage of such action and turn it into a crushing failure. However, the Israeli army took such a dangerous action and succeeded. After crossing the Suez Canal, it immediately pushed to the back of the Third Army Corps of the Egyptians, and cut off its supporting line, so that the Egyptian army on the east bank of the Suez was immediately put into a critical situation. At the same time, Cairo, Egypt's capital, was also in danger. So Egypt and Syria, having no other choice, were compelled to beg for peace. The soldiers of Egyptian army on the east bank all laid down their arms, only the unarmed personnel withdrew to the west bank; in exchange the Israeli troops returned to the east bank. At this moment, Israel turned danger into safety and won another victory. People may wonder how the Israeli troops, penetrated deep into Egyptian territory, could still control the vital point of their enemy, and why Egypt's superior troops was unable to cut off the backup line of the Israeli troops which crossed the canal. It was really incredible. Since then, Sadat finally realized that attempting to kill Israel by military force was impossible. He changed his mind and talked about peace with Israel through the Camp David negotiations, and acknowledged Israel's right to exist in exchange for the peaceful return of the Sinai Peninsula to Egypt. The threat of all Arab nations uniting together to fight with Israel was ended. Finally, the existence of Israel was respected by the Arab nations. (c)

Why did the Arab countries, obviously far superior, always fail in their attempts to take action against such a small nation as Israel? People gave various explanations for this. According to traditional Chinese concepts, some people would say it is by the will of Heaven, especially in regard to those incredible events which happened at critical moments. Seen from the Bible, however, there is only one reason, and that is, that all these Arabian plots came against what God had predestined. It was clearly predicted in the Bible that the rebuilt Israel would not be destroyed again by other countries; she will exist until the end of the world. It was said in the Bible, "Thus says the Lord God. when I have gathered the house of Israel from the peoples among whom they are scattered, then they will dwell in their own land which I have given to my servant Jacob. And they will dwell safely there, build houses, and plant vineyards; yes, they will dwell securely, when I execute judgments on all those around them, who despise them. They shall dwell there, they, their children, and their children's children, forever. The nations also will know that I, the Lord, sanctify Israel, when my Sanctuary is in their midst forever."(14) And it was also said, "I will bring back the captive of my people Israel; They shall build the waste cities and inhabit them;.....I will plant them in their land, and no longer shall they be pulled up from the land I have given them, says the Lord your God."(15) Therefore, it was clear that any plot attempting to strangle Israel would never succeed. But Israel will face great war tragedy in the future, because the Bible predicts that the very last great war of mankind will take place in Israel. For this, people can wait and watch with open eyes.

Besides brilliant successes in war, the Israelites can also boast of outstanding achievements in economy. When the Israelites first entered Canaan, the land was very fertile. It was called "the land of milk and honey." But because the Israelites sinned, the land deterio-

rated. From 70 A.D. onwards, following the battle of Titus, no more spring and autumn rains fell on this land. The land became more and more desolate. Later the Arabic and other nomadic tribes entered, destroying the covering vegetation quickly. The grass was all eaten, the trees all chopped out, exposing the sands and stones, and the wild areas were crisscrossed by gullies and ravines. Most of the land changed into deserts or semi-deserts, and eventually became desolate, left to the home-coming Jews as Jesus predicted. At the end of the last century, the famous American author, Mark Twain, came to that place. The dilapidated scene that met his eyes on every side, shocked and dismayed him. He wrote, "Among all the desolate spots, Palestine is the worst one. This is a hopeless and depressing land." This was the land on which the Israelites were to build their nation. Since the English troops captured Jerusalem in 1917, and the Jews started to return, the spring and autumn rains began to fall again, and the land revived. This is amazing seeing that it had not rained in over two thousand years.

After Israel had been restored, those Jews who had returned traded in their prosperous lifestyles of merchants and intellectuals for the life of laborers, devoting themselves to the reforming of their regained land. This was done with great enthusiasm by both men and women. The first project was a gigantic water drainage works in the swamp zone surrounding Lake Huleh in the north. Water was drained off and the swampy area was turned into six thousand hectares of fertile farmland, terminating Israel's food rationing system. Later on they worked out a huge plan to divert to the south the water of the north. They elevated the water of Lake Galilee to a height of 360 meters, let it pass over the Galilee Mountain, and go through a water distribution network composed of tunnels, culverts, and aqueducts, delivering water to the dry areas in the central and southern region. They initiated the most economic and efficient computer-controlled spray and dripping irrigation techniques, distributing suitable amounts of water and fertilizer directly to the roots of plants, to obtain the greatest

harvest from the smallest amount of water and fertilizer. The farmers, (about 5% of the whole population) not only can feed the whole nation with a self-sufficient level of food supply, but also can export large amounts of fruits and vegetables to Europe, earning about two billion dollars every year. Besides farm products they also export farming techniques and irrigation equipment. There are over fifty countries which send personnel to Israel to learn, and Israel is also sending thousands of agricultural experts to many countries all over the world to teach advanced farming techniques. After the Israelites solved their food problems, they began to plant improved varieties of cotton to meet their clothing needs. Israel soon became an important cotton exporting country. Their unit production of cotton is number one in the world. Since the rebuilding of the nation, the population of Israel has increased six-fold, and the agricultural production has increased sixteen-fold. The Israelites created marvels with scientific techniques on a desolate and barren land, and restored the deserts of yellow sand to the original "milk and honey land" of three thousand years ago. Israel not only developed modern and advanced agriculture, but also modern industry and scientific techniques, making herself to be "the smallest super-power nation."

How can such a small nation as Israel, battered by successive wars year after year, make miracles like these? Please look into the Biblical prophecy of Ezekiel once again, "Thus says the Lord God, on the day that I cleanse you from all your iniquities, I shall also enable you to dwell in the cities and the ruins shall be built. This land that was desolate has become like the garden Eden, and the wasted, desolate, and ruined cities are now fortified and inhabited. Then the nations which are left all around you shall know that I, the Lord, have rebuilt the ruined places, and planted what was desolate. I, the Lord, have spoken it, and I will do it." (16) So, it is also clear that the Israelites have nothing special themselves. It is God who has done all this. This is the only answer.

Affairs of the world are diverse and confusing, like a chess

game or a drama, with each of us acting as a chess piece or an actor, consciously or unconsciously. Thousands of years ago, God already put the scenario of the long play of human history into the Bible. Let people of later generations see that human history is going on exactly according to what the Bible has predicted; then people will know that God is the most superior and the highest master over the whole world. He dominates everything. (For details, please see Daniel, chapters 2 and 7). Throughout history there were many prominent and arrogant persons, from Nebuchadnezzar, Alexander, Caesar and Napoleon, to Hitler and Stalin. They all thought that they were the masters of history and could write history according to their own will. But when all was said and done, they could only play the part God assigned to them, no more and no less. And the long play of human history will be continuously carried out according to God's original plan and cannot be altered by anyone. When Alexander attacked Persia and had a stopover in Judea, some Jewish teachers showed him the prophecies in the Bible pertaining to Persia, Greece, and himself (in the book of Daniel, chapt. 8). He was shocked and deeply moved, and immediately ordered all his followers to treat the Jews kindly. This meant that Alexander recognized the power of Almighty God. Now more than two thousand years later, we can see even more historic evidences verifying the Bible scenario, that Alexander could not see in his time. The experiences of the Israelites let us see that what was written in the Bible thousands of years ago has come true just exactly as the Bible said. Even though everything in the world is ever changing and as unpredictable as clouds moving in gusts, all things work together eventually to fulfill the predictions in the Bible, which seemed completely impossible to come true. They were fulfilled, one by one, as cast-iron facts, and recorded in history permanently. This verifies, most vividly and powerfully, that the Bible has supreme authority over any human work, because the Bible originated from God. This is the revelation to us, which is derived from the history of the Jews and the prophecies of the Bible.

## The Futility of Evolution

Certainly there are some so-called "scientific concepts" which are inconsistent with the Bible. But I believe the fault lies with these "scientific concepts," not with the Bible facts. If more time is given to allow science to advance to a higher level, it will be verified that it is the Bible which can withstand all tests of time and facts. Many scientific concepts cause quite a furor but do not last long. Christians do not need to evade any facts, and are deeply convinced that all true knowledge, including true science, will not conflict with God's words. For instance, which is actually true, that man was created by God, or that man evolved from apes? When Darwin traveled around the world in the last century, he succeeded in collecting and investigating some new specimens. But his theory of evolution is just lopsided speculation. He failed to give any convincing proof to verify his theory; therefore, strictly speaking, it is not real science. It is not an objective fact, either. In the biosphere of reality, the general feature observed by people is "after its kind." If you sow rice, you reap rice; you sow beans, you reap beans. There is no exception. Nobody, even Darwin himself, has ever seen evolution. The evolutionists say that is just because the life-span of a human being is too short to see it. If so, then at least we should see some evidence of evolution in fossil records. But seen from the perspective of geological paleontology, almost all species appeared suddenly; and a species, after its emergence, usually lasted millions of years without any change. We cannot see the process of evolution of one species gradually changing into another, either. The fossil specimens of typical species are huge in numbers, some are in hundreds of millions. But those of the so-called "transitional species" are so few that you can count them with your fingers. Why? Darwin acknowledged frankly that he had no satisfactory answer, but he still said that it must be because of the incompleteness of fossil records. He predicted that an "inconceivable" number of transitional fossils would be found when geological exploration is complete. But now more than one century has passed, almost all the lands and oceans have been thoroughly surveyed, and those transitional fossils he expected are still missing, nowhere to be seen. The former scanty transitional specimens, on the contrary, were disproved one after another.

There are three transitional fossil specimens commonly flaunted by evolutionists. The most important one is the so-called "archaeopteryx." This is an animal fossil with both feathered wings as well as jaw bones with teeth. The evolutionists took it as the transitional type between reptile and bird, and claimed it as the ancestor of all birds. But this is only an inference without any evidence. Peter Wellnhofer, a recognized authority, stated in a 1990 review that it is impossible to determine whether archaeopteryx actually were the ancestor of modern birds. If archaeopteryx were really the intermediate pattern between reptile and bird, then its feathered wings (different from membrane wings) must be more primary and immature than birds' wings; otherwise what is the difference between them? Its jaw-bones and teeth should display some evidences of degeneration; if not, how could they develop into a bird's beak? (Modern birds have no teeth; instead, they have the sand sac of stomach). However, the wings, jaw bones and teeth of archaeopteryx were manifested as mature organs with good functions. This means that archaeopteryx was not a transitional type, but only an odd variant of bird, which existed in the ancient age and is now extinct. Moreover, the phenotypes and habits of modern birds are extremely divergent, so how could such an odd animal as the archaeopteryx evolve into so many modern birds with different characteristics? How many transitional types should there be between them? But none could be found in the fossil records. Evolutionists cannot give any convincing explanations. The next oldest bird fossils were typical specialized aquatic divers that did not look as if they could be direct descendants of archaeopteryx. Recently, in 1996, some Chinese scientists discovered an ancient bird fossil in Beipiao district of Liaoning province and named it Liaoningornis. Its body shape was like the modern kingfisher in the southern areas, with long wings and big claws. In addition, it had a keeled sternum which is the typical characteristic structure of the superior flying ability of modern birds. Liaoningornis lived in the late Jurassic Period about 140 million years ago, about the same time as archaeopteryx. But its structual characteristic is much closer to that of modern birds than that of archaeopteryx is. This indicates that archaeopteryx was not the ancestor of modern birds, but only a bylineage of birds. Deducing from the highly modern characteristics of Liaoningornis, the emergence of birds must be at the early Jurassic Period or even the late Triassic Period (220 million years ago), which is about the same time as the dinosaurs' emergence. This discovery refuted the long-standing international academic viewpoint that birds evolved from reptiles. (d)

Another example of the so-called transitional type was the fossil series of horses. Evolutionists claimed that modern horses with a giant body size and a single toe evolved from Hyracotherium of the Tertiary epoch, which had three toes and the body size of a dog. This is the typical example in texbooks of evolution. But the appearance of hyracotherium is quite different from that of horses, so whether it belongs to horses or not has long been questioned. When it was first named, it had been given the name Hyrax, and most probably it was an extinct Hyrax. Those "horse" fossils were found in vast areas, scattered in close ground layers of the Cenozoic era. Their appearance and disappearance were not consistent with the sequences of evolution. This means that they were just different animals existing in close periods of time, and that there was no relationship of ancestor and descendant among them. Those "horse" fossils were found chiefly in America, and if evolution is true, then there must be a lot of modern horse in America. Oddly enough, there is no trace of the modern horses in America. All the horses and donkeys in America now were imported from Europe by the Spanish in the sixteenth

century.(e)

The third example of the transitional type is the "ape man." However, all those fossils of ape man that were found were actually either ape or man; there is no such thing as an intermediate pattern between ape and man. For instance, the Cro-Magnon man found in southern France had already been recognized as modern man. The fossils of the Neanderthals found in western Germany were examined by the great pathologist Virchow, and also classified as modern man, with some deformities due to rheumatism and rickets. Afterwards, similar fossils were found in France and other European regions, even in the Middle East. All of them were classified as Neanderthals. The shape of those fossils was really somewhat different from modern man. At the first stage of discovery, people overreacted and overemphasized these differences and even took them as characteristics of apes. As a matter of fact, among modern men prominent differences can be seen also. These differences, however, are meaningless in distinguishing between ape and man. After sober pondering, people finally realized that there was no essential difference between Neanderthal and modern man. The famous evolutionist Dobzhensky acknowledged that Neanderthals and we are actually the same kind of man. Another fossil specimen found in Kenya, Africa, had the same size and posture as man, except with a smaller cranial capacity. However, there is no absolute correlation between cranial capacity and intelligence. The average cranial capacity of modern man is 1500ml, but with wide individual variations. For example, the cranial capacity of Napoleon was less than 1300ml, and the famous Russian writer Turgenev had a cranial capacity of 2600ml. The largest cranial capacity known to date, 3100ml, belonged to an idiot. The cranial capacity of the erect Kenya man was still within the limits of normal variation of modern man. The difference between man and ape is not confined to cranial capacity. The prominent differences in intelligence and wisdom between the two cannot be explained by cranial capacity only.

As for the origin of man, the evolutionists' viewpoints are still in chaos. There is no common understanding shared by all of them. Under the influence of Darwinism, looking for the intermediate link between ape and man has become a modern trend. Scholars from various nations joined in without delay, and specimens were unearthed one after another. The Piltdown man was unearthed in England, Nebraska man in the USA, Java man in Indonesia, and the Peking man in China. In recent years most evolutionists still claim that man is a descendent of the ancient ape of Africa. Wilson, the advocate of the "molecular clock" theory, concluded by means of the investigation of mitochondrial DNA, which is passed on only in the female line from mother to daughter, that all humans are descendants of a woman who lived in Africa two hundred thousand years ago. Some scholars at the University of Chicago and other campuses concluded, from research of the Y chromosome related to male heredity only, that all modern humans originated from a man who lived in Africa one hundred and eighty thousand years ago. Recently, English investigators said the time range is only about 7500 to 60,000 years. Among so many conflicting statements, which is correct? Of course, they cannot all be right at the same time. At most, only one of them might possibly be right, and all the rest must be wrong. But the most probable possibility is that all of them are entirely erroneous and strained interpretations. Evolutionists never subjected their theories of evolution to objective facts to verify them. They presumed evolution to be an indubitable principle, beyond any shadow of doubt, and predetermined that man's ancestor must be ape. Then they set out to seek evidence of the ape man to support their premise. Any inconsistent discovery was considered invalid and simply discarded. Thus, when somebody insisted on seeking evidence for the presumed ape man ancestors, then sooner or later they would surely find them; but the reliability of these "evidences" would be very questionable. Some ape man fossils were actually misinterpreted; some of them were just forgeries. After the general acceptance of Darwinism, anybody who could find

a specimen of an ape man fossil would gain global fame. Under the temptation of reputation and gain what won't be done? For example, the famous ape man fossil Piltdown man was an intentional hoax. Since the discovery of this fossil, it had been put under strict protection by the British Natural History Museum to prevent "unfriendly" inspection, and had been used to influence public opinion for forty years. It was finally revealed that the cranial bone was a piece of a modern human skeleton. It had been stained with chromic salt and re-buried underground to make it look like an ancient fossil. The mandibular bone knocked together with it belonged to an ape. Who did this? Up to this day, no one has acknowledged it.

Evolutionists, eager to justify the theory that man evolved from ape, often made themselves public laughingstocks. For instance, in 1922, Cooke found an unusual tooth in the state of Nebraska, then hastily declared that it was from an ape man, the Nebraska man. It was listed in scientific papers of 1925 as proof of human evolution. This was the only evidence of the so-called Nebraska man. Osborn, the Director of the American Museum of Natural History, took the Piltdown man and the Nebraska man as evidence to advocate evolution and assault creationism. However, the complete skeleton unearthed five years later, disclosed that the tooth was actually from a peccary, an extinct wild pig.

The Hollander, Dubois, another discoverer of ape man, went to Indonesia with the ambition to search for some ape man fossils. His ambition came true later on. He claimed that he had found a cranial bone and a femur of an ape man, and named it Java man. Dubois gained instant fame by this achievement, but his statement about ape man did not convince the public. People either regarded it as man or ape, but nobody accepted it as an ape man. Dubois then indignantly locked his specimen in a trunk and refused to allow anybody to reexamine. In his later years he finally acknowledged that the cranial bone actually belonged to a giant gibbon, and the femur belonged to a man. He insisted on this view without any wavering all the way to his

death in 1940.<sup>(f)</sup> Dubois did make some misinterpretations at first, but he finally corrected them without regret.

Another ape man specimen, Peking man, has also gradually come to be considered modern man. In the early 1920s, the Chinese geologist Wen-zhong Pei occasionally found a fossilized human tooth in the traditional Chinese medicine "dragon bones." He followed the origin of those "dragon bones" and traced back to the original site at Dragon Bone Mountain, situated at Zhoukou Dian, southwest of Peking (Beijing). More fossils were found there. Dr. Davidson Black of The Union Medical Institute of Peking made an appraisal of those specimens. Black was an evolutionist. Influenced by the unearthed Java man, he thought that the newly-found fossils belonged to some ape man also and named it Peking man. However, those specimens consisted of only a tooth, half of a femur, and a fragment of the cranial vault. The materials were so incomplete that his conclusion was considered to be subjective. Unfortunately, all those fossils were lost in the Sino-Japanese War and are not available for further investigation. Later on, fifteen cranial and eleven mandibular bones were unearthed at adjacent places. According to Dr. Weidenreich, the so-called Peking man was much more like modern man. So many cranial bones were unearthed at the same spot but no other body bone was found, and all those cranial bones showed indications of heavy blows. This seemed very unusual. How could it be like that? There could be two possibilities according to speculation: (1) those Peking men were apes killed by men, and the heads were preserved to boast of the hunters' achievements, and (2) those Peking men were killed by other Peking men, and the heads were preserved as spoils of war. But apes never display such behavior; only human beings do. In the first possibility Peking men were apes, and in the second possibility they were real men, but in no case were they deemed as ape men. The largest cranial capacity of Peking man was 1200ml. This dropped into the range of human beings, so the second possibility was considered more believable.

Last century Darwin did research on the Galapagos Islands, which are on the equator in the Pacific Ocean, about six hundred miles away from South America. He found that the finches on those islands had beaks with as many as thirteen different shapes, even though their body sizes and feather colors were almost the same. He thought this was because the ecological conditions of each of those islands were different, so natural selection had compelled the finches to evolve divergently. Taking this as a starting point, he gradually developed the idea of "evolution". However, based on modern research, it was learned that the ecological environments on all these islands could not have caused such variations among the finches. The real reason for these variations was isolated breeding. Some finches of the South American continent were blown accidentally by strong winds to those isolated islands. Here were virgin lands, allowing them to multiply rapidly. Because their gene pool (the comprehensive gene contents of the population) was very small and the function of stabilization was weak, there was a strong tendency of specialization in reproduction. Most of the islands are separated by broad sea waters. Since finches dislike long flights, those sea areas would undoubtedly be big barriers to them. If there were no major inducing cause large numbers of them would not move to another island on a large scale. In this way the finches on all those islands were divided into even smaller flocks and subjected to more variation. This is the inevitable tendency of small group breeding and is not a result of the ecological environmental conditions. Small isolated groups, even if living in the same environment, will still produce different specialized variations, but this has nothing to do with evolution. At that time Darwin had no knowledge of modern genetics. He could not understand the nature of these phenomena precisely, and thus conceived the mistaken idea of evolution. Now that we have already recognized the real cause of these facts, why should we cling to Darwin's erroneous concept? There are some people who still will not give up the theory of evolution, because after more than one hundred years, evolution

has become a huge system, involving too many people's established interests. Evolutionists will not let their vested interests be challenged. Moreover, giving up evolution actually means admitting creationism and acknowledging the existence of God. This would become a hard problem for people who deny the existence of a Creator. Therefore, they would prefer to leave the mistake alone and make the best of it. Of course, this ceases to be a problem of science, but rather of conscience and morality.

#### SCIENCE AND FAITH

Some people think that religion demands only belief, entirely based on faith, and that science pursues factual proof, based on facts and logic, having nothing to do with faith. These two contradict each other essentially. But actually this is not the case. The scientific inference appears to be clear, reasonable, and strongly logical. However, this is true only if you don't discern between the incidental and the fundamental, and don't seek for origin and finality, especially in its practical scope. Once you trace back to the source, the logic of science falters.

The foundation of science is mathematics. The most logical aspect of arithmetic is geometry, and in geometry the process of proving seems straightforward and meticulous. However, in order to prove a geometric proposition, one must use definitions and theorems. But how can you know these theorems are correct and reliable? One has to make use of axioms like, "The shortest distance between two points is a straight line." But how can we know that these axioms are true and reliable? There is no way to prove them. We can only resort to intuition or faith, i.e., so-called "self-evident" truth. Another example is in physics. For the most part, modern scientific achievements are accomplishments of physics. In the physical world there are two basic factors: substance and energy. Without these two, physics cannot exist. Energy can be measured by "work," or

force times distance. Therefore, it can be said that the fundamental factors in the material world are "substance" and "force." However, what are "substance" and "force" actually? There is no answer to this! Someone defined "force" according to the second law of Newton as "something that can cause substance to produce acceleration." But, what is "substance"? Then he reversed it, saying, "Under the action of force, what produces acceleration is substance." Such cyclic a definition is exactly like something in geometry: proving theorem A with theorem B, and then coming back to prove theorem B with theorem A. This is a violation of basic logic. So, how can we be sure that these two things, "substance" and "force," are real? Finally, one has to resort to intuition and faith for the answers. If the most definite and mature science, physics, is like this, let alone all the other sciences.

Actually all scientific work must use at least two basic faiths for its premise:

- (1) One must believe there are some unchangeable general laws in the universe. Otherwise there would be no such thing as scientific research. People usually think that the general laws of the universe have already been proved by science. Actually this is not true. Scientific research is based on experimentation and observation; but what people obtain from them are limited experiences, even if they have been repeated ten thousand times. People can only say, within the scope of their observation in limited time and space, that things are under the regulation of laws. However, when people apply the conclusions drawn from their limited experience to the whole universe as general laws, they can only rely on faith, not actual proof. The reason is that the finite cannot prove the infinite, the individual cannot prove the general.
- (2) One must believe that the human brain can precisely recognize and reflect things in the objective world; otherwise, all scientific work would be meaningless. We have seen that both arithmetic and science are ultimately established on a foundation of faith. If faith is to

be completely denied, then science must be denied also. Therefore, both science and religion are based upon faith; there is no difference between them. Scientists believe that substance is real. Christians not only believe that substance is real but also believe that real substance must have a real origin; therefore, Christians believe that God is real. Comparing these two concepts, which one is more perfect and more reasonable? When Newton, Kepler, and others deduced their scientific findings from limited research into generalized laws (for example, the law of universal gravitation), their confidence in them was based upon their faith in God. They believed that all things in the universe came from one origin, that is, from the creation of God. According to the Bible, the Creator is a God of order, not chaos. So they believe that there are unified, unchangeable general laws in the universe. Some scientists do not believe in God; however, they still have to believe the concept of the same "generalized laws of the universe." What are their concepts based upon?

Of course, scientific work is not limited to faith. Once people have established the concept of laws on the basis of faith, they will go ahead and test them in broader fields and apply them in practice. If they can obtain the anticipated results without any contradictory exceptions, then they believe that these laws have been verified, until at some later date a contradictory fact is found. After that, people will propose new concepts of law that include all the facts already known, and will continue to carry on their testing work. This is the way science is developed. Nevertheless, people still have no way to be sure whether the current scientific concepts are the final truth, or whether after a short time they will have to be revised again. Of course, religion is not merely faith, and once people establish their faith in God and the Bible, they also have to experience it and prove it in their practical life. If there were not personal experiences and objective factual proofs of thousands and thousands of Christians to confirm that God is reliable, and the Bible is true and trustworthy, Christianity would not have lasted for thousands of years, and would not be accepted by ever more people.

From the beginning to the present time, many thousands and thousands of Christians have paid an extremely high cost for their faith, even laying down their lives without regret. In the whole of human history, there has been nothing else to compare with the martyr spirit of Christians. If all that Christians believe is not the truth, where does their strength come from?

The verification of science and of religion, of course, are somehow different. Scientific proof is substantial; religious proof is not limited to substance only, but also includes mind and spirit. People might think that the mind and spirit are too abstract and difficult to grasp, but they cannot deny their existence. If there is no mind and spirit, then human beings can no more be human beings. For example, everybody has experienced love. However, love is not substance. You cannot verify its existence or its depth by using a kymograph, an electrocardiogram, or an electroencephalogram. None of these can display the essence of love. But you cannot deny the facts of love. If completely stripped of love, life would be too gloomy, too grim, altogether too intolerable. Everything in the world would fade in color and significance in the eyes of people who have experienced the greatness of God's love. This is why so many Christians willingly gave up everything for their faith without hesitation.

### FAITH AND LIFE

Realistically speaking, the fundamental premise of life is faith, not logic and verification. Too many things are not necessarily logical and are very difficult, or even impossible to verify; but faith is indispensable. If faith is lost, then direction and motivation are lost too, and that kind of life is tragic and painful. Faith is so important to life that some people even commit suicide when their fundamental faith is shattered. Life does not start from one's own choice and verification. When a baby is newborn, he has no logic or verification ability. Nevertheless, depending on instinct and natural reliance, he lies peacefully

in his mother's bosom, enjoying his mother's nursing, and he will gradually grow up day by day, finally into an adult. If he were to insist that he must first test to make sure that she is really his own mother, and test that her milk is really suitable to his physiological needs, or to verify that there is no impurity or bacterial contamination before he started to suck, then his fate would be nothing less than starvation. Every one who wants to live should at least believe that there will be a tomorrow. But tomorrow is not testable. As it is said, "Tonight I take off my shoes and socks to go to bed, but who knows if I can put them on or not tomorrow." A feeling of helplessness is reflected by this saying.

Among all the kinds of faith in human life, the most fundamental and most important one is faith in God. This is the fundamental need deep in mankind's soul. To man God is exactly like a mother to her newborn baby: absolutely irreplaceable. This is true through all ages. and over the whole world. Among all the nations in the world, advanced and backward, rich and poor, civilized and barbarian, there is none without a concept of worshipping god. Important cultural and historical vestiges such as temples, altars, tombs, artistic drawings, and carvings are mostly related to religious faith. This is true of China. India, Babylon, Egypt, Greece, Italy, and North and South America. Human beings have a religious nature. This is one of the most important characteristics by which human beings are differentiated from other animals. Different nations may have different concepts of god and different ways of worshiping god, but the inward need of men for God is the same. Many people neglect or intentionally obliterate this need in ordinary life, but during critical situations of life and death, their real need is fully exposed. The Chinese saying, "One will cry for mother when in pain, and shout for heaven when in an impasse," is an expression of this instinct. The so-called "heaven" here does not refer to the space where wind, cloud, thunder, lightning, sun, moon, and stars exist, but rather to a superior personal Dominator who has His own will and His own judgment of right and wrong, who can reward righ-

teousness and condemn evil, and who also listens to human prayer. People have had concepts since ancient times like "heavenly destiny," "heavenly principle," "heavenly will," and "someone who is guilty against heaven will have no chance to pray." This heaven is usually called by ordinary Chinese people "The old father in heaven," and expressed by ancient Chinese documents as the "Superior Emperor in Grand Heaven." When the Bible was first translated into Chinese the translators borrowed this term from Chinese classic documents and translated God into "Superior Emperor"(上帝). Of course, the traditional Chinese concept of heaven is not exactly the same as the God in the Bible, the Creator of heaven and earth. As the ancestors of Chinese people immigrated to the Far East for an extended time, their religious concepts drifted gradually away from the original faith. But it still demonstrates the common need for God in the innermost being of man. This need is the foundation of Christianity, as well as all other religions, although it does not mean that all religions are the same.

People who don't believe in God, still have to believe in something. People with no faith in anything are not able to survive. They might believe in some person, some cause, some lofty ideal or philosophical theorem. They might even believe in bare selfish individualism. ("If a man seeks no benefits for himself, the heaven and earth will not allow him to survive." This is a popular old Chinese saying.) Have all these concepts been tested, proved reliable without a doubt, or proved more reliable than God? Sorry to say, it is not so. People usually have many beliefs which have not been tested first, and are later on proved by the facts to be false and futile. Following something which is unprecedented in magnificence and popularity usually results in unprecedented disappointment and distress. And when one tries to turn back, it is already too late. If one does not turn to God, he will not be really satisfied or comforted, because there is nothing else more reliable than God. There is nothing else that can take the place of God in the deepest portion of man's soul. God's position in

man's heart cannot be replaced by anything else.

Some people ask Christians, "Where is your God? Is he visible or tactile?" They think that only things one can see and touch are real. They consider seeing and touching as the most reliable means of verification. Yet even these two basic means of verification are established on at least two aspects of faith. (1) You must believe that your sensations are correct without any error. Otherwise, what you see or touch would be meaningless. (2) You must believe that other people's sensations are the same as yours. Otherwise, even though somebody can see and touch something, it still has no general meaning to others. Nevertheless, the two concepts above are not completely reliable for two reasons. (1) Human beings sometimes have illusions or hallucinations. (2) The sensations of different persons are not always the same. We already realize that the sensations of different animals are not the same. Some nocturnal animals like the wolf, dog, and owl, have extremely sharp sensation of brightness, but their ability to differentiate colors is limited (color-blind). The world is not very colorful in their eyes; it is just a single-colored view with very rich levels of brightness, much like the screen pictures of a black and white television with good contrast. Some human beings are also colorblind. If it were not for the fact that a color-blind person has different degrees of weakness in vision to different colors, we would have no way to know that their vision is different from that of others. The things you can see may not be real, and real things may not be seen. This is common sense. In the famous Disneyland Park, there is a place called the "Haunted Mansion." Tourists can see many strange and odd things, but they are only illusional images, and not real. Even in scientific research, there are many things which are not visible and not tactile, but you cannot deny their reality. Can you see force? Can you see magnetism? Can you see electrons, protons, and neutrons? So, thinking that only visible and tactile things are believable is actually a shallow-minded concept. God, the Creator of Heaven and Earth, is really not visible and not tactile (except for those special cases where

God reveals Himself to men). For this reason, He is a real God, because all visible and tactile things are material, (human sense organs themselves are material). The visible materials can only be idols, but not God, because God is not material, but rather the Creator of all materials. I once accompanied some friends to visit the largest Buddhist temple in America. When I saw people worshipping those wooden, stone, or plastic idols, I couldn't help feeling grieved in my heart. How could men worship things made by human hands as gods? The reason is that men need God in their hearts, but in the process of seeking God, they are often led astray to worship idols. This is partially due to the fact that many people obstinately hold on to things they can see and touch. This is really a tragic mistake, because they miss the right way of knowing the true God.

#### SCIENTIFIC RESEARCH MANIFESTS GOD'S WORK

Science, due to its material limitation, cannot lead people to know God directly. However, scientific investigation of the material world is very helpful to men in understanding God's work by which He created the whole universe. When we see the Great Wall, we comprehend the great capability, boldness, and tolerant stamina of the ancient Chinese people. When we see the Egyptian pyramids, we recognize the glorious civilization and superior artistic techniques of ancient Egypt. Similarly, science leads men to understand more deeply the mystery of all things in the universe, and also makes men comprehend more thoroughly the wonder and greatness of God's creative work. It is said in the Bible, "The heavens declare the glory of God; and the firmament shows his handiwork."(17) This is true indeed. Kant said, "There are two things that won my admiration: first, the great wonders of the universe and second, the mystic function of human conscience." When we look up to the majesty of heaven, and look down to see the multiplicity of species of creatures on the earth, we can appreciate God's wisdom in creation everywhere. If

we would examine ourselves, and listen to the voice of our conscience, we could comprehend God's principle which leads men to righteousness. These two things are sufficient to direct people, who are honest enough and serious enough, to seek earnestly for God.

#### The Wonders Of The Universe

How great is the universe? Presently men can see celestial bodies ten billions of light-years away, but they still don't know where the boundary of heaven is. The number of celestial bodies is countless. However, right in this vast, boundless, and spectacular universe, we can see two surprising characteristics: the identity of the universe and the regularity of the universe. These are both profoundly inspiring.

### The Identity Of The Universe And Its Origin

Even though the known celestial bodies are countless and their distribution is wide and endless, their composition is very simple according to light spectrum analysis. It is just the same as that of the solar system and our small earth. This indicates that no matter how vast and great the universe is, it has a single common origin. Science acknowledges this, but so far, there has been no satisfactory answer as to what this origin is. In 1929, Hubble found that the light spectrums of the farthest out celestial bodies are all shifted towards the red side. This is the so-called "red shift" of spectrum. This means the light wave frequencies of all these celestial bodies, compared to a relatively fixed light source (e.g. the sun), are relatively low. According to the Doppler effect, we know that all these celestial bodies are flying away to outer space with extremely high velocity. In other words, the universe is expanding outward at very high speed. Therefore, people have to admit that the universe must have had a definite starting point, because it could not keep expanding like this in the infinite

past. If we could let time flow backwards, we would see the universe shrink with reversed velocity. Then after a very long but not infinite time, the universe ought to shrink back to one point. Then this primary point would be the origin of the universe. From this, someone advocated a theory that the universe developed from a primary explosion (Big Bang). Evidently, however, this is not a real answer, because, in case of an explosion, there must be an "explosive" (high potential energy). In the primordial void before the beginning of time, when there was no substance and no energy, how could such an explosion have occured? Evidently, explosion at most could only be a secondary incident, not a possible origin of the universe.

Some people think that this primary great explosion was not an ordinary explosion, but rather a particular, specialized event. It originated from one point with only location but no volume, and exploded into the entire universe. But if so, it could not have been just an explosion; it must have been a genuine Creation, which means, it brought about everything from "absolutely nothing." This is exactly what creation means. This kind of discussion is entirely beyond the range of science, and well into philosophy or metaphysics. Some people believe that before the great explosion the universe was originally a very small particle, named a "singularity," which was extremely tiny in volume, but its density, temperature, and pressure were infinitely large. After the "big bang" it then became our present universe. But where did this "singularity" come from? Evidently it also should have an origin. It could not have come from nothing. It is said in the Bible, "In the beginning God created the heaven and earth" (Genesis 1:1). This great creation was truly the origin of the universe. Recent research in astronomy reveals that the universe is not infinite. It must have a beginning, a starting point from nothing to everything. This is CREATION. Many astronomers who were at first atheists, when faced by all the facts, finally accepted the concept of "creation."

Materialists do not acknowledge the existence of God. They say that God was created by men. To deny the God of creation, they

proclaim that material itself is an everlasting existence which cannot be created or destroyed, having no origin and no end. They also assert that the universe is infinite, without a beginning or end in time, and without boundary in space. And all the countless wonderful astronomical, geographical, and biological phenomena in the universe are due to the very nature of material itself, not to the creation of God. However, by doing this, atheists have made up another god for themselves; the name of this god is "Material." Material, by their description, not only possesses all the characteristics of a god, but is even far more potent than the legendary gods in fairy tales. Material could properly arrange all the stars, and manage the regulated motions of the sun and moon; Material made all the bright mountains and clear waters, the singing birds and fragrant flowers. Material gave man his superior wisdom and logical intelligence, so that he could comprehend all things and dominate the world. Even though man, as the highest form of the existing material, could not make a simple cell, Material itself gave life to all creatures, and made them breed vigorously, the smaller ones as bacteria or virus, and the larger ones as big sharks and giant whales. Not to mention that the lifespan of Material is everlasting and endless! Is this not a fully deserving superior god?

But this is nonsense. Material is merely the substance which makes up all things; material itself has no wisdom. All things are made of some ninety elements, and all the elements are made up of electrons, protons, and neutrons. Should there be nothing in the universe besides material, then electrons, protons, and neutrons would be the only source of all wisdom phenomena. This is obviously absurd. All beautiful music is made up of limited notes, but notes themselves cannot produce music. The random combination of notes can only produce noise, not music. Beautiful music is created by musicians. All the magnificent buildings in the world are made up of materials such as bricks, tiles, wood, and stones. However, the building materials themselves cannot make buildings. The random accumulation of building materials can only be counted as trash. The value of

all buildings comes from the design of architects and the diligent labor of workers. If one attributes all the wonders and wisdom of the universe to the nature of material, that is just like attributing the beauty of music to notes and the architectural value of the buildings to the bricks, tiles, wood, and stones. All of these are equally preposterous.

All the natural material phenomena we see submit to the law of causation. If there is no raw rice, there will be no cooked rice. If there are no parents, there will be no children. There is absolutely no exception. If one denies the law of causation, one denies all the objective laws, because all the objective laws are merely specific expressions of the law of causation. For example, in physics we are told that when a mass of substance is affected by external force (cause), then it will display acceleration (effect). This is Newton's famous second law. In contrast, a mass of substance without action of external force (no cause) will not generate acceleration (no effect), that mass will maintain its original state: the stationary will remain stationary, the moving will keep moving along a straight line with the same velocity. This is Newton's first law. We can see that all these particular laws are just the specific manifestation of the law of causation. Also, according to the law of causation, we can determine that if there is an effect, there must be a cause before it. But the materialists have told us that the existence of material (an effect), does not need any premise (a cause); that material itself is an effect without a cause. By this, they have denied the law of causation in material phenomena. Those materialists who always emphasize objective laws have thus swept away the common foundation of all objective laws. Inconsistent in logic, and self-contradictory in words, what is more serious than this?

And if material is really everlasting, then the age of the earth and the celestial bodies should be infinitely old, but in fact it is not so. Scholars roughly calculate that the earth's age is about 4.6 billion years old (which is not very reliable). Some have estimated the age of the universe to be about 15 billion years old. In summary, scientists

can not help but acknowledge that there was an origin of the universe and all things, and that there must be an end of them as well, because all celestial bodies are continually consuming energy. For example, the sun must continually consume a large amount of materials of nuclear energy to maintain its light and heat. Once these combustion materials have been consumed, that will be its end. The so-called "conservation of substance" and "conservation of energy" are but concepts derived from limited conditions (chiefly from chemistry and thermodynamics). Whether these concepts can be applied to the nearly infinite conditions of time and space is not known for certain. According to the theory of relativity, some substances under certain particular conditions can be transformed into energy (Its equation is: E=MC<sup>2</sup>. E stands for energy, M for mass, C for the speed of light, so a small amount of substance can be transformed into a gigantic amount of energy). Now we can see no more conservation of material itself.

Even if the sum of substance and energy is conservative, during the process of energy transformation its entropy, according to the second law of thermodynamics, is always increasing and irreversible. Once entropy reaches its maximum, there will be no more energy transformation. And that means there will be no more usable energy. At that time, the universe will become totally dead, with no light, no heat, and of course, no life. It will be the end of the universe as we know it. This is the special condition known as "heat death." If the age of the universe is really infinite, it should already have entered the condition of heat death. There is no way to revive the vitality of the universe which has already entered a condition of uniformity. Although entropy is but an abstract concept derived from arithmetical calculation, at least it demonstrates that science cannot prove the universe is everlasting. The Bible says that the earth and heavens shall perish, and all of them shall grow old like a garment. (18) (This is an exact indication of entropy increment). And one day "heaven and earth will pass away."(19) This is to say, the universe is not everlasting. It had a beginning, and certainly it will have an end. Is this not the

best illustration of the universe and the material world?

# The Regularity Of The Universe

According to all observations, the universe is not an orderless accumulation of materials. It is a gigantic system in perfect order, moving according to very strict rules. Precisely due to this, men can do scientific research, accurately observe astronomic phenomena, make calendars, and predict the time, the region, and the degree of solar and lunar eclipses. One of my classmates, who is engaged in astronomy, had already calculated many years ago all the solar and lunar eclipses for two thousand years to come. Up to the present, the accurate calculation of time has been basically dependent upon astronomical observation. Newton gave the analogizy of the universe as a fully-wound huge clock. Nevertheless, who made this grand and huge clock, and had it fully wound (reserved energy)? Recently, due to rapidly developing computer technology, men have a new understanding of the mystery of the universe. Some scientists see the universe as a gigantic supercomputer, without parallel, functioning according to a very precise program. When people see a sophisticated computer, the first thing which comes to their mind is, who made this computer? Similarly, when we face this supercomputer of the universe, the wisdom of which is trillions of times superior to any man-made computer, can we not think of that as the masterpiece of the Creator?

### The Unique Ecological Conditions Of The Earth

When we look at the earth, we cannot help but acknowledge that the earth is really a paradise with unique endowments, without any parallel, for men to live in. We tend to take all we enjoy here for granted. However, after we look into the conditions of other planets, we realize that all these should not be taken for granted; the earth is an extremely precious and specialized case. Not all other planets are

provided with the same ecological conditions as the earth. Of all these conditions, if only one or two were incorrect, men would not be able to survive.

First of all, the stars in space are many and various. But not all stars are suitable for life. Luckily, the sun is not a red giant star, or a white dwarf star, or a neutron star, or even a black hole. It is a medium-sized, yellow star at middle age, exactly suitable to supply moderate light and heat to the earth. If the sun were too big or too small, too young or too old, or if it were not yellow in color, it would not be able to do the right job. And in the solar system, the earth is well-situated at a proper position. Too close to or too far away from the sun would be no good. If the earth were too close to the sun like Mercury or Venus, then it would be too hot, and no creature could exist. If the earth were located a little farther from the sun like Mars, it would be too cold. Its surface would always be in a frozen condition.

Also, the periods of rotation and revolution of the earth are just right. For example, if its period of rotation were too long like Mercury's, the surface always exposed to sunshine would become as hot as fire (over 400°C), while the opposite side in shadow would become bitterly cold (-173°C). If the period of rotation were too short, then sea water would rush to the equatorial area due to the high speed rotation. Vast areas of the low latitude region would be flooded by sea water, and the rest of the land in this region would also be under the flush of strong tidal waves, and no creature could survive. In the high latitude zone, large areas of sea bed would be turned into dry land, and large areas of land would become deserts due to lack of water. Also, if the speed of rotation of the earth were too fast, the rapid wind on earth would be catastrophic. For example, the period of rotation of Jupiter is 10 hours, and the wind speed on its surface is over 2000 kilometers per hour. It is terrible for living creature. Because the rotation axis of earth inclines to one side, the equatorial plane of the earth and the ecliptic plane (revolution orbit plane) are

not the same; between them there is an inclination angle of about 23.5 degrees. If this inclination angle were too small, there would not be four seasons on earth. If the inclination angle were too great, then the seasonal temperature difference would be also too great, and in most areas it would be permanent daytime in summer, and permanent night-time in winter. Compared to other planets, earth has a relatively large satellite: the moon. If the moon were too small, then the rotation axis of the earth would keep swaying, resulting in a chaos of seasons. If the moon were too large, then the huge tidal effect induced by it would cause great disasters on earth, and exert acute retardation to the rotation of the earth, making day and night longer and longer.

Today, because of the highly developed technology of transportation, some people think that the earth is too small. If the earth were larger, then wouldn't we have more space and resources to utilize? They don't realize that the size of the earth is not arbitrary. It would cause problems if it were either too large or too small. If the earth were too small (such as the size of Mercury), there would not be sufficient gravitational force to prevent gas from escaping, and the atmosphere would gradually be lost. As the air was lost, water would follow it by evaporation and be lost also. After air and water were lost, life could not exist. If the earth were too large, like a solid planet as large as Saturn, then its gravitational force would cause the weight of a human body to exceed two thousand pounds. No human being would be able to support his own body weight, nor maintain blood circulation under so strong a gravitational force. Simply put, human beings and all animals could not survive.

### The Wonderful Function Of The Earth's Atmosphere

The surface of the earth is surrounded by a layer of air. This layer of atmosphere is absolutely necessary for life and provides excellent protection to all creatures on the ground. If there were no atmosphere, the meteorites coming from space would bombard and

destroy everything on the earth. Due to protection by the atmosphere, most of the meteorites burn out and disappear before they reach the ground. The fine dust thus produced provides nuclear particles for vapor condensation, making rainfall possible, and gives a certain degree of diffuse reflection to sunshine. This diffuse reflection is very important to man's vision. It not only gives the sky a bright and pretty blue color, but it also makes the illumination on the ground become soft and even, giving us balanced vision. Otherwise, all objects on the ground under intense direct sunshine would not form clear visual images because of too strong a contrast between bright and dark. Besides glaring sunshine and dazzling stars, the background of the whole sky would be pure darkness, whether daytime or night. There would be no bright blue canopy of heaven, no beautiful view or scene. All one would see is clear-cut black and white.

There is a strong magnetic field around the earth (according to exploration, not all the planets have a similar magnetic field) that protects the creatures on earth from being hurt by the solar particle flux. It also forms an ionized layer in the upper atmosphere. The ionized layer and the ozone layer in the upper atmosphere have a good shielding effect against the electromagnetic waves coming from outer space. Without this protection, excess electromagnetic waves would endanger the health of men and animals. What should be mentioned is that even though the atmosphere can shield most of the electromagnetic spectrum, it still allows visible light to pass through. And as we know, visible light is also electromagnetic wave. It is only a very narrow wave band in the wide electromagnetic wave spectrum. Only because the human visual cells are sensitive to this wave band, does it become visible. Electromagnetic waves with frequencies higher or lower than this band will not be perceived by human eyes; therefore, they cannot be seen even though their property of electromagnetic waves is just the same as visible light. To most of the electromagnetic spectrum, the atmosphere is like a thick wall, hard to pass through, but to visible light it is like clear transparent glass, allowing light to

pass through without hindrance. This is called "the window for visible light" in geophysics. It is really an amazing phenomenon. If there were no such a peculiar window, the atmosphere would treat all the electromagnetic waves the same, shielding them all out. Then the earth's surface would become totally dark, and neither the heaven nor the sun could be seen. All life phenomena would be erased. As for the ultraviolet rays with frequencies slightly higher than violet light, the atmosphere absorbs most of them, allowing only a small portion to pass through. This is also very important. Too much ultra-violet light will damage the eye and skin, or even induce cancer. However, a small amount of ultra-violet light is indispensable for the human body. Otherwise, the steroids in the human body could not be transformed into Vitamin D, leading to rickets, and children could not develop normally. Recently, the overuse of fluorinated alkanes (some manmade compounds used as freezing agents), has contaminated and damaged the ozone layer of our atmosphere. Large holes have ruptured in some places, resulting in immediate health hazards. By this we realize that the ecological environment of the earth is in a delicate state of equilibrium which should not be interfered with casually.

The atmosphere not only provides protection to the earth's surface, but also has a greenhouse effect which keeps the temperature on the earth warm and stable. Proper atmospheric pressure is also a necessary requirement to maintain water on the earth's surface in a liquid state at normal temperatures. Therefore, the thickness of the atmosphere should be just right. If the atmosphere were too shallow, the protective function would be insufficient, the heat on the surface of the earth would be lost easily, and the temperature would go down dramatically. The temperature difference between day and night would be too exaggerated. If the air pressure were too low, then the water on the surface of the earth would continuously boil at normal, or even low temperatures, until all the moisture would evaporate and be lost. All the animals and plants on earth would then die of thirst. On the contrary, if the atmosphere were too thick and heavy, then the

extra high air pressure would not be tolerable to humans and animals. Also, too strong a greenhouse effect would elevate the temperature on earth continuously, endangering the existence of animals and plants.

In order to satisfy creatures' need for air, the atmospheric composition must be adjusted properly. Oxygen is needed by almost all living creatures. Too little oxygen would suffocate almost all living creatures; too much of it would also be harmful to them. Too strong oxidation would cause the surface of the earth to become a sea of fire, and even the metals would become spontaneously combustible; therefore, oxygen must be diluted with some inactive gas. About eighty percent of the atmosphere on earth is nitrogen. Besides diluting oxygen, nitrogen, after being gradually transformed into solid or liquid compounds, is the most important nutritional source for plants, and indirectly meets the nutritional needs of animals as well. If some other inert gases were used instead of nitrogen to dilute oxygen, then all of the plants and animals would be unable to synthesize protein and would die. Nitrogen is very stable under normal temperature and pressure, and will not join in any chemical reaction, so it can dilute oxygen. But how can it be transformed into compounds needed by organic creatures? The mystery lies in thunder and lightning. In the discharging process of a thunderstorm, the high-potential electrical arc turns some nitrogen into ammonia, nitrogen oxides, and nitric acid. These chemical compounds then drop to the ground with rain and snow and become fertilizers for plants without polluting the air.

Besides oxygen and nitrogen, the atmospheric air must also contain some carbon dioxide in the proper concentration. Without enough carbon dioxide, plants could not conduct photosynthesis and would definitely wither and die. Animals without plants for food could not survive, either. However, with too much carbon dioxide, animals and plants could not breathe. Carbon dioxide has a very strong greenhouse effect; too much carbon dioxide would make the temperature on earth keep rising until beyond control.

As we know today, there is no other planet or satellite in our

solar system that has an atmosphere similar to that of earth. Mercury, like the moon, has no atmosphere left at all now because its gravitational force is too weak. The atmosphere of Venus is too thick and dense, with air pressure about 90 times that of earth. Such high air pressure is definitely intolerable to humans. Its carbon dioxide content is as high as 90%, with a very strong sulfuric acid mist which can erode metals, not to mention living creatures. Mars has almost no oxygen and nitrogen in its atmosphere, and 94% of it is carbon dioxide. It is absolutely unsuitable for animals or plants. The surface layers of atmosphere on Jupiter and Saturn are composed chiefly of hydrogen (90%), while the rest is helium. In their deeper layers are methane, ethylene, and ammonia, which are all toxic gases. The atmospheric compositions on Uranus and Neptune are not completely determined yet. It is estimated that besides hydrogen and helium there should be more methane, ammonia, and the like. The chief atmospheric compositions on Pluto are neon and methane. In summary, not a single one of these planets, except the earth, has an atmosphere that will sustain human life.

#### The Earth And Water

Besides having the right atmosphere, another especially important property of the earth is that it has plenty of water. Seventy percent of the earth's surface is covered by water. Water is indispensable for life. Rivers, lakes, and seas are hotbeds of life. Also, water has the greatest specific heat value. Seas and lakes are gigantic natural thermostats. Water, working together with the atmosphere, can give moderate and stable temperature and humidity to the earth's surface. These are the basic conditions that creatures need to live and multiply.

In the entire solar system, no other planet possesses such a plentiful water supply as the earth. There is no water on Mercury and the moon because of the absence of the atmosphere. Venus has a size very close to that of the earth, and it is just slightly closer to the sun than the earth. But because it has no sea or ocean to absorb the excessive carbon dioxide, carbon dioxide has accumulated more and more. The greenhouse effect of carbon dioxide had caused the temperature to increase persistently, so that even more carbon dioxide evaporated from the rocks. A vicious cycle thus formed, finally raising the surface temperature of Venus to a level of over six hundred degrees centigrade. Even the rocks are burned to a dark red color. The whole planet thus has become a hell of fire.

The basic conditions on Mars are also very similar to those on the earth. Its diameter is about half that of the earth. Its revolution period is 1 year and 8 months. Its rotation period is 24 hours 37 minutes, almost the same as the earth's. Its axis of rotation also has an inclining angle of 24 degrees, so its seasonal changes are similar to those of the earth. It also has an atmosphere. At first glance, it seems that Mars would be the planet most likely to have life on it besides the Earth. Early astronomers such as the Italian Schiaparelli and the American Lowell, all saw some peculiar networks on the surface of Mars. It was said that these networks showed seasonal color variations. These network patterns did not look like natural rivers. So they were supposed to be canals with plants growing along their banks. These canals were so enormous that they would have required very advanced and superior technical power to accomplish such a feat of hydraulics. Therefore, it was speculated that on Mars there must exist some highly developed creatures with intelligence far beyond that of human beings on earth. So the rumor of a "Mars man" was high at that time. The canals were thought to be made by the "Mars men" to draw the melted ice and snow from both poles for irrigation. But before long, all these speculations were totally shattered. People finally learned that on Mars there is almost no water. Mars is also too cold. Even if there would be some water, it would be frozen permanently underground. Also, because the gravitation of Mars is only one-third that of the earth, it cannot hold all the gases. The lighter

ones, such as hydrogen, helium, oxygen, and nitrogen, are almost totally lost, and only the heavier ones such as carbon dioxide remain. The air pressure is only about 0.7 percent that of the earth. Under such low air pressure, even if the temperature is 0°C, water would keep boiling until totally evaporated. Therefore, no liquid water can exist on the surface of Mars. There are no rivers, no lakes, and no seas. Even the white "ice caps" on both poles are chiefly coagulated carbon dioxide (dry ice), with very little water.

So, in a world without water it is impossible for any highly advanced life to exist, and even the single-celled bacteria can hardly survive. And because the atmosphere is very thin, the greenhouse effect is weak. With no water to work as a buffer, the temperature differences between day and night, or between seasons, are extremely great. The severe expansion of hot air and the contraction of cold air, causes drastic changes in air pressure and induces continuous strong winds. The wind speed is as high as 320 kilometers per hour. In addition, without the protection of water and plants, when the wind storms start, sand and dust are blown up, stones roll about, and the sky is obliterated by a sand storm. The reason Mars always appears red in color is due to the sand storms all over it. Even the most primitive creatures cannot withstand such poor conditions, not to mention human beings. According to recent close exploration of Mars with Space Explorer, besides scattered meteorite craters and a few high and steep mountains, most of the surface of Mars is occupied by sandy, stony deserts. There are no rivers at all. The so-called "canal network" is only one solid example illustrating that in the so-called "scientific observation," the subjective imagination of men can lead to most unscientific illusions.

### The Condition Of Other Planets & The Peculiarity Of The Earth

The planets beyond the orbit of Mars are successively Jupiter,

Saturn, Uranus, Neptune, and Pluto. The first four are all gigantic gaseous stars with no solid surface for creatures to stand on. Their densities are very low, e.g., the density of Saturn is lower than water. Pluto is very small. Its mass is only about 0.2% that of the earth, and most likely it is just a large piece of ice. These outer planets are so far away from the sun that, not to mention the other conditions, the extremely low temperature alone (about -200°C) excludes the possibility of any existing life. Therefore, we can see that, among the nine major planets of the solar system, no other planet possesses the ecological conditions comparable to these of the earth. Some scholars think that even among all the other galaxies, the ecological conditions on earth are most likely unique. So we can see how wonderful and precious the conditions of the earth are.

When there are too many "just rights" for a matter to come true, then people have reason to believe that the occurrence of the matter is not purely by chance, but through some special intelligent arrangement. Let's take plying dice for example. If one plays it only two or three times, occasionally it happens that the same points appear. But if one plays many, many times, then the chances for all these six numbers of the dice points to appear will become closer and closer, all approach to one sixth of the total number of play. If someone throws seven or eight times continuously, and every time he rolls a six, then you have good reason to suspect there must be some special reason for it. If he throws twenty times continuously and every time he still always rolls the six, then you will certainly think that either his dice is strange, or else he has some mystic trick to play with it, or both. You would never think that it was just an accidental occurrence. For the very same reason, to create the earth with all the ecological conditions so that life can exist and regenerate is much, much more difficult (thousands of billions of times more difficult) than throwing dice twenty times and making all of them come up sixes successively! Can you believe that it was just an accidental occurrence?

Now let's take another example of logic circuits which are indispensable to the modern automatic control technique. In order to obtain a suitable logic circuit, it is necessary to make a principle design first according to the particular demand, then prepare the proper components and assemble them together onto a circuit board in strict accordance with the design requirements. Any defects in the components or error in assembling will lead to total dysfunction of the whole circuit, not to mention random preparation and assembly. After it is assembled, it still needs professional tests and fine tuning to insure that the integral assembling is correct and to set all the variables to the best values. Otherwise, even though the whole assembly is correct, the circuit still might not work. As people investigate the structure of the universe and earth's ecological conditions more deeply, they realize that all these structures and conditions were intelligently designed and fine tuned. Otherwise, they could not so precisely fit the needs of all creatures for existence. Presently, people can use a computer to make a model, and design another "artificial earth." Since there are so many variables involved in the earth's ecological conditions, and the range for each variable is so wide, if the best value of each variable were not chosen intentionally, but just set to an arbitrary value by chance in the allowable range, then the possibility of this "artificial earth" allowing living creatures to survive would be extremely low, practically zero. We are told clearly in the Bible that the unique ecological conditions of our earth did not come about by accident, nor by chance, but by the meticulous creation of God. Before God created man, He first created, step by step, circumstances that were suitable to the existence of mankind. As God finished each step of creation, it is said in the Bible, "God saw that it was good." And when the final step was done, "God saw everything that He had made, and it was very good."(20) This is why all the conditions on earth are so surprisingly perfect.

### The Wisdom Of The Living Creatures

If we look at the animals and plants on earth, we will discover more wonders in the works of creation. The wisdom displayed by every kind of creature to lengthen the life of its own and its species is really amazing. For example, if you throw a handful of beans on the ground, the positions these beans assume on the ground are by chance. Their plumule point may be up or down, to the left or to the right, with no definite direction. It conforms to the principle of mathematical probability. But once the seed starts to germinate, its growing direction completely follows the demands of life, absolutely not the principle of probability. Its root bud may even make a 180 degree curl to grow downward; its stem bud may even turn a full somersault to grow upward; there are absolutely no exceptions. Now, by biological knowledge, we know that only in this way can the root system obtain water and nutrition, and the twigs and leaves get sunshine and air. But how they can do this is still not understood very well even today. However, all these principles of life were conceived in these small seeds since the beginning.

In order to spread their seeds, various kinds of plants display their fantastic capabilities. Seeds of plants like the dandelion are equipped with a few cilia, which give them good aerodynamic properties, so they can fly far away with the winds when they mature. Capsules of garden balsam and the pods of many beans are very effective spring-ejectors. They explode suddenly when their seeds mature, so that the seeds can be sprung several feet away. Seeds of plants like cocklebur can neither fly, nor spring, but are equipped with many ingenious reversed barbs which can hook onto animal fur or human clothing and travel away with them. The seeds of some plants are spread by birds. They all have sweet fruits to attract the birds to pick them, such as Chinese wolfberry, and mulberry. The seeds of these plants germinate only after passing through birds' digestive tracts. In this way they avoid the over-crowding caused by direct

falling on the ground and germinating on site.

In tropical areas there are some insectivorous plants, one of which is the common nepenthes. It has small pockets on its leaves. Sweet honey juice is secreted at the bottom of these pockets to attract insects. But the inner surface of these pockets is slippery, so when insects attempt to reach the honey juice, they slip down to the bottom of the pocket. At this moment, the cap over the pocket closes instantly. The tiny rigid hairs on the cap and around the pocket opening will then interlock tightly, so the insect inside the pocket can never escape. Fluids will then be secreted inside the pocket to digest the insect completely. After that the pocket will re-open and wait for another insect to come. Is this design not even more ingenious than the hunters' traps? In America there is another kind of insectivorous plant. We may call it the "soul-enchanting herb," because it has a very special method of capturing insects. Its flower is like a deep wide-mouthed cup, spreading a very special fragrance. Once insects smell this fragrance, they are seized by it, just like somebody overcome by a so-called magic potion in fairy tales; they instantly lose their ability to escape and fall into the flower cup. Even if you take them out of the flower cup, they are still unable to fly and flee. They can only creep around aimlessly, and eventually drop into the flower cup again, to become a fine meal for the "soul-enchanting herb." This herb's method of capturing insects seems even more ingenious than the common nepenthes. From whose hand come all these wise designs?

Now, let us look at the animal world. Bats are nocturnal animals. They fly here and there freely in the darkness of night, catching various flying insects for food, without hitting any obstacle. The ingenuity of bats' activity even exceeds some diurnal birds. What means do bats rely on to control their activity? They do not rely on vision for flight, but rather guide their flight with ultrasound. While flying, they emit ultrasound waves with their vocal cords at a rate of ten ultrasound pulses per second. Their ears are extremely sensitive ultrasound sonars which receive the ultrasound waves reflected by all objects. According to these ultrasound messages, bats then avoid obstacles and pursue their food. The bat brain can analyze ultrasound pulses in microseconds, so bats can catch two different objects successively in one second. Some night moths have a marvelous technique to avoid being pursued by bats. Once they realize the pursuit of ultrasound waves, they stop their normal flying abruptly, put back their wings, and drop down to the ground in a state of feigned death to escape the killing pursuit.

Sea animals like whales and dolphins also guide their motion with ultrasound. When they dive into deep water, the light is so dim and visibility so poor, that ultra-sound piloting is far more effective than vision. These animals all have a lump of fat-like mass in their heads that serves as a very good ultrasound amplifier. Why do these animals use ultrasound to pilot and not ordinary sound waves? Because the frequency of ordinary sound waves is too low and the wavelength too long, they will bypass most obstacles they meet, giving no reflective message. If human beings had the ability to use ultrasound guiding, then blind people could use their ears for eyes. Someone did try to use ultrasound equipment instead of the blind stick to lead blind people walking. Unfortunately, the artificial ultrasound equipment today is all too cumbersome and ineffective, far less suitable than the animals' ultrasound systems.

There is a legendary Chinese saying from ancient times, that says, "the adopted son of the corn-ear worm." The corn-ear worm is the green larva of some kind of moth. The small earth bee takes it for a medium to breed its offspring in, hence leading to the misconception of an "adopted son." When the small earth bee is about to lay eggs, she first chooses a well-developed green larva, and pricks it with her poisonous sting to anesthetize it. She brings it back into her den hole, and then lays an egg into this larva's body. The mother bee, having finished her breeding duty, leaves the den, seals the hole, and dies. The anesthetized larva will neither eat nor move for the entire

winter; it is not dead, not stiff, and not putrid. In the following spring the egg is hatched into the bee larva. It then takes the anesthetized larva for its food, until it turns into a new earth bee of another generation, coming out of the hole to repeat the life of the previous generation. This superior method of preserving meat is still beyond human ability. This ability of the small earth bee is not a learned behavior, because small bees of the new generation are completely isolated from the outer world before they grow up, and have no chance to see the previous generation. They are born with this built-in ability.

The woodpecker is sometimes called a doctor of trees, because it has a surprisingly fine innate capability to eradicate worms in trees. No other animal can do as well. The arrangement of toes on ordinary birds is three in front and one behind. This makes them capable of grasping branches. (The ostrich is an exception, because it only runs on the ground, never goes on trees, and has no hind toe.) But the woodpecker, on the other hand, is a trunk climber; therefore, its arrangement of toes is very unusual, with two in front and two behind, so it can climb and cling to the vertical trunks. The woodpecker is a keen observer; it can locate those trees with worm pests among the woods, and can determine the exact position of the worms through percussion, i.e. locating the worm by rapping the tree trunk with its sharp beak. After that it holds the bark tightly with its claws, spreads its tail feathers as a fan and adheres tightly to the trunk. Thus its body can obtain steady support. Then it starts its "surgical operation" to take out the worm pest. Its hard and sharp beak is a good instrument to bore a hole in wood. In order to bore a hole through tough wood, its head must vibrate forward and backward, fast and forcefully. But this action definitely causes its head to undergo strong concussions. The intensity of this concussion would shatter the brain tissue of ordinary animals to pieces. However, the woodpecker has a special anti-shock structure that protects its brain from being damaged. After the hole is done, the woodpecker still needs some reliable means to take the pest worm out from the depth of the hole. The

structure of the woodpecker's tongue is entirely different from that of other animals. It is a specialized apparatus to get the pest worm out from deep holes. Its tip is equipped with sharp barbs, and its stem is a very long, elastic, and tough cord. Normally it is coiled and kept inside the head and neck. When in use it extends forward to push the tongue tip into the deep portion of the hole, hooks the pest worm with barbs out of the hole, and then swallows it, thus accomplishing the job of eradicating the pest from the deep hole.

Have you ever thought about why fire-flies are capable of emitting light without generating much heat? Why do ants, foreseeing a heavy rain storm, heap up a large amount of dust around their hole opening beforehand, so once the heavy rain storm comes, the dusts will shut off the opening, preventing the rain water from flushing into the hole? Who taught them this simple and effective method of flood prevention? Spiders spin webs that capture insects without fail, but why are spiders themselves not stuck? Some spiders can spin webs between trees or buildings, sometimes very far apart, and even with deep ditches or streams between them. Spiders cannot fly, so how can the first thread of the web be delivered to the opposite side?

When eagles and other birds of prey swoop down from the sky to capture, they do not aim and dive downward directly at the object. They slide down to the target from one side with a 30 degree inclining angle. What is the reason for this? Through experiments of aerodynamics, it is found that a falling body sliding down in the air at this angle can attain maximum speed. And also, after capturing the prey, the eagle can ascend right away. It is much more effective than diving down directly to the object. However, when eagles drop into water to catch fish, they still use a large angle for diving, because if they used a small inclining angle, then they would be bounced back by the water surface and could not get down into the water.

Owls catch mice for food at night, so besides sharp hearing and good night vision, they still need to be able to fly quietly. Ordinary birds usually make some noises when they are flying, and eagles are no exception. However, eagles usually seek their prey while flying in the day time, so when they swoop down, they rely on speed and threatening power to overcome. Noise is not so important. However, owls wait silently at night, watching for mice to appear; then they spread their wings to attack. Their swoop starts from a standstill, hardly reaching high speed. Therefore, they must swoop to their prey quietly and suddenly to catch them, leaving them no time to run away. If owls made too much noise, the mice would be alerted, and rush into holes to hide; then owls could do nothing more with them. How can owls fly without any noise? Through investigation, it was learned that the posterior margin of the owls' wing feathers are arranged in a zigzag line to suppress turbulence, and thus eliminate noise. The posterior border of wings on the B-2, America's modern invisible bomber, was designed by mimicking the wings of owls. But the question is, who designed such noiseless wings for the owls?

Now, let us take a look at motion of animals. All motion instruments made by men, from ancient times to today, almost always rely on wheels or sliding boards to move, because they are simple in structure and easy to make. But their adaptability is inferior. They can hardly move on any road with a rough surface, and they are entirely unable to go up and down steps. Recently people started to make "step walkers." But presently a man-made walker requires at least eight legs to avoid overturning, and still walks with difficulty. Besides, during walking, all legs can only move one by one in turn in a way of trial and error. Its movements are slow and clumsy. Let's look back to the human body. There are only two legs for each person, but they can move simultaneously. They can walk, run, jump, and dance. They are also able to kick, tread, tramp, kneel and do other different motions, and still keep good balance at the same time.

The patterns of motion of other animals are of even greater variety and higher skill, all suitable to the requirements of their lives, and all operating smoothly, displaying specific ingenuity, far superior to any artificial product. For example, quadrupedal animals can go

straight; octopedal crabs can walk transversely; centipedes have nearly one hundred legs, and they can still move harmoniously from back to front in a wavelike pattern. The inchworm has a long body and short legs, and moves by bending and extending. The cricket has a short body and long legs, so it walks by jumping. The earthworm has no legs but has rigid cilia, so it moves by wriggling. Snakes have no legs but have scales so they crawl on the ground. Snakes can climb on trees and can swim in water; they are no less ingenious in movement than animals with legs. Snakes living in the desert, because the fine sands are too soft for crawling, curl up their bodies like springs and roll transversely. Aquatic animals usually swing their tails or hind limbs to go forward; those organs are more efficient than the oars of a boat. They are spindle-shaped or elongated water-drop shaped (round in front and pointed in rear), with a smooth and elastic body surface to eliminate turbulence. According to experiments, this kind of body shape has the smallest resistance in water, and makes it easier to change direction. When dolphins are swimming fast, their velocity exceeds a torpedo at full speed. The body shape of the modern submarine is copied from that of aquatic animals. Flying animals all have wide wings, and relatively light bodies. Birds have unusually strong pectoral muscles to control their wings; other muscles are comparatively smaller, or even lacking, so as to reduce their body weight. Also, they don't have thick and heavy bones. Most of their bones are small hollow tubes or curved thin plates. This gives them light weight and high strength. Even the feathers of birds' wings are composed of thin hollow tubes. This is the best flying material. One feather can float in the air for a very long time, whereas the needle-shaped hair of animals cannot do so. Flying activity is much more strenuous than activities on the ground, and consumes more energy. So birds must have a higher metabolic rate. To maintain a higher metabolic rate, the body temperature of birds is much higher than that of other animals. Their normal body temperature is 42°C. If man had a body temperature that high, he would be on the verge of death.

A prominent example of flying creatures is the ordinary fly. It has many natural enemies and no effective means of self-protection. It can only use its tricky and changeable flying technique to escape from its enemies. When an airplane takes off, it needs a runway. Larger birds need a run-up to start flying. Smaller birds and insects start their flying by bouncing. However, flies need nothing; they can start to fly at any time and in any direction. If enemies are in front, they can even fly backwards. Their flying path is very changeable, strange, and unpredictable. Flies still have another unique skill, namely, to make upside-down landing on ceiling, opposing the gravitational force. No other animal can do the same. Most insects have four wings, but flies have only two. Flies do not have a long tail or long legs to keep steady while flying. Then when they fly randomly, how can they maintain balance and avoid being out of control? The answer is that they have a bar-shaped structure under each wing. Whenever they are flying, these two bar-shaped organs turn round at a high speed to maintain their steadiness in flight. Their function is exactly the same as the gyroscope or gyrocompass (to replace the old fashioned compass) on modern airplanes or ships. The flying skill of little flies won the admiration of aero-engineers, because up to this day there is no man-made object which can fly as ingeniously and skillfully as the flies.

# The Origin Of Wisdom Of The Natural World

Examples like those mentioned above are countless. When we take a good look at the heavens and the earth, we can see the infinite ingenuity of creatures at any time and at any place. Bionics is a science which specifically investigates the structure and function of living creatures, and mimics them. People cannot deny that the structure and function of living creatures are far superior to any man-made objects; we can derive profound inspiration from them. In summary, the world we see is not a blind, meaningless, and accidentally mixed-

up mess. It is a gigantic system full of superior intelligence and wisdom. This wisdom evidently does not emanate from human beings, nor from those birds, beasts, insects, and fishes, or flowers, grasses, and trees. So where does this wisdom come from? Biologists call it instinct. But this is just a term, not an answer, because instinct should have an origin as well.

## Additional Discussion On The Futility Of Evolution

To all these questions, the only answer given by evolutionists is that all these are the result of long-term natural selective adaptation. But this explanation reverses the relationship of cause-and-effect, because selection, whether natural or artificial, simply means to choose something from things already existing, to keep the better ones, and to reject the worse ones. Its function is only to sieve, not to create. Selection can only account for why the worse things disappeared; it can never explain how the better came into being. Therefore, it is absurd to say that natural selection was the source of all the marvelous wisdom in the biosphere. Then, someone proposed mutation as a supplementary explanation. That is to say, all living creatures underwent mutations successively in the process of breeding to form various unprecedented new shapes and new characters. These new characters then furnished plentiful raw material for the natural selection. Through selection and sieving, the worse were eliminated and the better preserved. Then the various outstanding characters in the biosphere came into being. Mutation is like a kaleidoscope of the living creature world, capable of producing plentiful and inexhaustible new patterns. Then after selection, what finally remain are species which become more and more superior and prominent.

This argument sounds reasonable at first, but it cannot pass a thorough inspection, because it overlooks one important fact: mutation is a random phenomenon, with no direction and no purpose. This kind of blind alteration is absolutely incapable of producing any intel-

ligent results. All the intelligent things in the world come only from some intelligent creation; it is absolutely impossible for them to originate from random incidents. A building must be built by someone; a suit of clothes must be made by some tailor. Behind a well-known article there must be a great author, behind an everlasting poem, a great poet. Nothing happens casually. To illustrate, if you give even the best typewriter to an illiterate blind person to hit arbitrarily, no matter how diligently he does it, he can only type out meaningless letters and marks. He can never compose an academic thesis. Let us take the kaleidoscope as an example. The patterns it displays seem to be inexhaustible, and its changes appear to be unconscious. However, the structure of a kaleidoscope is conscious. Its basic structure is a regular triangular reflective tube made of three pieces of mirror. Any meaningless arrangement of the small colorful pieces will be reflected by the triangular mirror tube as multiple symmetrical, harmonic right hexangular patterns. This is the basic reason why a kaleidoscope can produce beautiful patterns. If you take these three pieces of mirror out, the only thing left would be some meaningless pieces of paper, and glass, with no more beautiful patterns. And the patterns of the kaleidoscope, no matter how changeable, are just multiple hexangular figures. They are basically identical with only minor differences. It can never give any other kind of picture. The so-called kaleidoscope can actually make only one pattern, because the wisdom element provided to it is limited to this. For comparison, the wisdom elements contained in the modern computer are far more complicated than a kaleidoscope, so it can perform far more advanced jobs. However, no matter how wonderful is its function, all the intelligence it possesses is given by man, so it is called artificial intelligence. The computer itself has no wisdom at all. If all the materials are but some meaningless outcome from blind incidents, then any unconscious selection will not give rise to intelligent results, no matter how many ages or generations you have selected. On the contrary, if from a pile of meaningless materials one can really obtain a superior intelligent

result through selection, then this selector must have superior intelligence. Such selection is actually a creation.

However, evolution excludes any intervention of intelligent factors, so not only is mutation unintelligent, but selection is also unintelligent. Certainly natural selection cannot make any intelligent choice: otherwise, evolution would become creation. For example, everybody with imagination can make sand castles on the beach, or use rocks and sands of different colors to form pictures or words, making them meaningful. But all unintelligent factors, like wind, rain, mountain slides, or earthquakes, will destroy the original order, and never lead to intelligent results. Huge tidal waves will flush all sand castles and other intelligent figures away, and cause everything eventually back to an orderless sandy, rocky beach. Because according to the second law of thermodynamics, in a closed system without intervention from any external factor, all variations will make the structure of things to go from orderly to orderless, and make energy go from a high potential to a low one (that is, entropy will go from low to high); things never go in reverse from simple to complicated, from low grade to high grade, or from orderless to orderly. A building will definitely deteriorate with the passing of time; a suit of clothes will necessarily become old and shabby after years. They will never become more splendid or more luxurious

Any high quality audio tape will unavoidably induce some distortion in the process of duplication. The more it is duplicated, the more severe is the distortion. Ultimately it will turn into entirely useless trash. The distortion (or mutation) caused by the incidental factor in the process of duplication is called *noise* in statistics; it has no positive function, only a destructive effect. However, the evolutionists try to convince us that countless noises with the aid of unintelligent selection can cause the duplicated tapes to evolve into products more superior than the original. And the more you duplicate it, and the more frequent and violent are the noises, the more probable is evolution. Because if there were absolutely no distortion (mutation), the

tape would retain its original state permanently, giving no chance for evolution. Would you think this is scientific language? Mutations are mere destructions and distortions to the genetic code system of any creature, resulting in decay only. But evolutionsists say that countless destructions and distortions will make up a perfect new genetic code system, leading to the generation of a new species. This assumption is entirely unbelievable either theoretically or practically.

In order to remedy the flaws in evolution, the arguments of the evolutionists have kept changing from Darwin's time to today. New theories are still emerging one after another, because they need to weave various cunning words to make their theories plausible. This very fact indicates that up to now there is not one single theory which is reliable; otherwise, there would not be so many divergent opinions. Suppose that evolution possessed the definite reliability of the law of gravitation, would it then require so many arguments and so much patching up? Compared with former theories, evolution today has already revealed obvious differences. There are three chief points.

First, even though modern evolutionists still have not given up their mutation theorem completely, they do confess that mutation plays only a minor role in evolution. Because mutation is a very rare phenomenon, it cannot occur frequently, and the overwhelming portion of mutations (over 99.9%) are harmful or even fatal. Even according to this most optimistic estimation, the total number of harmless and beneficial mutations is less than 0.1%. The probability of two beneficial mutations occurring successively will be lower than one in a million. The probability of three beneficial mutations occurring one by one will be lower than one in a billion. Counting in this way, the possibility of "continuous accumulation of multiple successive beneficial mutations" turns out to be something utterly improbable. Again, because mutations are without any purpose or direction, even if some beneficial mutations do occur, they are not necessarily correlated and able to be accumulated. So the accumulated evolution would be hopeless. On this point, modern evolutionists are somewhat more rational.

Second, Darwin claimed that all creatures are descendants of a unicellular ancestor. As to the origin of this monocell, Darwin's words were evasive. He acknowledged, however, that between living and non-living things is a gulf which is hard to cross. But modern evolutionists regard evolution as a general principle applicable not only to living creatures but also to all non-living things. They say even the whole universe is in a process of evolution. Non-living things can evolve by themselves from simple state to complex, from low grade to high grade, and from non-living things to primitive living creatures. But this idea is obviously contradictory to well-known scientific principles, so it is hardly accepted by people with basic scientific knowledge. Evolutionists then began to resort to fancy and farfetched disputation. They said that even though the process of evolution from non-living things to living is impossible to repeat in today's world, it might possibly have taken place in the infant earth during a distant, ancient age. At that time the primitive world was just like a huge flask filled with a special medium. It was said that at that time there was no oxygen yet in the atmosphere; the air was reductive. In addition, there were thunder, lightning, and ultraviolet radiation, so ammonia and hydrocarbon compounds in the air and water could have automatically combined into aminoacids, and the aminoacids could then again have automatically combined into protein. Later on, upon the foundation of protein, for some unknown reason, a spark of life accidentally burst out and a cell was produced, and this cell acquired the capability of reproduction at this exact time, then so on and so forth, it eventually evolved into this spectacular world of living creatures we live in today. However, this kind of mythical theorem had never been witnessed by anyone, it cannot be verified or repeated by experiment, and furthermore, no reliable evidence is available to support it, so what does it have to do with SCIENCE? Actually each step of the foregoing evolutionary process hides some giant, insurmountable obstacles. Evolutionists cannot provide any convincing explanation, but stall people with "countless accidents" and "possibly." Evolutionists

indulge in wild fantasy and try to force us to take their fancy as fact. This indicates that modern evolutionists are even more presumptuous than Darwin.

The concept of living creatures being formed automatically from non-living things is by no means a new idea. It is exactly the same as the old idea known as "abiogenesis." Since Pasteur's principle was established, abiogenesis has become a historic relic. However, since evolutionists neither accept creationism nor have any other choice, they have to dig up the bankrupted concept abiogenesis and peddle it as *scientific fact*. This, however, cannot turn a myth into truth.

Abiogenesis has at least four insuperable innate defects:

(1) It is contradictory to Pasteur's principle.

Life has to come from other preexisting life. It cannot be produced from a non-living substance. This is Pasteur's famous principle. From this principle a series of basic knowledge has been established as the foundation of modern medicine, such as microbiology, immunology, and sterilization and aseptic technology. If abiogenesis were true, then all of these would be meaningless. Evolutionists have no way to deny Pasteur's achievements, but make farfetched arguments that Pasteur merely proved life cannot spontaneously generate in today's world within a single human life span. He did not prove that life could not have spontaneously generated in far ancient ages over billions of years. However, such an argument sounds like deliberate provocation. It is analogous to similar arguments that Newton merely verified that there has existed a gravitation force within the solar system since the seventeenth century, not that there was one in the universe before the seventeenth century. So even though apples today all drop down to the ground, in ancient times they could possibly have flown up to heaven! Is this serious scientific thinking? The famous anthropologist L. Eiseley said that after chiding creation for its reliance on myth and miracle, evolution had to create a mythology of its own: namely, the assumption that what could not be proved to take place today had taken place in the primeval past. (g)

(2) It is contradictory to the second law of thermodynamics. According to the second law of thermodynamics everything will gradually decay, lose order, and disintegrate. Living things are no exceptions. Therefore, all individual living creatures will die eventually. This is the ultimate outcome determined by the second law of thermodynamics, no one can escape. This process of decay is irreversible, so all living creatures can only go from life to death, not vice versa. Everyone knows this fact. The breeding of living creatures is always from life to life, not from death to life. If things could go from death to life, then it would be quite an incredible event which went from orderless to orderly, from low potential to high potential, from high entropy to low entropy. It would completely contradict the second law of thermodynamics, and could not happen spontaneously, unless some supernatural factor intervened. It is well-known that once a living thing has died, it can never come back to life, so how can nonliving things give rise to life by themselves? Obviously this makes no sense.

Evolutionists claim that evolution does not contradict the second law of thermodynamics, because the earth is not a closed system. It obtains extra energy from the sun, and can make the entropy from high to low, i.e., make low potential energy to high potential, orderless to orderly. For example, a seed can grow into a big tree, a fertilized ovum can grow to a fetus, then to an adult, and so forth. However, this is a sophistry, a specious reasoning. To begin with, there is really no absolute closed system in the world. This will not jeopardize our discussion about the second law of thermodynamics with the concept of a closed system, just as the fact that there is no absolutely stationary state does not jeopardize the discussion of Newton's first or second law with the concept of kinetic and static states. If you extend the range of discussion to the solar system, the galaxy of the Milky Way, or even to the universe, every time you will get a new, larger, almost closed system. Evolution will still contradict the second law of thermodynamics. Any partial decrease of entropy requires a larger in-

crease of entropy in another part as its cost, because no thermoengine has a 100% efficiency. Furthermore, the growth of seeds, fertilized ovum, and all living creatures, does go from simple to complex, from low grade to high grade. But they all need the intervention of life to turn the basic energy of heat and light into specialized biological energy, and to turn inorganic material into complicated macro organic material, to meet the need of living creatures. This process is accomplished under the strict control of the genetic code, and is not a random variation. Similarly, a heap of building materials can only be constructed into various buildings under the guide of a blueprint and with the help of engineers and workers. Otherwise, these variations cannot be realized. A mere increment of light or heat energy cannot raise the orderliness of the structure of things. Putting anything without life under sunshine would only enhance its disintegration. Let's say, without intervention of intelligent factors, can the light and heat energy of sunshine itself cause stones to roll up a slope? Can it erect grand buildings from the ground up? Can it transform inorganic materials into organic macromolecular compounds? If the plumules of seeds (the location of genetic code) were removed, could solar energy cause them to grow into a forest? Plainly, the view that blind, unintelligent natural variations can give rise to life and make it continuously evolve contradicts well-accepted scientific principles.

(3) It is inconsistent with the message property of life.

Reproduction and metabolism are the characteristics of living creatures. Neither is a random phenomenon. Their normal operation has to be under the strict control of genetic code. The genetic code is contained in a double helix composed of deoxyribonucleic acid (DNA). From generation to generation it is highly preserved from change. This is the structural foundation of the fact that one gets "melons from melons, beans from beans." These hereditary messages are highly logical and ingenious, and every species has its own particular characteristics. They are not interchangeable, and if something goes wrong, usually serious disease or malformation will result. Hemophilia, albi-

nism and sickle cell anemia are all due to a tiny error in a hereditary gene. The message characteristic of life phenomena denies any possibility of accidental generation of life from non-living materials, because "message" implies some elements of intelligence in transmission. DNA itself is not the message; it is only the medium. The message is the intelligent element imposed on this medium. A blank videotape has no message; there must be some intelligent elements, such as pictures or voices added to it to realize the message. And messages can never be derived from disorderly accidents without any wisdom.

(4) It cannot surmount the difficult obstacle of extremely low probability.

Living things, whether a whole creature, a particular organ, a single cell, or even a chemical composition, are all provided with structures and functions extremely complex, ingenious, and far superior to any artificial products. To take items so complicated and so ingenious as the results of purely accidental events is entirely incredible. The eye is a very good example. Even Darwin said, "To suppose that the eye with all its inimitable contrivances . . . could have been formed by natural selection, seems, I freely confess, absurd in the highest degree." The only reasonable explanation should be that all these superior and ingenious structures originated exclusively from a superior intelligent design. If one tries to explain it with accidental circumstances, the first insurmountable obstacle is the extremely low probability confronted in every step of this event.

To begin with, all living creatures need protein. All proteins are synthesized by various living creatures according to their own peculiar genetic information under the action of different enzymes. Otherwise, no matter how many amino acids were available, they could still do nothing. All enzymes are produced by living creatures. But before the appearance of the first life, where could enzymes come from? Many scientists have striven to synthesize protein artificially, but all their efforts have failed. Can unconscious accidents do something

that even intelligent scientific experiment could not do? Proteins are composed of more than twenty different kinds of amino acids. The simplest protein molecule contains at least four hundred amino acids, and every kind of protein has its own particular sequence in the arrangement of amino acids. To count it in this way and to suppose protein could be synthesized by chance, then the probability of synthesis for the simplest protein would be  $10^{-257}$ . However, in accordance with Borel's law of mathematics, anything with a probability lower than  $10^{-50}$  will never happen. (h) Even given the most favorable conditions, the probability of protein synthesis by chance will definitely go far beyond this limit of Borel's law, so there is absolutely no chance for it to occur.

Evolutionists place their hope on the endless length of time, supposing that if only there is a long enough time, then anything would be possible. But modern astronomy and geology together cannot provide a length of time such as the evolutionists require. Scholars have estimated that the age of the universe is only about 15 billion years, or about 4.8X10<sup>18</sup> seconds. If the synthetic reaction of protein could occur with a super speed as high as ten billion times per second, then since the creation of heaven and earth, there could have been only 10<sup>28</sup> reactions. Even if the age of the universe were lengthened one hundred billion times, the number of reactions would be only 10<sup>48</sup>, still much less than enough to make a molecule of protein. It is estimated that the simplest living creature needs at least 124 different kinds of protein, and every kind needs a great number of the same molecules to make it function; therefore, even if a protein molecule is formed by chance, it is still meaningless.

In addition, protein is not equivalent to life. Life is by no means as simple as "the shape of existence of protein." An unfertilized egg is really a shape of existence of protein, and is provided with all the nutrients needed by a chicken, but it cannot be hatched into a chicken, because it has no complete life. Any existing cell needs at least a membrane to separate itself from its external environment. This semi-

permeable membrane is not protein, and up to now, it is still beyond human ability to make. Any species in order to survive must breed, and must have genetic material, and that genetic material is not protein. Besides this, the production of protein needs DNA, because the message controlling the synthesis of protein is contained in DNA. But DNA is a product of life, and cannot be formed by itself. Even if it could be formed by itself, the probability of being formed by chance is still much, much lower than that of protein. F. Salisbury of Utah State University counted that on 10<sup>20</sup> planets similar to earth in a time of four billion years, the probability of producing one molecule of DNA by chance is  $10^{41523}$  (i). In addition, all the indispensable materials such as protein, DNA, etc. must coexist to make them operate properly. To synthesize protein there must be DNA; to synthesize DNA, there must be enzymes (which are proteins). Neither should be missing. This linkage operation excludes, in advance, any possibility of formation of life by chance.

Third, modern evolutionists, taking advantage of new achievements in genetics, strive to put their theory of evolution on genetic genes as its base. But the theory of genetic genes does not originate from Darwin, but rather from Mendel, an Austrian monk of the same time period as Darwin. Different from the former mutation theory, evolutionists now emphasize the effects of gradual variation in normal state. In the process of breeding, the second generation of offspring always displays minute differences from their parents, and individuals of the offspring are different from each other also. This is called "micro-evolution," a misleading term. These tiny differences after many generations may accumulate into huge changes and result in "macroevolution." If two populations of the same species have been separated by high mountains or a great sea, preventing them from any interchange of genes, and under the action of micro-evolution and some other factors, then the gene pool of each population will show remarkable differences. This phenomenon is called "gene drifting." This is the basic dynamic cause which leads to evolution of the population, and the generation of new species.

This kind of argument is evidently more plausible than the mutation theory, but still not reliable, because the differences between two generations, or between individuals of the same generation, are only "specialization" of individuals or populations, which will not lead to the generation of any new species. Therefore, it is not evolution. The number of genes of every species is great, forming nearly infinite patterns of combinations through bisexual breeding. Just because of this, all individuals of a species not only have common characteristics but also have individual peculiarities. No two individuals would be exactly the same (identical twins are the exception). If populations are separated for too long a time, they would show some different characteristics. This is the normal phenomenon of breeding and has nothing to do with evolution. Specialization of populations is exactly what the Bible says: God "has made from one man every nation of men."(21) The Bible said that every living creature is "according to its kind,"(22) not according to its shape. All individuals of the same species do not have exactly similar appearances. Identical reproduction is not the work of God. What God created is a world filled with glory and wisdom, full of variety and color.

The common characteristics of a species are determined by the specific genes this species has; the peculiar characteristics of individuals and populations come from various combinations of those genes. If the genes do not change in their characteristics, then no matter how they are combined, the common characters will not change. This is the origin of the stability of species in its characteristics. The patterns of specialization of individuals are changeable and manifold, but all are confined to the frame of common characteristics of species; they cannot go beyond the limit of species because the genes of every species have their own peculiarity. For example, dogs have undergone man's breeding for thousands of years. Their body sizes are quite different; the smaller ones look like cats, and the bigger ones look like leopards. However, they are never as small as mice, or as

big as elephants. This is not because men have not had enough time to breed them, but because the genes of dogs are entirely different from those of mice or elephants. They have their own limits, and once the limits are reached, no matter how you breed them, no further advance can be obtained. Specialization always happens around a prototype of design; the more remote it is from the prototype, the rarer is its appearance, and the weaker is its ability of adaptation. Therefore, the over-specialized breeds always need special attending. And all these variations are reversible. If all kinds of dogs are allowed to cross-breed naturally, they will quickly become wild dogs in appearance, and go back to their original state, or the prototype.

Even though mankind developed into various populations, each had its own characteristics of skin color, hair, and body size. However, that's not evolution; man is still man. Individuals of any different tribe can cross-marry and breed normally, bearing even more superior offspring. This indicates that they still belong to one species of man. American Indians have been separated from other tribes of people from pre-historic times, but they can still breed normally with other peoples. Since the so-called "gene drifting" is carried out gradually in the process of normal breeding, the composition of genes is still the innate one of the species. There is nothing new in gene composition; hence, there will be no new species and no evolution.

A vivid example is goldfish. Goldfish is not an independent natural species of fish. It is just a modified variety of fish cultivated by Chinese people through the efforts of more than one thousand years. The ancestors of goldfish were crucians. As early as the Tang dynasty, people found some crucians with a golden red color, so named them "gold crucians." To view them from the standpoint of modern genetics, they were just a specialized variety of crucians. If left to live and breed in flocks of general crucians, they would vanish quickly in the whole population. Their offspring would return to normal crucians. But in man's eye these gold crucians looked much prettier than those normal dark-gray colored crucians, so some people started to

cultivate them for pets. In this way these modified fish were completely isolated from the normal crucian populations, and their metamorphosis was preserved artificially. Later on, new specialized variations continued to appear. The more unusual were the variations, the more they would be favored by men and preserved. Through the accumulation of variations for more than one thousand years, today we have numerous, colorful patterns of goldfish.

In appearance, they have almost nothing in common with the usual crucians. It seems that they have really evolved into a new species. But actually that is not the case; they are only extremely specialized varieties of crucians. Even though these variations are favored by men, they are very detrimental to goldfish themselves. They can only survive under artificial conditions. If released back to a natural environment, usually all the goldfish will die. If the environmental conditions allow a portion of them to survive, then during the breeding process their offspring will continue to show different characteristics. Those with characteristics more closely related to their crucian ancestors will have a stronger capability to live, and have more chances to survive naturally, while the rest of the small fish will be gradually eliminated. After some generations of natural reverse sifting and elimination, all the surviving offspring will finally return back to crucians "according to their kind." If some normal crucians joined in this process, cross-breeding with them, the reversing process would be speeded up. The fact that those two varieties of fish can be mixed in breeding, means they still belong to the same species of fish; no new species appears. This very fact reveals that even an accumulation of variations, resulting from complete isolation and strict artificial sifting through more than one thousand years, not only cannot produce a new species of fish, but also cannot induce any bit of evolution in crucians. A crucian is still a crucian.

It is known that individuals or populations of living creatures do have variations in their appearance, and can be seen everywhere, but they are limited to specialization within the frame of their species. This has absolutely nothing to do with evolution, which means one species gradually changing to another. The first time Darwin proposed his theory of evolution, he failed to provide any convincing natural evidence. Therefore, he tried to stall with some examples under domestication, such as various kinds of pigeons and high-yielding oxen and sheep. This trick was very deceitful, however, because artificial breeding is entirely different from his so-called "natural selection," and they should not be lumped together. Artificial breeding is a process designed with special purposes, and by means of intelligent human methods, to compel some species to develop along a predestined direction. Any individuals which do not meet the breeder's demand will be eliminated right away, and at the same time the desired ones are protected from being hurt by the environment. In this way some highly specialized "new breeds" are obtained. This condition never happens in the natural realm. "Natural selection" is an unintelligent process which is aimless, directionless, blind, and indifferent to the creature's fortune, no matter to live or to die. It eliminates all unfit creatures mercilessly without any bias. It is extremely different from artificial breeding.

The evolutionists' essential mistake is that they have mixed up the specialization within species (so-called "microevolution") together with evolution beyond species (or "macroevolution"), considering all variations as evolution. For instance, the blackening phenomenon of the pepper moth, which has been revered as a classic evidence of evolution, is actually a typical misunderstanding or misinterpretation. The pepper moths in England before industrialization were chiefly grayish white. Because this color is very close to the color of tree trunks, birds could hardly see them. Only a few of the moths were black. During the early stages of industrialization, coal smoke pollution blackened all the trees. Most white moths were thus exposed to birds' preying, whereas the black moths were protected very well and became the chief portion of moth population. Later on when the pollution was controlled, trees recovered their original white color, and the

moth population also recovered its original state. White moths regained their chief portion again. These facts have been interpreted by evolutionists to mean that these moths evolved into different colors under the pressure of environmental changes; therefore, they provide a solid evidence of evolution! An evolutionist, Asimov, even said that the mere evidence of the pepper moth is enough to verify that evolution is truth and creation is nonsense. But this is sophistical, because the white moth and the black moth are only two different specialized patterns; they can cross breed, so they are not two different species of moth. Long before industrialization there were already black moths, only fewer than the white ones in number. At the time of the most serious pollution the white moths did not vanish altogether; otherwise, they would not have been able to recover their majority position. During the whole process of variation, the only thing that changed was the ratio of genes in the gene pool of the moth population, which determined the moths' color; the species of the moth itself still remained the same, with no evolution at all. In accordance with the theory of evolution, evolution must count in millions of years or tens of millions of years. But the variation of industry pollution was an event just lasting about one hundred years altogether. Can any species evolve in such a short time?

Actually, if the evolutionists dared to face reality and not bury their heads in sand, they would have to confess that in the world of living creatures there are really only variations within species and no evolution between species. Let's recall the sincere words of S. J. Gould, an authority on evolution, "We may tell tales of improvement for some groups, but in **honest moments** we must admit that the history of complex life is more a story of multifarious variation about a set of basic designs than a saga of accumulating excellence." He said again, "The failure to find a clear vector of progress in life's history is the most puzzling fact of the fossil record." Another evolutionist, S. Stanley, said that the doubts of paleontologists about gradual evolution were for long years suppressed. It is a pity that the **honest** 

**moments** of evolutionists are so rare; otherwise, how much senseless turmoil could be avoided!

The central thought of Darwinism is "struggle for existence; natural selection; the superior conquers, the inferior is subdued; the flesh of the weak is prey to the strong; the fittest reserved." However, this is not science. It is merely the political philosophy of the English people in the nineteenth century. At that time Great Britain, after industrialization, was in an expanding stage. The people of the empire of Great Britain used to look down on the whole world. Even before Darwin's The Origin of Species was published, some people in England had already publicly proclaimed such prominent opinions as "the struggle for existence, the conquerors rule." These opinions and Darwin's theory are evidently of the same model. Darwin confessed frankly that his concept of evolution was profoundly influenced by the book The Population by Malthus. Darwin just extended the prejudices of English society of that time to the whole realm of living creatures, and gave it a scientific-looking appearance. Suppose that all these people were living in the declining England of today; they would not be interested in singing songs like "the superiors conquer, the inferiors subdue."

Darwin's theory encouraged the arrogance of hegemonism, and made it sweep over the whole world, but scientifically it was utterly unjustifiable. From the beginning to the present time there have always been some scholars who did not agree with Darwin's prejudicial theory, and did their best academically to expose its flaws. For example, the prominent philosophers of Darwin's time like J. Herschel, W. Whelwell, and J. Mill all resolutely considered *The Origin of Species* to be just an inference, and Darwin have proved nothing; his theory of evolution had serious defects, and was not acceptable philosophically. Their words were earnest but fell on deaf ears. How could a hypothesis with such obvious mistakes overwhelm the whole world? The only explanation is this: people at that time were willing to accept it, because this hypothesis exactly fit the needs of many people

at that time. From bourgeoisie, imperialists, hegemonists, racists to Marxists, all of them found a "scientific" ground for their concepts and actions from Darwin's hypothesis. This can be verified by words of the representatives of these social groups. For example, two years after the publication of Darwin's book (1861) Marx wrote, "Darwin's work is very important; he supported, from the angle of natural science, the class struggle in human history. It is completely consistent with my viewpoint." Marx distorted the struggle of natural species in evolution into the struggle between classes of human society, then his theory of class struggle became "scientific" socialism. Engels also gave the greatest esteem to evolution, praised it as one of the three great scientific discoveries of the nineteenth century, and predicted the superior proletariat class will ultimately win this struggle of existence. Then "From Ape to Man" became the first chapter of the "history of social development" of Marxism.

The fanatical German evolutionist Haeckel was himself a vicious racist. He thought that the difference between superior white people and inferior Asian races was greater than that between the white people and apes. He even considered the Jews unworthy to be called human beings. Later on, the general representative of German racists, Hitler, followed and developed Haeckel's thought, declaring publicly, "the innate mission of the superior German nation is to exterminate thoroughly those inferior Asian nations which reproduce like locusts." So he conducted a frenzied massacre of Jews first. Social powers of every kind have done their utmost to push evolution forward from their own standpoints. This is the chief reason why evolution could flood all over the world like a raging tide. From this single vantage point, we can see a small portion of the adverse influences which evolution has exerted on human society.

Luckily, all those social powers finally decline and vanish one by one. With the development of science, more and more people have recognized finally the fallacy of the theory of evolution. For example, the director of French Natural Science Research Center,

Bounoure said, "Evolution is the fairy tale of adults, it affords no benefit to the development of science at all." The Nobel Prize winner of biology in 1945, E. Chain said, "Survival of the fittest... seems to me a hypothesis based on no evidence and irreconcilable with the facts. . It amazes me that these evolutionary theories are swallowed so uncritically and readily, and for such a long time, by so many scientists without a murmur of protest." Recently the Chinese geologist, Professor Kenneth J. Hsu of Swiss Federal University of Technology, interpreted this point quite adequately in his new book The Great Dying based on recent achievements in scientific research. Prof. Hsu started with the great incident of the extinction of dinosaurs. He summed up all the newest achievements in scientific research by scholars of various nations as well as his own, and proposed an explicit explanation about the cause and results of the extinction of dinosaurs. Dinosaurs were the dominant creatures in the Cretaceous and Jurassic Periods of the Mesozoic Era. The smaller ones were the size of cats or dogs; the bigger ones were almost as big as whales or sharks. Land, swamp, lake, sea, and even the air were all their realms of activity. They had been flourishing and prospering for more than one hundred millions of years, but perished and vanished suddenly at the interval between the Mesozoic and the Cenozoic eras.

Why did the dinosaurs become extinct? According to evolution, it was because they were defeated in the struggle of existence by the newly-born, more favored mammalians, and perished as the inferior species. This is the best instance of "the superior conquer, the inferior subdue; the fittest survive." But this argument was challenged in several aspects. (1) If the dinosaurs became defeated by mammalians and perished, then this must have been a slow and continuous process in which one side declined and the other side prevailed. But the geological records revealed that dinosaurs became extinct suddenly in a very short time, and that there was no continuous process of variation. Evolutionists claim that is because the geological records were incomplete, something was missing, and so we cannot see the

whole process. However, the facts verified that the structure of the earth layer of this time is intact, without any disturbance or gap. (2) If the dinosaurs were exterminated by mammalians, then there must have been great development of mammalians first; later on followed by the great dying of dinosaurs. But the geological records showed the opposite fact, that the dinosaurs perished by themselves first, and then after the Tertiary period of the Cenozoic era came the great development of mammalians. The mammalians living at the same time as the dinosaurs were small and few, utterly incapable of competing with these giants, and could by no means destroy three-fourths of all species together with dinosaurs. (3) If dinosaurs perished because of maladaptation to the environment, then at the end of their existence they should display those defects of maladaptation and decline. However, dinosaurs had adapted very well until the very last stage of their existence without any trace of decline. It is evident that the explanation of "struggles for existence and preservation of the fittest" is groundless.

To solve the mystery of the extinction of dinosaurs, scholars made use of many methods, such as geological physics, geological chemistry, paleontology, and paleogeomagnetics. They used the techniques of neutron bombardment to activate the related elements, then used super sensitive mass spectrometers to detect the contents of platinum family elements, especially the contents of iridium. The platinum elements have heavier specific gravity and also have characteristic affinity to the iron group. At the early stage of earth's formation when they were still in a melting state, the major portion of these elements had already sunk to the deep iron-nickel core of the earth, while only a very small amount remained in the surface layer of the earth. There the iridium content is only 0.3 PPM (PPM means 1 part per million). This is the "background richness" of iridium on the earth's surface. But on comets, meteorites, and other celestial bodies, the platinum family elements are still kept at the level of richness of the substance in the universe in general; therefore, the contents are much higher than the background richness on the earth's surface. If in some ground layer, the iridium content is generally and remarkably higher than the background richness, then it can be determined that during the formation of that ground layer some extraterrestrial bodies had been present. At the interface between the Mesozoic era and the Cenozoic era, the content of iridium is 30 to 200 times the background richness. This means that there had been a gigantic celestial body (estimated to be a comet of the grade of Halley's Comet) which collided with the earth. The instant results of the collision and successive calamities resulted in the perishing of dinosaurs and 75% of all the other species of creatures. This inference offered a relatively satisfactory explanation to various phenomena associated with the extinction of dinosaurs.

The perishing of dinosaurs was not a special case in earth's life history, only a more recent one. If one examines the interfaces of other different ground layers with the same method one can find similar tragic changes with the perishing of other species. We can see that sudden tragedies from outer space were not so unusual, as evidenced by the numerous and dense meteorite craters on the surface of the moon. Quite recently (July 1994), the Shoemaker-Levy comet hit Jupiter, offering an extremely rare example of one of those sudden tragedies from outer space. At the interface between the ground layers of the Paleozoic and Mesozoic eras, there was also a great tragedy even more horrible than that of the dinosaur period. It caused 95% of all the species of that time to be wiped out completely. And between the earliest Cambrian period of the Paleozoic era and the still earlier pre-Cambrian period there was another similar great tragedy, which made the luxuriant molluscan sea animals almost entirely perish. Following this clue, and examining the rise and fall of species in the geologic era, we find a general principle that every time the original species perished, later on there would be some new species to take its place. It developed quickly to occupy the original vacant space, and then it would remain in a state of stasis for some millions of years

until it too perished suddenly in yet another tragedy. This cycle was repeated over and over.

Since the perishing of species was due to sudden natural calamities, then of course, it had nothing to do with living struggles. There was not the so-called "the superior conquer and the inferior subdued." The strong and the weak, the superior and the inferior, were all exposed to the same great tragedy. The survivors were not necessarily the superior, and the perished ones not necessarily the inferior. To survive or to perish was totally dependent upon chance at that time, (e.g., the size of the celestial body, and the location and the season it fell, the hitting angle and speed, etc.) In the life history on earth, creatures aiding each other to survive is a general principle; to fight each other and die the exception. The fact that human beings slay each other mercilessly is a peculiar crime of mankind. It is not a natural law. The normal state for creatures to exist in is interdependence, thus maintaining the ecological balance. Carnivorous animals take herbivorous animals for their prey. This is a typical case of "the weak are the prey of the strong." The former look superior, but they cannot drive the latter to extinction, or they also would perish. The intelligence of human beings is absolutely superior to all other creatures. The means presently available to mankind is sufficient to destroy all other living creatures many times over, but mankind cannot act wantonly. Because while destroying other creatures, mankind would also destroy itself. No creature can survive alone, and humans are no exception.

Instigated by Darwin's hypothesis, most people have deemed "the superior conquer and the inferior subdued" as a natural law to be taken for granted; therefore, people not only slay their compatriots, but also plunder nature recklessly. Mankind now is subject to nature's retaliation, which is getting more and more serious day by day. So what people should do today is to stop destroying these inferior and weaker species with their superiority, do their best to protect those already damaged species, and save the ecological bal-

ance from any more damage. More and more people are becoming aware of the need for environmental protection. The more people comprehend the history of life, the more definitely they will understand that the "struggle for life and the favored preserved" is not naturallaw

The more people investigate historical information, the more they realize that natural selection as proclaimed by Darwin is not science. In his book The Origin of Species Darwin did not provide sufficient scientific evidence to support his argument. The subtitle The Preservation of Favored Races in The Struggle For Life is a false description. The newest achievements of scientific research have thoroughly exposed the fallacy of natural selection. Now is the proper time for people to wake up. Darwinism is the greatest myth in the history of human ideology. There has never been an erroneous thesis so obviously inconsistent with facts yet so widely accepted by people as a rule to be taken for granted. Luckily the time to dispel the clouds and see the light has come at last after more than one hundred years. Today almost no paleontologist still doubts the phenomena of the great dying in life history, and also nobody really takes the struggle between species as the cause of the great dying of creatures. Some stubborn Darwinists still put up a desperate struggle, but it is already useless.(1)

Professor Hsu is not a Christian, he does not believe in creationism, and his basic viewpoint is prone to the philosophy of Taoism. However, by using recent achievements in scientific research, he pointed out Darwin's fallacy, illustrating that Darwin's hypothesis is not science, but a social prejudice. This happens to coincide with the criticisms some Christian scholars have had about Darwin's thesis for many years. This fact is worthy of great consideration.

Since Darwin's thesis is erroneous, it cannot provide a rational explanation for the objective world. Therefore, when we face a world which is so gorgeous and full of infinite wisdom, can we not think that there must be a superior Wisdom to be the origin of all wisdom in the universe?

#### The Mystery of the Human Body

Presently medical science is still very limited in understanding the human body. However, the available knowledge today is already sufficient to win our sincere admiration about the ingenuity in structure and function of the human body. Every system and every organ of the human body is a masterpiece of the Creator. Even those parts which look trifling in appearance are all provided with a profound purpose. For example, there are many different kinds of hair on the human body, but each has a different shape and function and is not interchangeable. Head hair protects the head and also helps to make us nice-looking, so it can grow very long. The Bible says that long hair is the glory of women; therefore, women rarely show baldness. Eyebrows divert sweat or rainwater, preventing them from running into the eyes, so they are located above the eyes and grow laterally. Eyelashes protect the eyes from dust or foreign bodies, so they are located at the edge of upper and lower eyelids. They are also bent anteriorly with a special curve, so that they will not interfere with vision. When evelids are closed, the upper and lower evelashes touch each other but do not prick the eyeballs. If eyebrows and eyelashes grow too long, they will interfere with vision. Therefore, they will never grow as long as head hair or beards. Hairs in nostrils filter the air of breathing, so they are situated inside the nostrils and grow obliquely towards the outside. If they would grow inward, then the foreign substances would go in easily and could hardly get out. Axillary hairs lessen local rubbing of skin and help the evaporation of sweat. If a man had no axillary hairs, he would have to lift his arms up all day, or the local rubbing and the dampness would cause inflammation of the skin. In accordance with its function, axillary hairs should not be as long as the hairs on the head, nor be as short as eyebrows, but be soft, thin and curly. If they grew thick, stiff, and straight, they would hurt the skin. Generally speaking, different kinds of hair at different locations usually grow downwards, some of them can even quiver coordinately, with their waves of vibration going downwards also. Only the cilia (tiny hairs) on the epithelium of the trachea and bronchi, are different from the others. They grow upwards and their waves of vibration also move reversely, because only in this way can the sputum be pushed upwards to the throat and spit out. If they would grow and move downwards, then the trachea and bronchi would be obstructed by sputum, causing death.

Let us take two simple reflex activities for example. When certain foreign bodies invade the nasal cavity or trachea, they induce, respectively, sneezing or coughing, two protective reflexes functioning to expel the foreign bodies. But the specific situations of these two cases differ, so these two reflexes are also carried out in quite different ways. A foreign body in the nasal cavity is not an urgent condition; therefore, the sneezing activity can be prepared for leisurely. Starting with slow inspiration, opening the mouth and elevating the soft palate to shut off nasal cavities, enough air is taken in through the mouth. Then the thoracic and abdominal cavities contract suddenly to push the air out quickly, and at the peak of air flow the tongue is elevated suddenly to block the oral cavity, this forces the air flow to flush out through the nasal cavities and blow the foreign body out.

But if a foreign body enters the trachea, that is a very critical condition which is life-threatening if the foreign body not removed right away. The time interval is almost infinitesimal, and absolutely no air intake is allowed, or the foreign body will go deeper and cause suffocation. So the cough reflex has no inspiratory action, but the glottis is closed immediately, and the thoracic and abdominal cavities contract instantly to increase drastically the pressure of available air in the lungs. As the air pressure reaches maximum, the glottis opens suddenly, and the air in the lungs rushes out explosively, pushing the foreign body from the trachea through the glottis to the throat. At this time the soft palate is elevated to shut off nasal cavities, and the foreign body is spit out through the mouth. If at this time, the actions of the tongue and the soft palate are the same as during sneezing, the

foreign body expelled from the trachea will go through the posterior nasal orifices into the nasal cavities, becoming a foreign body in the nasal cavity, causing an additional problem.

In both of these reflex actions, all organs of the body must be strictly coordinated and working together. Any incoordination of any organ will certainly cause failure of the entire reflex action, and the result may be extremely serious. Therefore, these actions are not arbitrary, but go according to the functional needs and follow a strict pre-determined program. This program is not obtained from learning or practicing; it is inborn. That means when a baby is born, this kind of program is already present in its cerebral neural structure (neural nucleus). Otherwise, the baby cannot survive.

By means of today's available highly advanced computer technology, people can mimic these actions artificially. To do this, however, there must be three conditions. (1) Apparatus mimicking mouth, nose, throat, thoracic and abdominal cavities to realize inspiration, expiration and conduction. (2) Central control equipment mimicking the central neural system (the computer and the networks of inputs and outputs). These two items are so-called "hardware." But mere hardware is not enough. Some "software" is still needed, such as: (3) A program compiled strictly in accordance with the requirements to control the patterns and sequences of all the activities to make them all well-coordinated. Not one of these three items above can be missing, or the entire reflex action will not be realized. This software program itself is not a material structure, but an application of wisdom, a purely intelligent product. If there is no application of wisdom, there will be no program produced. Thus, we would ask, as the computer programs are compiled and put into the computer in advance by men, then by whom were the controlling programs in the human brain compiled and put into the brains in advance? Sneezing and coughing are just two simple examples. Actually there are numerous examples of physiological, biochemical, and pathological automatic controlling activities, and most of them are far more meticulous and complex than the cough reflex. Some of them are still far beyond human comprehension in their profound ingenuity. Tell me please, where are all these meticulous and mysterious controlling programs coming from?

Let us take a look at human sensory organs. Why should man have two ears? The reason is that you cannot differentiate the direction of sound with only one ear. With an ear located on each side of the head, sound will reach the two ears at different times. By this tiny time difference, the human brain can distinguish which direction the sound comes from. The most external portion of the hearing organ is the auricle which can guide the sound into the external auditory meatus. Within the auricle there is a thin layer of cartilage. It maintains the auricle in its particular shape, and makes the auricle flexible, so that even bumping will not cause damage. Without cartilage, the auricles would have only two layers of soft skin hanging at both sides of the head, entirely useless. If the auricle were supported by such a thin layer of hard bone, it would fracture easily. If just a small case of hitting, or even sleeping on the side, could break the auricle, then everybody would have damaged or missing auricles. In the outer section of the external auditory meatus grow some thin hairs to prevent accumlation of dust; in the inner section, ear wax is secreted to protect it from insects. If a foreign body comes into the external auditory meatus, the reflex action induced is not sneezing or coughing. but the shaking of the head so as to swing out the foreign body. Because the external auditory meatus is a blind tube, it is impossible to expel the foreign body with an air stream. Why don't we expel nasal foreign bodies by shaking the head? This is because the human nasal cavities are located in the central portion of the head, and shaking the head cannot produce enough centrifugal force.

Sound is produced by the mechanical vibration of substance, and usually transmitted by waves of air, or sound waves. Human ears are actually very delicate detectors of mechanical vibration. In the inner ear there is a series of keyplates in different sizes, each resonat-

ing with the proper sound frequency and producing corresponding nerve pulses. The brain distinguishes the intensity, pitch, and timbre of the sound according to the characteristics of these pulses. It is worthy of attention that of the various sensory organs of the human body, only the inner ears are situated inside the most thick, solid and strong bones, the petrous portion of the temporal bones. Because among all the sensory organs, only the ear is bestowed with the function of monitoring mechanical vibrations, so it must be provided with a relatively stationary housing; otherwise, it would have no way to do the job. If the inner ear were located inside some soft tissue, then when the sound waves come, the inner ear would wave along with them, like the duckweed on water, and no sound would be heard. Since the inner ear is located inside the dense bone, of course it cannot perceive waves of air directly. Therefore, before the sound waves are transmitted to the inner ear, the longitudinal air waves must first be converted to mechanical vibrations. Exactly as expected, there really is such a converting apparatus between the bottom of the auditory meatus and the middle ear, called the tympanic membrane. The surface of the tympanic membrane is pretty large, so it can receive enough air sound pressure. It is as thin as paper, so it can vibrate freely along with the sound waves from the outside. It is also strong and tough, so it can activate the transmitting apparatus. The long handle of the malleus bone attaches to the inner (middle ear) side of the tympanic membrane. The traction force of the handle of the malleus makes the tympanic membrane slightly depress inward to maintain proper tension, and then the tympanic membrane can accurately convert the outer sound waves into mechanical vibrations, and in spite of variations in external temperature and humidity, its vibrating character will not be affected.

After the sound waves are converted into mechanical vibrations, they still need some rigid substance to transmit them to the inner ear. Among all the tissues in the human body, the most rigid one is the skeleton. But most regular bones are too bulky and heavy, usually wrapped around by soft tissue, and entirely unsuitable for sound frequency vibrations. However, there are three pieces of miniature bone in the tympanic cavity between the tympanic membrane and the inner ear. Their size and shape are very tiny and delicate, measuring mere millimeters. They are almost completely exposed to the air of the tympanic cavity, and connected by ligaments to form an arc-shaped conducting linkage. They have very good ability to transmit sound frequency vibration, so they can accurately transmit the vibrations of the tympanic membrane into the inner ear. This transmitting apparatus not only amplifies the weaker vibrations, but also buffers down the overly strong sound waves. All these superior designs meet the requirements of sound physics perfectly.

The ingenuity of the auditory organs is not limited even to this. For example, to facilitate free vibration of the tympanic membrane with the incoming sound waves, there must be air on both sides of the tympanic membrane; therefore the tympanic cavity of the middle ear is filled with air. If the tympanic cavity were filled, like other body cavities, with liquid which is not compressible, then the tympanic membrane would not vibrate at all. The tympanic cavity needs not only to be filled with air, but also needs a duct to communicate with the outside and balance the static air pressure in the cavity with the external atmospheric pressure; otherwise, the air in the cavity would gradually be absorbed and cause serious inward depression, or even rupture, of the tympanic membrane, which would result in loss of its function. When external air pressure varies, (e.g. in mountain climbing, water diving, airplane take off and landing, or severe changes of weather.) discomfort and hearing impairment result. However, the middle ear cannot open to the outside directly like the auditory meatus or nasal cavities. If so, the external sound waves would pass through the auditory meatus and the middle ear duct to reach the outer and inner surfaces of the tympanic membrane at the same time, offsetting each other and nullifying the effect. Then the tympanic membrane would not vibrate at all, and no hearing sensation could be produced. In this way, the fashion of communication from the middle ear to the outside turns out to be a big problem.

Nevertheless, this difficult problem is solved by a very ingenious design, that is, the middle ears are connected through two semiconducting tubes to both lateral sides of the pharynx at the upper posterior portion (so-called Eustachian tube or ear-pharynx tube). This tube is normally closed. It is temporarily opened only during swallowing, intermittently adjusting and balancing the air pressure in the middle ear. After swallowing it will close again. Besides eating, the human body will make an unconscious action of swallowing at proper time intervals, even during sleeping. In this way the air pressure of the middle ear will be intermittently adjusted, so that hearing sensation is not interrupted. During swallowing, the tongue and the soft palate must both be elevated to shut off the oral and nasal cavities, so that the throat will be temporarily isolated from the outside. Thus at the instant the Eustachian tube is open, even though the air in the pharynx can go in or out of the middle ear, the external sound waves will be shut out of the middle ear. Therefore, the hearing sensation will remain undisturbed and ready to receive sound and language messages all the time. Besides the pharynx, no other organ is capable of meeting the special requirements of hearing organ exactly. The pharynx is primarily a structure of the alimentary and respiratory systems. It does not belong to the sensory system, but can coordinate marvelously with the hearing organ. We must confess that the structures of the human body really manifest a superior total design.

The vestibular portion of the inner ear is an organ that controls the body balance. There are three semicircular canals arranged perpendicular to each other. When the human body loses balance, the semicircular canals will produce pulses to stimulate, through the balancing center in the medulla, corresponding reflex activities to resume body balance and avoid possible injury. This is also one of the congenital instinct reflexes. Why are there not two or four semicircular canals, but exactly three in number and perpendicular to each other?

The reason is very evident. Man is living in a 3-dimensional space, and may have activities in three perpendicular directions, (i.e. anterior and posterior, left and right, and upper and lower), Therefore, we must have three semicircular canals perpendicular to each other to monitor all these activities. Less than three is insufficient, more than three is unnecessary. So we can see that all these meticulous and marvelous structures and functions entirely display a superior wisdom. They can never be accidental.

Vision is the most important sense in the human body. Information provided by vision is more than the sum of information provided by all other senses combined. Vision is a sensation of image and space. The visual organ must have the finest and the most accurate structures and be entirely different from all other sensory organs. To view it from the aspect of either embryology or neuro-anatomy, the principal structures of the eye are not those of general sensory organs, but rather part of the cerebral cortex. The so-called optic nerve is also completely different from other cerebrospinal nerves. It is essentially an internal structure of the brain that transmits the most complex and finest visual messages. Functionally the eyeball is like a very fine and delicate camera. The retina, composed of light sensitive cells corresponds to the film; the crystalline lens, iris and cornea correspond, respectively, to the lens, diaphragm and filter of the camera. However, its accuracy and the automatic adjusting function are far superior to any high-grade camera. For example, the lenses of available modern cameras are all made of special glass or hard plastic material, so their focal distance is fixed and not changeable. When one takes photos for objects at different distances, one must adjust the position of the lens forward or backward, or it cannot form an image on the film. This is a very clumsy method. Let us imagine, if our eyes had to be adjusted the same way, then when we look at things at different distances, the eyeball would have to either protrude or retract now and then. This would not only look ugly, but also seriously hurt the health and function of the eyes. Instead, the lens of the human

eye is a transparent elastic colloidal body, which can automatically adjust its focal distance according to the distance of objects, ensuring that all the objects seen can accurately form images on the retina without changing the position of the lens. This kind of automatic adjustment can never be achieved by any camera.

If we observe it from the view of the modern television technique, the eyes are even more like a television camera, but the eyes are ten thousand times more accurate than any television camera. Television images are composed of dense image elements (fine points of different brightness), and today the best television picture has only some hundred thousand image elements. However, the image elements of human eyes are about 20 billion. Because of this, human eyes can see clearly the fine tips of tiny animal hairs. Nevertheless, no matter how accurate and clear it could be, the image of a single eye is still a plane image, not a stereoscopic picture. So, how to transfer this plane image into a stereoscopic picture and to provide spatial sensation is the key to forming perfect vision. How to accomplish this image transference is not an easy thing. For a long time men could not understand its mechanism. Finally people recognized that the wisdom and technique displayed in the human body is really exquisite beyond compare. The plane images obtained by both eyes are delivered simultaneously to one nervous center to be compared and analyzed; because the positions of the two eyes are different, there is a tiny difference of visual angle between the two. By measuring this minute visual angle difference, the visual center can determine the distance of objects, and produce spatial sensation, which in turn composes a stereoscopic visual picture. This is why man must have two eyes to obtain perfect vision. From this understanding people developed the stereoscopic movie. This is only the external process of visual sensation. The operating process inside the visual center is still not quite clear to us to this day. We have to confess that the ingenuity and mystery of the human body's structure and function is really far, far beyond human intelligence.

To determine the distance from the visual angle difference between two eyes is actually a meticulous, automatic triangular surveying technique. In order to make accurate measurements, there must be two premises. (1) Two eyes must simultaneously aim at one object, or double vision will result, that is, seeing one thing as two. For this reason, the eyeballs are equipped with the most perfect neuromuscular system on their outer surface. So the eyeballs become the most nimble and accurate organ of the human body. Within the eyeball, the ciliary muscle can momentarily adjust the refracting power of the lens to focus on the object, forming a clear visual image. The iris, according to the intensity of light, automatically adjusts the size of the pupil, to avoid too much light entering the eye. (2) The retinas of both eyeballs must be strictly correlated; otherwise, the images from both eyes cannot be compared. Also the correlated images from two eyes must be simultaneously transmitted to the same visual center to be compared and analyzed. There are two visual centers in the brain, the left one and the right one, so as to manage two sides of the visual fields respectively. The objects of the left side of the visual field project through the pupil onto the right side of the retinas of both eyes. These correlated images from both eyes are transmitted through the optic nerve simultaneously to the visual center at the right side of the brain. The objects of the right side of the visual field project onto the left side of the retinas of both eyes, and their correlated images are also transmitted through the optic nerve simultaneously to the visual center at the left side of the brain. These two visual centers then compare the correlated images from both eyes to produce a complete stereoscopic image for the whole visual field.

The organs on both sides of the human body are usually correlated symmetrically; that is, the inner side is correlated to the inner side, and the outer side is correlated to the outer side, in the way that both hands and both feet are correlated to each other. Only the retinas, however, are correlated homolaterally, that is, left side correlated to left side, and right side correlated to right side. Because the light

shines along a straight line, this is the only way for the two visual centers to obtain mutually correlated images and produce coordinated vision. Also, the structural correlation of the retinas of both eyes must be extremely accurate; otherwise, the correlated images from both eyes will not coincide with each other and will become blurred. Moreover, in order to allow the correlated images from both eves to be transmitted to one visual center, the retinal images from the nasal side of both eyes must be transmitted and cross over each other. passing over the midline, to the visual center on the opposite side. So the optic nerve must have a special structure to realize the cross transmission of images. This is the unique structure of the optic nerve, the "optic nerve chiasma." It is not seen in all the other cerebrospinal nerves, because the other nerves do not manage information of image and space. If we use computer and television cameras to mimic the visual processes of the human body, then the input network of the computer must have something similar to this chiasma, with no other different design. To summarize, we can see that the structure and function of all the organs of the human body reveal an extremely superior wisdom, without exception.

Some people think that the human body also has some organs which seem useless, such as the thymus, appendix, tonsils, and coccyx bone. This would mean the structures of the human body are not all reasonable. These organs have been considered not only useless, but also prone to diseases, (e.g., appendicitis, tonsillitis and so on). Removal of these organs does not affect the human body very much. Formerly even the spleen was included in this category. In history, the number of so-called "useless organs" had been over one hundred, which is really astonishing. However, the reason why this list was so long was not that these organs were really useless, but that the people were ignorant. As knowledge about the human body advanced, the majority of these organs were ruled out one by one from this list. Right now only a few are left.

Some thought these organs were relics of human evolution, so-

called "vestige organs", and took them as evidence of evolution. Obviously this is a misunderstanding. Now people finally realize that there are no "vestige organs" at all. The only problem is lack of knowledge about them. Take the thymus for example. Formerly we did not know what function it had, but now we know it is a very important element in the immune system of the human body. As to the appendix and the tonsils, they are the warning apparatus in fighting against external and internal infections. They are more sensitive to infections, and they can activate in advance the preventive mechanism of the body to prevent more serious infections. Therefore, they have indispensable merit in maintaining the health of the human body. If a fracture occurred to the coccyx, it would cause serious dysfunction, which means that the coccyx also has its function and is not an unnecessary organ. Any organ of the body may suffer from disease, even the heart and brain, but you cannot say that the heart and brain are harmful or useless. The fact that removal of less important organs is not immediately life-threatening does not mean they have no function, just as the loss of hands or feet would not cause death directly either, but doubtlessly it would leave the human body maimed.

After recognizing superior intelligence in the structure and function of the human body, of course one will ask, where does all this superior wisdom, revealed by the human body, come from? Who designed and made all these complex, delicate, peculiar, and ingenious organs? This is an unavoidable question. Any practical and realistic person will admit that organs with exquisite structures, without parallel, cannot come from nothing. For example, if someone gives you a high-grade automatic camera, and tells you that it has no designer and no manufacturer, but rather is an outcome of nature itself, will you think his words are very scientific and accept them? The organs of the human body are far more wonderful, and accurate, than any manmade things. All these facts tell us that behind the human body there must be a Creator of superior wisdom and power. This is impossible to deny.

One early Sunday morning in the spring of 1954 as I went into the church hall, I saw a young man sitting there alone, whom I had never seen before. After a short greeting conversation, I realized that he was a student of Peking Union Medical Institute. He said, "Since I have studied human anatomy and physiology, I feel that the human body is really so wonderful that if there is no God, it can never be well-explained." He came to the church seeking an answer.

The experience of this young man is not just a special case. I remembered when we were studying anatomy and physiology at the university, some fellow students surrounded a physiology teacher asking for more thorough answers. Eventually this teacher could hardly answer all the questions, and at last he said, "Students, please don't go on to make endless inquiry. If you continue to inquire, you will be on the way to religion." Within the particular social environment of that time, this reminder was very alarming, so all the students calmed down right away. This event impressed me deeply; I have never forgotten it. At that time I thought that to recognize God's wonderful work in all of God's creation was a very natural thing, and what the teacher said really touched the crucial point. Certainly this teacher was not a Christian, but he could not deny the fact that if we keep searching steadily into the mysteries of the human body (a mere part of the universal mysteries), we finally come to an unavoidable conclusion that God exists ("on the way to religion"); otherwise, we can never find a reasonable explanation. Just as it is said in the Bible, "Ever since the creation of the world God's eternal power and divine nature, invisible though they are, have been understood and seen through the things he has made. So they are without excuse." (Romans 1:20).

In the 1950's most Chinese intellectuals accepted materialism and evolution as truth, and took science as the only way to recognize truth. So, why would people finally go to religion when they search along the way of science? It is obvious that serious scientific thinking will not lead to materialism and evolution, but rather guide people to

God. Did the teacher express a true scientific spirit? No. A scientific spirit must seek truth from facts, dare to face the truth without evading any contradiction, and not predetermine any standpoint that caters to social trends. This teacher clearly knew that to go only one step further one would meet God, but he dared not go forward along the path of truth to its destination. On the contrary, he dissuaded his students at that critical moment, leaving the matter unresolved. From this fact it is made clear that many people, like that teacher, refuse to confess the existence of God not due to any scientific reason, but because of other considerations, such as social pressure, personal advantage, or their own prosperity. Nevertheless, the existence of God will never be affected by these things. And men cannot always live in such a myopic state. The day will come when everyone will have to face the Creator of the universe and mankind, to face the final judgment. It is said in the Bible, "And just as it is appointed for men to die once, and after that comes judgment."(23) People need to accept this eternal God right now; otherwise, when the time of judgment comes there will be no excuse.

When we talk about the origin of the universe and all things, frequently some younger friends ask, "You said man was made by God. Then who made God?" Such questions of analogical reasoning sound reasonable at first, but actually are untenable. God is the Creator and not a creature. You cannot put the Creator equal to the creature. A table was made by a carpenter, but you cannot say that the carpenter and the table should have a similar origin. Man's knowledge about God is derived solely from God's revelation given to man. Otherwise, man would not be able to understand the mystery of God Himself. God said, "I am who I am." (Exodus 3:14) "I am... who is and who was and who is to come" (Revelution 1:8). For God, there is only Eternity, no time, no beginning, and no end.

Even in the field of science people are not allowed to ask too many questions of analogical reasoning. Once, a scholar discussed faith in God with some students. One student asked proudly, "Where

did the universe come from?" The scholar answered, "The universe was created by God." The student asked again, "Who created God?" The scholar answered, "God is eternal, not a creature." The student said, "This is rather too unscientific." Then the scholar asked, "Where did the earth come from?" The student answered, "From the sun." The scholar asked again, "Where did the sun come from?" The student answered, "From the nebula." The teacher asked once again, "Where did the nebula come from?" The student hesitated and answered reluctantly, "The nebula came from nature." The scholar asked one more time, "Where did the nature come from?" The student could not continue, so answered angrily, "Nature is nature, it was there naturally." The scholar smiled, "Is this not also rather too unscientific?" So, we can see that the so-called "scientific" answers were not really better. Let us look at another example. Science tells us that substance is composed of molecules. Then what composes the molecules? Molecules are composed of atoms. What composes the atoms? Atoms are composed of electrons, protons, and neutrons. But what are all these particles composed of? To this question, up to now, it is hard to get a definite answer. Atomic physicists are striving to search for the "basic particle." A particle named "basic" means that these scientists do not expect that substance can be divided infinitely. They believe that sooner or later people will find out the ultimate component, i.e., the basic particle. Of course, they would not be prepared to answer such questions as, "What is the basic particle composed of?" That is the final limit; everything should stop there. The materialists announced that the universe is infinite, and that substance is everlasting and can be divided endlessly, and so forth. Actually all these were just presumptuous assertions of philosophers, with absolutely no basis in science. In the logic of materialists, there is also an ultimate limit, which is the substance. They say that substance is self-existing and everlasting. They cannot answer where the substance came from. Let us also look at mathematics. All numbers originate from one. One must come first, then there can be two; there

is two, then there is three; and so on, until infinity. But you cannot ask where one comes from, because one is one; it does not originate from any other number. That is to say, one is the "Prime" of all numbers. God created all things. God is the primary origin of everything. If you still want to ask where the Primary origin of everything comes from, you can see now, that is a meaningless question.

#### THE REVELATION OF CONSCIENCE

Now let us take a look at another wonderful fact, that is, the conscience of human beings. In Chinese, conscience means "good mind." The Chinese character for "good" has a twofold meaning. (1) It concerns good and evil, right and wrong. The character "good" refers to good and right. (2) It is prenatal, having nothing to do with any postnatal factors, such as family background, social position, or education. The conscience is like a prosecutor or a judge deep in our souls. When our conduct and intention meet the requirement of "right" and "good," then the approval of our consciences makes us easy and peaceful. This is the state of "feeling no qualms upon self-examination." However, when our conduct and intention violate the criteria of "right" and "good," we are condemned by our consciences, and we feel guilty. Human minds are as different as their faces, but the function of conscience is all the same. This fact is really amazing. Some people call the conscience the "law of right and wrong" of man's inner heart; it is the final ground of all concepts of morality.

Some people think that probably not everyone has a conscience. Otherwise, how can some people be so lawless and do every kind of crime without hesitation? However, except some mentally handicapped, everyone has a conscience of right and wrong; even those guilty of heinous crimes are no exception. This can be verified in two ways: (1) Even though they have done every kind of evil, when somebody else does the same thing back to them, they oppose it immediately and say they should not be treated like that. This "should not"

means something "right or wrong," even though their own concept about "right or wrong" is distorted. Occasionally some of them may feel they deserve that and accept the punishment. This condition is usually called "the conscience resumed." (2) Evil-doing people, like Hitler and the aggressive Japanese warlords, after doing all their evils, always added one more evil, that is, lying. They tried to deceive people's judgment about right and wrong, misleading people to think what they did was "right." Why did they do that? Simply because they believed that everyone has a conscience of right and wrong; otherwise, they would not have spent so much energy fabricating lies. Doing this verifies conversely that they themselves also had a concept of right and wrong. Of course having the concept of right and wrong does not mean their behavior met the requirements of conscience.

This fact illustrates the peculiarity of conscience. The conscience makes judgments of right and wrong on man's conduct and intention, but it does not control man's behavior forcibly. This is the point where the "law of right and wrong" is different from physical or biological laws. In physics, the law of universal gravitation determines that if a man jumps from the window of a high building, he will definitely fall down. In biology, the law of metabolism determines that if a man does not breathe, he will definitely suffocate; if he does not eat, he will starve. There can be no exception. However, with the law of right and wrong in one's mind, one may comply or not. And to comply with it does not necessarily benefit oneself (Chinese proverb, "giving up life for righteousness"); not to comply with it may not be harmful to oneself. In fact, these two aspects are usually in conflict with each other. Many people do bad things against their conscience just by considering the advantages or disadvantages for themselves (another Chinese proverb, "forget righteousness by seeing advantage."). Conscience only makes the judgment between right or wrong for man, but which one to choose is entirely a matter decided by one's subjective will. Human beings are not machines nor lower grade creatures. Men have intelligence and free will; therefore, men must be responsible for their own decision and behavior.

Now, the question before us is, "Where does conscience come from?" One thing we can affirm is that conscience is not a natural phenomenon of substance, because natural substance itself has nothing to do with right or wrong, good or evil. Two celestial bodies bump each other, lightning ignites a big forest fire or nuclear fission or nuclear fusion induces a gigantic energy explosion. Their effects might be tremendous, and extremely serious, but they are not concerned with right or wrong, good or evil. Since the beginning of time such incidents have been taking place, and nobody needs to feel guilty for them. But if you shoot a small bullet into someone's body, set fire to someone's house, or throw a small atomic bomb on an innocent city, you will be immediately involved with issues of right or wrong, and you will be accountable for the consequences of your actions. So we realize that the activity of conscience is closely related to the nature of man. From the standpoint of conscience, man and other animals are essentially different. Man is not a mere lump of substance. Human life and intelligence are far superior to all other creatures. No one has the right to hurt other people without a proper reason. Otherwise, he will be definitely condemned by his conscience. But from the standpoint of materialism and evolution, man is but a relatively evolved ape. essentially no different from the other animals. In addition, animals and plants, creatures and non-creatures, also have no insurmountable differences between them. So then what is life? Life is but an "existing form of protein." So then what is protein? Protein is just a megamolecular substance composed of multiple amino acids. So then what are amino acids? These are only compounds made up of carbon, hydrogen, oxygen, and nitrogen. What do these things have to do with conscience? Is it possible that the response of conscience can be produced by carbon, hydrogen, oxygen and nitrogen? From the standpoint of materialism and evolution, cutting down a tree and killing a dog, slaughtering a monkey and putting a man to death, are different only in degree, but not different in essence. All of them are

considered merely as some change of existing forms of protein. Since there is nothing else in the universe except substance, then all creatures, including mankind, have no more divine or nobler components besides substance. Therefore, it does not matter whether they are living or dead. Moreover, the death of any individual creature does not mean the destruction of substance. The substance is still everlasting; it just changes into another form of existence, so what is there to worry about?

The above argument sounds really ridiculous; however, if starting from materialism, it is the unavoidable conclusion to reach. There is a saying, "A thorough materialist is fearless." It is true. Ordinary people usually believe in surveillance by god (a Chinese saying, "there is god three feet above your head"); or believe in causal retribution ("good or evil will get its reward at last"); or believe the heavenly principle manifests justice (another Chinese saying, "the net of heaven has large meshes, but it lets nothing serious through"); or do not want to live under the condemnation of conscience. In summary, most people believe that in the universe there exists a superior standard of right and wrong above human kind, and believe in a superior authority which rewards good and punishes evil. Because of this, they scruple at the aftermath of their own conduct. But to a "thorough" materialist, all of these beliefs are sheer nonsense. Since besides substance there is nothing else in the universe, then man must be the highest form of material existence. Then of course, he can do whatever he wants to do. What is there to be afraid of? The so-called "conscience," is at best a kind of social psychology, and it is quite unnecessary to bother oneself with it. However, when the persons being destroyed are not anybody else, but the materialists themselves, then whether they can still be so elegantly unconcerned is very questionable. Actually "thorough" materialists like this are not so plentiful anyway, because when they are driven into a corner by other materialists, they usually make a sharp turn and begin to talk about retribution of good and evil after all. The fact that they do so is equal to a declaration that their concept of materialism is already shattered, and a confession of the existence of an invisible judge. Otherwise, who will make the judgment about good and evil? Who will execute the retribution? Only when they fall into such a situation, can they realize that good and evil, right and wrong need a standard independent of, and superior to man, as justification. It should not depend on political power and philosophical dogmas. If so, there would never be so-called good or evil, right or wrong. Within man's inner soul, the conscience is the direct judge of good or evil, right or wrong. The existence of conscience is an objective fact as well. If we examine ourselves, we cannot but confess that in our innermost hearts, there is a judge of right and wrong which is independent of our subjective wills. It is not fabricated from void by anyone, nor can it be obliterated arbitrarily by anyone, or many would have already completely rooted it out. No matter how some people deliberately try to suppress it or avoid it, it is still there. This demonstrates that conscience has an origin beyond man himself.

Materialists cannot give any satisfactory explanation to this origin. But if we look into the Bible, the answer is definite. It is said in the Bible that man is made in God's image(24). This image refers chiefly to the aspects of spirit and nature. Man has not only a body and a soul, but also a spirit. The latter makes man different from animals, and more like God, because God is a Spirit, and conscience is one of the functions of the human spirit. Therefore, we can say that conscience is the seal which God has printed on man's nature. Even though man has sinned and degenerated, this seal is indelible. Even though man is in a state of degeneration, his conscience is still admonishing him continuously as to what man's original nature should be. It also tells man that God, who created man and gave man his breath, is righteous, and He hates all wickedness. No matter what kind of excuses people would make for their evil conduct, all are useless. Conscience does not show partiality. It is said in the Bible, "They show that what the law requires is written on their hearts, to which

their own conscience also bearing witness."(25) Therefore, we can see that conscience is a part of man's nature made by God. It cannot be changed by man.

In summary, now we see the facts of these two aspects.(1) The wonders of the universe manifest the mighty work of God. (2) The function of conscience reveals God's nature of righteousness. These two facts illustrate that above men and all creatures, there is one highest Lord, the God who created the heavens, the earth and all creatures.

However, these facts can only lead men to realize the existence of God. They cannot directly reveal God Himself as substantial objects are revealed in scientific experiments. To know God, depending merely on these is not enough.

### HOW TO KNOW GOD

How can man know God? Ultimately, if God is not willing to show Himself to man, man has no way to know God. Some people want to know God by their own intelligence and wisdom, but this is useless, because wisdom is not the right means to know God. The Bible says, "the world did not know God through wisdom." (26) When God first created man, He gave man the power to "subdue the earth," and have dominion over all the living creatures. God gave man a wisdom superior to all the other creatures. It is also taught in the Bible that we should walk in wisdom toward people. Therefore, we can see that the intelligence and wisdom of man are used to solve the problems between men and the objective world, that is, between men and creatures, or between men and men. This is the normal function of wisdom, but it cannot be used to solve the problem between man and God, or to know God by man's wisdom, because the mystery of God's nature is far, far beyond the intelligence and wisdom of man. The Bible never says that man could use his wisdom to measure the mystery of God. God is Spirit. Man can only accept Him and worship Him in spirit and truth. This is the only way for man to know God and communicate with

Him. Otherwise, it is impossible. It would be entirely wrong to attempt to know God by means of rational investigation.

There are two things which directly hinder man from knowing God.

- (1) Pride. Man originated from dust before the face of God. Man must confess that he is a creature only, not God. Man should not exalt himself over God. Nevertheless, some people consider themselves superior and look down on everything else. They never esteem others, neither man nor God. This kind of person can hardly get along even with ordinary people, not to mention God. It is said plainly in the Bible, "God opposes the proud, but gives grace to the humble." (27) A proud man can never know God. If a man wants to know God, the first thing he needs to do is to put down his pride, and turn to God with a sincere heart.
- (2) Sin. Since Adam, the first ancestor of mankind, fell, sin came into the inner heart of all men, becoming part of human nature. Or it can be said, sin became the second nature of man. Why are there so many sinful phenomena in the human world? The source is here. But when man was first created he was created according to God's image. So the aspect of human nature that resembles God (goodness, and conscience) still exists. Therefore, the inner heart of man became a battlefield of good and evil. Ever since ancient times there has been in China a long debate about whether human nature is good or evil. Mencius proclaimed that human nature was good, while Xun-zi (荀子) insisted that human nature was evil. Both sides had certain facts for their basis, but have been locked in a stalemate for thousands of years. Some people think that the original human nature was not good or evil, but was like a white paper which could be stained black with black dye, or stained yellow with yellow dye. But if human nature were really purely white like white paper, then where did all these black and yellow dyes in the world come from? Evidently, this concept has no basis in fact. Actually fallen man has a double nature. He has a tendency towards good, and also has an-

other tendency towards evil; one aspect looks nice, the other aspect looks ugly. One who is usually a gentleman may turn abruptly into an evil thug as the environment changes and is filled with great temptations, and the possibility of punishment diminishes to almost zero. During the recent riot in Los Angeles, the good and evil in human nature were exposed thoroughly. This kind of conflict between good and evil in man's heart is a generally known fact. The Chinese scholars always called it "the fight between rationality and lusts." Actually it is the fighting between good and evil, right and wrong.

Unfortunately in most cases, men cannot "choose the good and stick to it," but instead, just as water always flows down, they drift with the current under the controlling power of their sinful nature. Why? Because to do so usually benefits them the most and satisfies their selfish lusts. There are none who have never done anything against the requirements of a consciences. If men's conduct and intention never went against a conscience, then they would not feel the existence of a conscience, just like someone who has never been guilty would not feel the existence of the court. Whenever men are condemned by their consciences, that means they have already violated the principle of the conscience to some degree. If men cannot even pass the examination of their own consciences, how can they pass the judgment of God? Therefore, it is said in the Bible, "There is none who is righteous, not even one."(28)

There are usually two conditions which make men unwilling to confess their own sin. (1) Some people really know that they have sinned, but dare not face it. Hence they force themselves to deny the existence of sin. This is like the Chinese proverb, "Plug one's own ears while stealing a bell." Things like this probably yield some temporary result before men, but are completely useless before God, because God looks into man's heart. (2) Some people do not think they have sin, because they use greatly lowered man-made standards to judge themselves. Therefore, some people not only do not feel guilty, but in comparing themselves to others, feel rather pleased with

themselves. Nevertheless, God's standard is different from man's standards, and far superior. For example, the Bible says that whoever hates another person is a murderer. (29) Real murderers may be few, but how many people are there who never hate? Another example is that people usually know that adultery, (i.e. unlawful sexual relation), is a sin, and therefore, they understand that they "should not commit adultery." This refers only to unlawful conduct. However, Jesus said, "whosoever looks at a woman to lust for her has already committed adultery in his heart."(30) This is not only a concern with conduct, but an examination of man's inner heart. Most people probably have not committed adultery in action, but how many can say that they have never had any adulterous thoughts in their minds? We need not even mention that today many people do not consider wicked adulterous behavior to be wrong. On the contrary, they take it as natural and right, even giving it a fine name of "sexual liberation." So we can see how unreliable man's standards are. Suppressing the voice of conscience for too long a time, causes the conscience of those people to become numb and anaesthetized to sin, so that they stray further and further away from the right path. This kind of self-indulgence does not change the fact that man is a sinner before God, because the highest judge is God, not man.

If we were to talk generally about the ugliness and darkness of human society, there would be little disagreement. But if we were to talk about individuals, most would not admit they have any sin in their lives, and would claim to be undefiled. However, if most people were really keeping themselves clean and intact, then the whole society could not be so deteriorated. This tells us that most people often hold double moral standards in judging themselves and others. They are strict with others and lenient with themselves. However, God will never show partiality to anyone.

Even measured by man's standard, people still have no reason to be complacent. A Chinese proverb says, "Except sages or saints, who can be free of guilt?" That means except for those saints, everyone will commit some sin. However, can saints really be free of faults? Even

those who are thought of as saints dare not say that. They have said, "The faults of saints are like eclipses of the sun or moon, if faulted, dare to correct." This means that even the saints are not without fault, but only that they are relatively bolder in self-correction. For example, according to man's moral standard, people should honor their parents. A Chinese saying says, "A man who does not honor his parents is inferior to animals." To one's own parents, man must honor and repay their grace in upbringing and nurturing. But God's superiority, honor, power, and grace toward man far exceeds that of parents toward their children. Then, to God, who created heaven and earth, and gave man life and breath, should not man be even more respectful and thankful? Nevertheless, to this highest God many people are neither respectful nor thankful, some blaspheme Him with vicious words, insult Him willfully, or even deny His existence. Is this not a more serious sin than dishonoring one's parents? Rebelling against God is the first and most fundamental sin of mankind. All other sins derive from this.

Sin is the greatest obstacle that keeps men from getting near to God. Man should not hide his own disease to avoid treatment. So if man wants to go to God and know God, he should first solve the problem of sin. If the problem of sin is not removed, man cannot see God. The holy glory of God would burn the sinner out. At the same time, a sinful person does not like to face God, just as a criminal does not want to face the judge. Sin drives men to stay far away from God. Usually we can see that when someone does not want to acknowledge the existence of God, it is not because he has had too much scientific knowledge, but because his conscience is deficient before God. How can the problem of sin be thoroughly solved? God, as the kind and merciful heavenly father, is always ready to accept the prodigal son. But as the highest judge, God cannot overlook man's sin. He cannot consider the prodigal son's sin as nothing. The only consummate way to satisfy God's love and justice without conflict is for God Himself to pay the necessary cost of all sins for that prodigal son

who had no way to salvage himself. The wage of sin is death. Therefore, God Himself paid the cost of death for mankind. That is, God sent His only begotten son, Jesus Christ, to the world, in the shape of a man, to be crucified on the cross for man's sin. The death of Jesus satisfied God's justice, and also demonstrated God's love. That is the reason that when Jesus was on the cross, before he breathed his last, he said, "It is finished." (31) In the time of the Old Testament, if someone sinned, he had to take a bull or goat without blemish to offer on the altar to redeem himself from sin. But that was just a symbol, because the blood of bulls and goats could not take away man's sins. (32) The real fact is that Jesus shed his blood for man's sin. Only the blood of Jesus, the son of God, can bring redemption for the sin of man. So it is said in the Bible that Jesus is "the lamb of God who takes away the sin of the world."(33) God made the sinless Jesus Christ to die for all men's sin. Therefore, whosoever believes and receives Jesus Christ as his own savior, will be delivered from his sin. At the same time he shall become righteous and can come to God without fear to enjoy God's love and to be saved from eternal perdition. This is the only way that all men in the world can be delivered from sin, to know God and to become God's children. It is said in the Bible, "For God so loved the world, that he gave his only begotten Son, that whosoever believes in him should not perish, but have everlasting life."(34) It is also written, "Neither is there salvation in any other (except Jesus Christ), for there is no other name under heaven given among men, by which we must be saved."(35) Besides God's son Jesus Christ, there is no other person in the world who can deliver men from sin. To believe in Jesus Christ and receive him as one's own savior is the only way man can know God and become God's child. Jesus said, "I am the way, the truth, and the life; no one comes to the Father, except through me. If you had known me, you would have known my Father also."(John 14:6-7). Therefore,

to believe in Jesus Christ is the only way man can know God.

The salvation of God is not merely having sin forgiven; the more important aspect is that all those who believe in Jesus can be born again to attain God's eternal life. This is the meaning of the scripture "that whosoever believes in him should not perish, but have everlasting life." Jesus died for man's sin, but his death is different from that of all other men in the world. Men die just as it is appointed. Every man has to die once, and death for men is a one-way road; one can go forward but never backwards. The life of all men in the world begins in the womb of the mother and ends in the tomb, with no exception. Only Jesus was different from all other men. He was slain and died for man's sin, but he was resurrected from death. His life could not be imprisoned by death. Jesus died at about three o'clock on that Good Friday afternoon, and was laid in the tomb which was carved in rock. The opening of the sepulcher was shut off securely by a big stone, and was guarded by Roman soldiers. But he rose on the third day, on Sunday before dawn, leaving an empty tomb. This fact was not only written in the Bible, but was also mentioned in the book of the great Jewish historian Josephus, who lived about the same time as Jesus.

The difference between Jesus and all other men is that Jesus died a real death but was resurrected. This is also the difference between Christianity and all other religions. Sakynmuni died, and his "Buddha bones" are still there. A portion of his bones have been honorably transferred into China. Mohammed died and his grave is still there. These men were not resurrected. Only the tomb of Jesus is empty, because he was resurrected. When Jesus suffered and died, his disciples became desperate. Being utterly discouraged and disheartened, they fled and dispersed in all directions under the persecution of the Jews. The chief disciples, Peter, John, and some others also escaped back to their native villages and resumed their original occupation of fishing. After Jesus was resurrected, he appeared to his disciples many times, letting them see that not only was he resur-

rected, but that he had also alive to heaven. This fact gave enormous encouragement to his disciples. It completely changed their spiritual attitude. They were no longer timid or desperate, but became very strong and brave. Without yielding to any power or force, they risked their own lives to bear witness to the resurrection of Jesus and preached everywhere the gospel of believing in Jesus to be saved. Because of that, this gospel spread to all the nations and to the ends of the world. The first twelve disciples of Jesus, except the traitor Judas, were all martyred for Jesus Christ. How could they do this? Because they saw everlasting life through the resurrection of Jesus; they saw that Jesus overcame the power of death. Death was no longer a dreadful one-way destination, but a prelude to resurrection, because Jesus said, "I am the resurrection, and the life, he who believes in me, though he may die, he shall live." He also said that whosoever believes in God's son Jesus will have everlasting life.

Someone may ask, "Is the way to get one's sin forgiven and obtain God's life really so simple?" Yes, it certainly is. The reason it is so simple is that God Himself has paid the highest cost. That cost is the blood of God's only begotten son Jesus. Therefore, there is no need for men to cultivate favor with God according to some religious doctrine or to accumulate merits of personal achievement. There is no need for men to do deeds of merit with the sword and by the shedding of blood in order to make themselves qualified for ascending to heaven. In addition, there is no need to purchase God's favor with money or talent. God has already prepared a complete salvation. He is only waiting for each person to receive it by faith. This really is the true gospel that God has given to man.

With respect to God's existence and the salvation accomplished by Jesus Christ some people still have many puzzling questions. The key to answering these questions is to pray. Is there really a God? Is the salvation of Jesus really reliable? Only if you are willing to pray, can you find out if it is true or false, right or wrong. If there is no God, and if the salvation of Jesus is unreliable, it will be useless to pray. But

if you pray, and God really answers your prayer, and the salvation that is accomplished by God in Jesus Christ does become yours, then all of the problems will automatically be solved. You won't need others to prove anything for you. It is said in the Bible, "Ask, and it will be given to you; seek, and you will find; knock, and it will be opened to you."(37) If you are willing to give up your pride, to humble yourself before God, to call on the name of the Lord Jesus with a sincere and honest spirit, to ask him to forgive all your sin, to repent and to receive Jesus as your Lord, then you will immediately experience a change in your life, and at the same moment you will enjoy the peace of being forgiven, and the joy that comes from God. If you would do this, and still not receive the salvation that God promised, then that would not be your fault. You could return to the original way in which you used to walk and you would lose nothing. However, I believe deeply that such a thing has never happened, nor will it happen in the future. God is faithful and His words will never be invalid.

God paid a very high price to open a new and living road for us. Whosoever believes in Jesus will be saved, and become a son of God. How can we refuse this for any reason? If we really neglect so great a salvation, how shall we escape with any excuse when one day we come before God at the judgment throne? Right now the door of salvation is still open to all who are willing to believe, and anyone who is willing can enter it. Everyone must make this serious decision for himself. Do you want to accept this eternal God or not? Man can either accept Jesus Christ and walk toward God's eternal life, or refuse him and miss such a great salvation and walk toward eternal death. It must be one or the other. The direction you chose depends upon a critical momentary choice you make.

I do hope from the bottom of my heart that you choose God's eternal life. Please do not hesitate or delay. God's great salvation awaits you.

Sincerely yours, Wei Yan \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### Dear Reader,

After you have read this letter, if you sincerely want to accept the Lord Jesus as your Savior, please enter into your inner room, close the door, kneel down humbly, and sincerely pray to the Lord Jesus. The prayer below is for your reference.

"Lord Jesus, you are the Son of the eternal God. You came to earth as a man to save us sinners. I thank you for your love for me. Today I beg for your grace to cleanse me from all my sin and iniquity with your precious blood shed on the cross. I repent deeply with my whole heart, and sincerely receive you as my Savior. I want to respect you as a holy God throughout my whole life, and obey your words. Please save me and my whole family. Please hear my prayer for your holy name's sake. Amen."

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After you have read this letter, if you are willing to believe Jesus, but still have some questions in your mind that you cannot solve, then you can bring your questions to the Lord Jesus in prayer. Ask for His help. The prayer below is for your reference.

"Oh Jesus Christ! I have read this letter, but I still cannot make up my mind. In one respect, I recognize that man's life is short, empty, and painful. I also feel I am a sinner. I am willing to believe and accept you as my Savior; however, I still have many questions that I cannot answer. Now I frankly bring these problems before you. If you really are the only Savior of mankind, please give me grace and faith in my heart and save me and my whole family. I sincerely and humbly pray that you will hear me for the sake of your holy name. Amen."

(Amen is a term often used at the end of prayer, to denote a strong heart felt wish.)

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In closing, I hope you will participate frequently in Bible classes, and worship in those churches nearby with a pure and true Christian faith, and continue to pursue the Truth. (Joshua Yu, the writer of this page)

# SOURCES OF SCRIPTURE QUOTATIONS

Job	26:7	(17)	Psalm	19:1
Genesis	2:7	(18)	Psalm	102:26
Ezekiel	26: 3, 5. 14	(19)	Psalm	102:26
Genesis	22:18		Matthew	24:35
	12:13	(20)	Genesis	1:4, 18, 25
Exodus	20:1-17	(21)	Acts	17:26
Deuteronomy	31:29	(22)	Genesis	1:11.21.25
Deuteronomy	11:26-28	(23)	Hebrews	9:27
Deuteronomy	4:26,27	(24)	Genesis	1:26,27
	30:18	(25)	Romans	2:15
	28:25,37,64-66	(26)	1 Corinthians	1:21
	32:25	(27)	1 Peter	5:5
Matthew	27:24,25	(28)	Romans	3:10
Matthew	23:37,38	(29)	1 John	3:15
Luke	19:42,44	(30)	Matthew	5:28
	21:24	(31)	John	19:30
Deuteronomy	4:31	(32)	Hebrews	10:4
Deuteronomy	30:3,4	(33)	John	1:29
Ezekiel	37:21,22	(34)	John	3:16
Ezekiel	28:25,26	(35)	Acts	4:12
	37:25-28	(36)	John	11:25
Amos	9: 14, 15	(37)	Luke	11:9
Ezekiel	36:33-36			
	Genesis Ezekiel Genesis Exodus Deuteronomy Deuteronomy Deuteronomy Matthew Matthew Luke Deuteronomy Ezekiel Ezekiel Amos	Genesis       2:7         Ezekiel       26:3,5.14         Genesis       22:18         12:13         Exodus       20:1-17         Deuteronomy       31:29         Deuteronomy       4:26,27         30:18       28:25,37,64-66         32:25       Matthew       27:24,25         Matthew       23:37,38         Luke       19:42,44         21:24       Deuteronomy         Deuteronomy       4:31         Deuteronomy       30:3,4         Ezekiel       37:21,22         Ezekiel       28:25,26         37:25-28       Amos         9:14,15	Genesis       2:7       (18)         Ezekiel       26:3,5.14       (19)         Genesis       22:18       (20)         Exodus       20:1-17       (21)         Deuteronomy 31:29       (22)         Deuteronomy 11:26-28       (23)         Deuteronomy 4:26,27       (24)         30:18       (25)         28:25,37,64-66       (26)         32:25       (27)         Matthew       27:24,25       (28)         Matthew       23:37,38       (29)         Luke       19:42,44       (30)         21:24       (31)         Deuteronomy 4:31       (32)         Deuteronomy 30:3,4       (33)         Ezekiel       37:21,22       (34)         Ezekiel       28:25,26       (35)         37:25-28       (36)         Amos       9:14,15       (37)	Genesis       2:7       (18)       Psalm         Ezekiel       26:3,5.14       (19)       Psalm         Genesis       22:18       Matthew         12:13       (20)       Genesis         Exodus       20:1-17       (21)       Acts         Deuteronomy 31:29       (22)       Genesis         Deuteronomy 11:26-28       (23)       Hebrews         Deuteronomy 4:26,27       (24)       Genesis         30:18       (25)       Romans         28:25,37,64-66       (26)       1 Corinthians         32:25       (27)       1 Peter         Matthew       27:24,25       (28)       Romans         Matthew       23:37,38       (29)       1 John         Luke       19:42,44       (30)       Matthew         21:24       (31)       John         Deuteronomy 4:31       (32)       Hebrews         Deuteronomy 30:3,4       (33)       John         Ezekiel       37:21,22       (34)       John         Ezekiel       28:25,26       (35)       Acts         37:25-28       (36)       John         Amos       9:14,15       (37)       Luke

#### **APPENDIX**

#### More Discussion About Evolution

(For interested readers, additional references are listed below.)

## (1) Is evolution a fact?

The evolutionists definitely proclaim that evolution is a scientific fact, which is not questionable. Anyone not acknowledging evolution must either be ignorant or must harbor evil intentions. However, evolutionists try in this way to obliterate the difference between facts and inference in order to avoid queries about evolution. Apples dropping and celestial bodies revolving are facts seen by everybody; "universal gravitation" is not a directly visible fact, but rather is an inference derived from known facts to explain why apples drop instead of wandering into space. But whether this inference is reliable or not, it must be tested, and verified to be true without exception; only then can it win general acceptance, because the theory of universal gravitation is not an axiom. The great contribution of Newton is not that he discovered universal gravitation, took it as a fact without doubt, and forced the public to accept it. On the contrary, he repeatedly verified the existence of a universal gravitational force with perfect mathematical equations, and by the application of the gravitational equation, all the motions of the celestial bodies can be explained and predicted perfectly without even an error of seconds. Therefore, the theory of universal gravitation became a generally accepted scientific law, without doubt. However, evolution is quite a different story. The concept that creatures evolve appeared long, long ago. Since the time of ancient Egypt and China there have been preposterous fables such as "rotten grass turns into firefly," "tangerine moved beyond Huai-river changes to trifoliate orange." These two were very popular ideas among ancient Chinese people and they are very similar to modern notion of evolution. Darwin was not the first to advocate evolution. But he proposed first a series of seemingly scientific explanations, such as "modified descent, struggle for existence, natural selection and the fittest survive," making the theory of evolution all the rage for a time. In scientific research, to make a

bold inference according to a hypothesis is acceptable, but such an inference must pass the test of facts, and gain sufficient evidence first before being accepted as scientific theory; otherwise, it must be discarded like worn shoes. Unfortunately, Darwin's theory has not been verified. The evolutionists would not accept creationism, and were not able to find another theory to replace it, so they had to make use of some specious arguments to lengthen the legend of evolution.

For example, according to Darwin's theory, all creatures descended gradually from one "common ancestor." If this is true, then all creatures must be like the light waves in a continuous spectrum. Even though there are different colors like red, orange, yellow, green and so on, they are still continuous, vary gradually, and have no clear cut boundary between them, so that we have no definite way to classify them. However, the living world we see is clearly classified; we cannot see unclassifiable creatures anywhere, such as a non-donkey and non-horse. Darwin said that this is because between existing species there were many extinct intermediate species, and the gaps they left make the existing species seem separted by huge gulfs. Darwin said again, that based on his theory there must be an "inconceivable" number of intermediate fossils between existing and extinct species. But the facts are not so, no matter what Darwin said.

Influenced by the misleading one-sided propaganda of evolutionists, the general public usually thinks that evolution must have sufficient fossil evidence for its ground of argument, but the facts are just the opposite. Paleontological fossils not only give no support to evolution, but on the contrary, reveal more difficult problems for evolution. Darwin's close friend, the famous geologist Lyell, would not accept Darwin's concept of evolution throughout his life for this reason. This disappointed Darwin deeply. Even Darwin himself conceded that the fossil evidence was "the most obvious and gravest objection which can be urged against my theory." If modern evolutionists were brave enough, they would have to acknowledge this indisputable fact. Stephen Gould, the contemporary senior authority on evolution, wrote: "The history of most fossil species includes two features particularly inconsistent with gradualism. 1. Stasis. Most species exhibit no directional change during their tenure on earth. They appear in the fossil record looking pretty much the same as when they disappear; morphological change is usually limited and directionless. 2. Sudden appearance. In any local area, a species does not arise gradually by the steady transformation of its ancestors; it appears all at once and fully formed." Another famous evolutionist, N. Eldredge, put it even more revealingly, "We paleontologists have said that the history of life supports the story of gradual adaptive change, all the while really knowing that it does not."

Evolutionists Gould and Eldredge both told us that in the fossil records no evolution could be seen. However, as evolutionists, they would not see evolution falling into a predicament. They knew profoundly that the gradualism which Darwin insisted on is entirely groundless. In order to rescue evolution they had to start all over again, so they worked together and elaborately fabricated a new theory, the so-called "punctuated equilibrium." According to this theory, new species not only could appear suddenly, but also could remain in stasis for a very long time, and again their evolutionary process might not leave any fossil records. Every detail of this theory has been flawlessly addressed. Certainly it is very difficult to oppose or fault a theory so smooth and slick, but if a theory is so evasive that it leaves no trace for others to follow, then it will also be very hard to justify. This theory is really too abstruse and too farfetched to be generally accepted; instead, it is sometimes ridiculed as "punk eek" (nonsense). (m)

# (2) More Transitional Examples

Besides archaeopteryx, hyracotherium, and ape-man, evolutionists still put forth some other transitional models, but these are not quite convincing either. The ancient fish, rhipidistians, had a few small bones in their fins. Evolutionists said that in the dry age of Devonian periods of the Paleozoic era these fish changed their fins into limbs and moved onto dry land, evolving into amphibians. But the author of *Vertebrate History*, B. Stahl wrote, "none of the known fishes is thought to be directly ancestral to the earliest land vertebrates. Most of them lived after the first amphibians appeared, and those that came before show no evidence of developing the stout limbs and ribs that characterized the primitive tetrapods." (n)

In 1938 some fishermen caught a very rare kind of fish in the

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Indian Ocean close to Africa. Later on they caught more than one hundred fish of the same kind in an area more than one thousand kilometers away. A zoologist noticed that these fish were exactly the same species, coelacath, which were considered to be already extinct some seventy millions years ago. They had small bones in their fins too, belonging to the same kind of fish as the rhipidistians. But they showed no indications of evolution. Their internal organs showed no signs of adaptation to land life, either. The function of those small bones in their fins is to help them to counter the strong ocean currents on the continental shelf and to stay there for feeding. If the theory of evolution were true, and the rhipidistians could keep evolving and evolving, even all the way up into human kind as evolutionists claimed, then why were the coelacaths, the same kind of fish as rhipidistians, so incorrigibly obstinate, having undergone four hundred million years without any change? The evolutionists then said that this is called "stabilizing selection." Even though those fish displayed no evolving or changing, they still verified that the theory of evolution is correct. Of course, evolutionists may make unreasonable arguments like this among themselves, but it is not so easy to convince other people.

The transitional specimens which the evolutionists are the most content with are the animal fossils of therapsida order which are said to be the intermediate form between reptiles and mammals. Evolutionists are often embarrassed by the fact that the transitional specimens are so few, and the fossils of therapsida are so many that evolutionists feel much happier with them. However, having too many specimens became another perplexing problem, because they were too divergent in shape, and could not be classified in the same species. Evolutionists tried to arrange them into a series according to the amount of mammalian characteristics so to display the process of evolution from reptile to mammal. But these animals did not appear or disappear in accordance with the sequence assigned by evolutionists. They came into being in their own time respectively and existed simultaneously with each other in the world at that time. Without forcibly rigging up the characteristics of different animals and tampering with the sequence of their appearing, no series of evolution can be arranged at all. So which one of those multiple animals of therapsida order was the ancestor of mammals? A famous evolutionist, Futuyma, said, "Among more than ten animals of therapsida we really do not know which one was the ancestor of mammals." It is definitely impossible that all of them could be ancestors of mammals and probably none of them were. Later on evolutionists tried to take all these animals of therapsida as ancestors of mammals. But in this way the "one common ancestor" emphasized by evolutionists would become "multiple different ancestors," and of course, this would no longer be Darwinism.

Actually one animal with some characteristic of another animal does not mean that there is a relationship of evolution or ancestry. For example, there is a modern bird, hoatzin, in South America. It has claws on its wings, and seems like a reptile, but it is not a descendant of a reptile or an ancestor of other birds. Another existing animal of Australia, the platypus, is a mammal, but it is oviparous and also has a cloaca, which functions in both excretion and reproduction as in birds. It has webs between its toes, and a beak similar to that of a duck. However, even most evolutionists do not consider it as a transitional model, nor claim that it is the ancestor of birds or mammals. It is just a rare and unusual animal. In the classification of creatures, only species has a natural objective standard (that is, individuals of the same species can reproduce through cross mating), all other classifications, such as phylum, class, order, family, and genus, are artificial. To put all extinct ancient creatures obstinately into the frames of classifications made by modern people is like "cutting one's feet to fit small shoes." To fabricate additional ideas as "evolution" and "common ancestor" is merely superfluous.

# (3) Spontaneous Generation of Life and Miller's Experiment

The idea that various chemical substances in ancient oceans, lakes and pools formed a so-called "warm dilute soup," thus generating primary life, originated in the 1920's from a Russian scholar, Oparin. After some exaggeration it seemed that life could really be generated in this warm dilute soup. In the 1950's an American postgraduate student, Miller, carried out an experiment according to this idea. He put some reductive gases like ammonia, methane, hydrogen, and water vapor into a flask. After a full week of high potential discharge he got

some traces of a few aminoacids. The evolutionists were excited by this achievement for a while, as if they had already synthesized life in the laboratory. However, in the 1980's this experiment and related suppositions were subjected to serious query and criticism from scholars in chemistry and related sciences. First of all, the presupposition of this experiment was erroneous. Modern geology and atmospheric physics reveal that the earth never had a reductive atmosphere, and except for water vapor, all the other components cannot stay in the air for a long time. And without oxygen there would be no ozone layer to protect the earth from cosmic radiation, and aminoacids would be destroyed quickly, before having any chance to form protein and life. Even if life were formed by chance, how could it survive without oxygen? Second, the quantity of energy used by Miller in one week exceeded the total amount of energy obtained naturally in forty million years. This could not happen in the natural world. And in addition there was no postgraduate student like Miller in the ancient world to provide and set up all the apparatus needed by this reaction. Except for their imaginations, evolutionists could not provide any evidence to verify that there really had been something like "hot dilute soup" on earth. Even if there were, it still could not have simultaneously created all the important materials which are indispensable in producing life. Miller, now a professor at the University of California, said recently, "The problem of origin of life has turned out to be much more difficult than I, and most other people, envisioned."

Some over-enthusiastic evolutionists, starting from their own subjective desire and farfetched statements, tried to consider that the origin of life was a very easy matter. But this idea never has been appreciated by experienced evolutionists, because it is groundless and it is not good news for Darwinism. The famous evolutionist Dawkins deemed that if the formation of life was so easy, then Nature must have repeated this process many, many times. Luckily this was not the case, or the vital point of Darwinism, the "common ancestor," would be broken down. If the production of life were so easy, why did so vast an ocean of "hot dilute soup" form only one single life through billions of years?

When facing the difficult problem of the spontaneous formation of

life, the chief magic weapon evolutionists use to make their statements plausible is the phrase "by infinite chances," as if anything could happen through countless accidental events. However, infinite chances do not create any miracles. For example, it is strictly by chance that a couple gives birth to a boy or a girl. There is no way to predict this. Some couples even give birth to ten girls successively, but numerous such cases of chance put together will make up a statistical necessity: that is, the total number of boys and girls are approximately the same. and the larger the sample, the smaller the error. For another example, the position or motion of a particular molecule of gas in a closed container, because of molecular motion, is highly occasional and indeterminable. But the total summation of countless molecular motions will make up a statistical necessity also: that is, every surface of the container will be under the same gas pressure. It is strictly subject to Boyle's law and Pascal's principle with no more occasionality. Countless occasional molecular motions never create super high pressure in one direction and negative pressure in another. For another example, if black and white sand are put into a container, and the container is shaken, vibrated, and overturned arbitrarily, then the destination of a particular grain of sand is highly occasional and indeterminable. But the overall result is still a statistical necessity: that is, an even mixture of black and white sand. The more thorough and the longer the disturbance is, the more even the mixture will be. Black and white sand cannot be spontaneously arranged into any pattern or picture. For the same reason, occasional variation may possibly affect an individual creature, but countless minute variations can only counteract each other, and leave the species in a state of stasis. The idea that so-called countless beneficial minute variations accumulate successively and result in evolution is just a subjective fantasy.

### (4) Molecular Biology and Evolution

Since the 1960's, molecular biology has advanced significantly. Man's knowledge about life has reached down to the level of the molecule. Some secret codes of genetic messages have been interpreted and techniques relating to genes, having been applied to medicine or animal and vegetable breeding, seem to have a very bright future. Evo-

lutionists claimed that molecular biology verified evolution in a completely new field, and that by comparing the same molecule (as cytochrome C) of various species, they could determine the time when each species diverged from the common ancestor to a level of accurate quantitative measurements. Somebody has even said that the moment for man to conquer nature is coming. Now if we could only interpret all the genetic codes, then we could create any new species at our own will, and even create super human beings.

What then does molecular biology say to us? Can man really do anything he desires?

Christianity is not agnosticism; according to the Bible creatures are recognizable. God gave man intelligence superior to all other creatures to "subdue the earth," and "have dominion over every living thing that moves on the earth" (Genesis 1: 28). Therefore, the phenomena of life, including the phenomena of genetics, are knowable. So interpretation of the genetic code is only a new stage of man's recognition about nature, without special implication. In genetic therapy or genetic engineering, people just replace or recompose certain genes to attain the goal of therapy or breeding. They do not create any new gene, not to mention new life. Whether these unusual creatures made by genetic engineering are at last benefits or disasters to nature and human beings is really hard to anticipate, but people concerned with environmental protection are already laden with anxieties about such creatures. As for creating super human beings, it is just someone's fancy running wild.

There are always some similarities and dissimilarities between creatures. Because of this, creatures can be classified. Man and ape are very similar in appearance, so Linnaeus classified man and ape together as primates. There are also similarities and dissimilarities between molecular structures of different creatures. This also may be taken as a ground for classification. Sometimes there is great divergence between morphological classifications and molecular classifications; but in general they are consistent with each other. Therefore, molecular biology just verified the taxology of Linnaeus, not Darwin's evolution. On the contrary, it makes evolution even less likely to win people's confidence. Because different creatures not only differ in

shape, but also in molecular structure, both these aspects must be synchronized and coordinated to make the creature exist. This greatly expanded the difficulty of evolution. If any animal lacks proper hemoglobin, then no matter how perfect its lungs and cardiovascular system are, all these structures are still useless. The complicated structure of hemoglobin itself and its peculiarly marvelous function of carrying oxygen, together with its perfect coordination with the cardiorespiratory system, will make the attempt to explain the evolution of species with accidental mutation and blind selection unbelievable. If various molecules of different creatures evolved gradually from the same molecules of the imagined ancestor, then between them must be a lot of intermediate molecules. However, biochemists cannot find anything like that.

The thesis advocated by evolutionists that molecular biology can precisely determine the time of divergence of every kind of creature must be based on two suppositions. (1) Suppose that all creatures' molecules must mutate spontaneously with a clock-like stable rate through numerous ages without any change due to influence of external factors. This is the so-called "theory of molecular clock." However, the molecules of creatures do not have any indication of time; therefore, this molecular clock does not have a datum point. It needs some fossil ages as references to calibrate its time value. Then, (2) suppose again that these fossil ages are accurate and without error; otherwise, the reliability of the molecular clock becomes questionable right away. But as it is well known that all fossil ages are only rough estimates with large errors, and are usually products of evolution, how could they then be taken as evidence of evolution? And what is even more pitiful is that there is no stable mutation rate at all. The advocate of the theory of molecular clock, Wilson himself, once wrote, "Many biologists argue that instead of proceeding smoothly, molecular evolution might be characterized by long periods of inactivity punctuated by bursts of change."(0) From this statement, it is obvious that this molecular clock not only has no datum point, but also has no pendulum, so it either goes too fast or too slow, and sometimes it goes and sometimes it stops. Please think, can such a "clock" calculate time accurately? So we see that the socalled "accurate determination of age" claimed by evolutionists is just

a claptrap to intimidate the public. It should not be taken seriously. If the thesis of the molecular clock is true, then the continuous mutation of the molecule would be a determined trend. The appearance and molecular structure of creatures would have no stable state, for they must continue to mutate and never stop. But this is contrary to the facts. Stabilization of species is well known. Even evolutionists cannot deny it. Recent research reveals that living molecules have a characteristic to counteract error. For example, in the duplication of DNA, if any error happens, some enzyme will be activated to cut off the erroneous section, and re-duplicate it one more time. This is consistent with the idea of immunity.

## (5) Evolution or Creation?

Is our universe actually coming out from numerous blind, unintelligent, accidental events, or did it originate from a design of superior wisdom? The regularity and wisdom of this universe is as evident and bright as the sun and the moon. Nobody can deny it, not even the evolutionists. Let us take a look at the words of an evolutionist, A. Cairns-Smith:

"After all what impresses us about a living thing is its in-built ingenuity, its appearance of having been designed, thought out—of having been put together with a purpose . . . too much of the complexity seems to be necessary to the whole way in which organisms work." (p)

Let us see the words of another evolutionist, H. Pagels:

"What scientists find is that the architecture of the universe is indeed built according to invisible universal rules, what I call the cosmic code—the building code of the Demiurge. Examples of this universal building code are the quantum and relativity theory, the laws of chemical combination and molecular structure, the rules that govern protein synthesis and how organisms are made, to name but a few. Scientists in discovering this code are deciphering the Demiurge's hidden message, the tricks he used in creating the universe. No human mind could have arranged for any message so flawlessly coherent, so strangely imaginative, and sometimes downright bizarre. It must be the work of an Alien Intelligence!" (9)

These two paragraphs are written excellently. Even the writings

of creationists could not be better. The words are put in such a clear way, that they must acknowledge the existence of a Creator, right? But in the very next paragraph, the writer says that there is no creator. Everything in the natural world can be accounted for by evolution, that is to say, all are contributions of natural selection! Such logic is really astonishing. The previous sentence said clearly that no human mind could arrange it; the second one said that blind natural selection without any intelligence could make it. So the natural selection must be the "Alien Intelligence," correct?

F. Crick, one of the discoverers of the structure of DNA, said, "An honest man, armed with all the knowledge available to us now, could only state in some sense, the origin of life appears to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going." He estimated the probability of human beings appearing by chance to be as low as  $10^{-2,000,000,000}$ . Of course, this just means impossible. But he still believed in evolution. However, he thought that life couldn't be produced on this earth and needed to be transferred from another celestial body. (f)

Another evolutionist, G. Wald of Harvard University said, "A man must confess that spontaneous generation of life is impossible. Even so, I still believe in spontaneous generation of life. To the end this is a personal choice—— faith." (s)

The instances above make it perfectly clear that the reasons these people believed in evolution were not scientific, but rather a personal choice of faith. They chose to believe in evolution which they clearly knew was impossible, and not to believe in creation, because they had already denied the existence of God. This also explains why those so-called advanced critics in some English and American churches displayed more enthusiasm than even the scientists did when Darwin advocated his theory of evolution. These people had already abandoned their faith in God, and needed something like evolution to support their disbelief. It is said in the Bible, "Since they did not see fit to acknowledge God, God gave them up to a debased mind and to things that should not be done." (Romans 1: 28) This is an exact description of such people.

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