

NATURAL AVENUES OF GOD-REALIZATION

SCIENTIFIC LAW OF CAUSE AND EFFECT

LECTURE THREE

Eversince ancient times, man through his wisdom has adopted different ways and means of determining the existence of God. One such ways is through scientific law of cause and effect.

1. WHAT IS SCIENCE ?

It is knowledge ascertained by observation and experiment, tested and systematized. Science is defined as an understanding of causes and effects, of relations and natural forces. It is the knowledge of science which guides us on knowing the nature of things. It is, therefore, a principal venue of understanding and realizing the existence of God. Science is but the whole range of attempts made by men to discover causes, effects and objective relations between different peculiar things.

The scientific law of cause and effect teaches us that there is cause for every phenomenon- anything appearing and observed, that there can be no effect without a cause. Great amount of scientific effort is based upon this philosophical principle.

Because one put a seed in a fertile soil and watered it regularly, a beautiful tree grew up. But can we really say that we made the tree grow? Obviously not. Belief in God as the true - tree grower is the answer, otherwise we have to believe that the seed-to-tree process is accidental. Can our mind accept this? Certainly not. Even Plato the great Greek regarded the mathematical form of universe as evidence of the rational mind of the Creator God as the absolute cause.

2. WAYS OF PERCEPTION

On this basis, belief in the existence of things in this world may be classified into several categories, three of which are:

- a. Things which are evident to one or more of the five senses of man; we see visible things with our eyes, we hear sounds with our ears, we become aware of pleasant and unpleasant smells with our nose, we learn of sweet tastes, hot or cold with our tongue, we feel the roughness or smoothness of things by touching with our fingers.

- b. Things which are not perceived by anyone of our five senses, but whose existence we reduce by considering their effects.
 - c. Things that are invisible to us and have no apparent effect on us like huge galaxies, the dust clouds, the empty space itself e.g. the great invisible universe called MACROCOSM (Big-Telescopic) and MICROCOSM (Microscopic).
3. Let us consider the following example of things whose existence we accept by witnessing their effects.

a. Electricity

By looking at two wires, one of which is electrified, we can never determine which of them has an electric current. We can only discover the existence of this current from the effect of the electricity e.g. a lamp being lit and which provides light. So electricity is something which exists although our eyes cannot directly see it.

b. Gravitation

Imagine you have a book in your hands and if you let it go, it will fall to the ground e.g. the ground will pull the book towards itself. This power of pulling a thing down to the ground is something which we do not perceive through our five senses. So gravitation is again one of those scientific things which is not visible but of whose existence we feel sure through observing the falling of bodies, which is its result.

c. Magnetism

You place a magnet beside a piece of iron. Externally there is nothing except what we see, but when the iron is pulled towards the magnet, we understand that in the space around the magnet, the phenomenon of magnetism exists.

d. Radiation

You shine white sun-light through a prism (sold form of glass or other clear substance whose sides are so cut that rays of light are broken up) You will see the other side of the crystal six colours which are red, orange, yellow, green, blue and violet. This side of red and beyond violet, no more colours are to be seen. However scientists have discovered that in the place where the eyes see no more light, further "colours" exist which have heating and chemical properties. These "lights" are called infra-red and ultra-violet.

In the year 1800 A.D., a physicist and astronomer called Herchel conceived the idea of researching into whether radiation existed beyond what the eye can see. He gradually altered the position of a thermometer placed on a screen on which the six coloured spectrum (from red to violet) was projected, and exposed it to the various colours, measuring the heating effect of each of them. When he got beyond the red, he discovered that the thermometer indicated greater heat from this. He then became certain of the existence of invisible radiation called infra-red radiation which produced more heat than visible light.

Scientists later found out that the changing of the colour of the skin on exposure to sun-light was due to the chemical influence of this radiation.

Inaudible Sounds

There are many sounds which we do not hear. They are called supersonic sounds, and we discover their existence by examining their effects; they are used in medicine and technology.

Air

Our very lives depend on something we cannot see at all, and that is the air we breathe. Without it we would die in a few minutes. We cannot see the air, but we certainly know that it exists. We cannot see the wind either, but we do see trees waving in the breeze, and ocean waves tossed about by the wind's power. Thus we believe that the wind exists because we see its results.

Thus numerous such instances in our daily life whereby we observe effects that oblige us to believe their causes even though we are unable to see them. This law of cause and effect was in fact already used 1400 years ago by Imam Jaffer Sadiq (A.S.) when he said to Mufaddhal:

"If you see the painting of a man on a wall, and someone tells you that it appeared on its own, without being painted by anyone, would you agree to it or would you find it ridiculous? Therefore how can one deny the Creator who created the living and articulate man?"

SUMMARY

=====

1. Existence of a thing can be determined either through five senses or through consideration of its effects.

- 4 -

2. Existence of a number of things unseen like air, gravitation, electricity magnetism, radiation is accepted from witnessing their effects.
3. Similarly existence of the Creator can be realized by what we perceive the countless things created and their function uncaused by man, the cause effect relationship in all creation.