

THE HUMAN BRAIN **NATURE'S WONDER EXTRAORDINARY**

By Ahmed H. Sheriff

The most marvellous of all creations is the human body and the most complex organ of the body is the brain which is considered to entail some wonder-striking secrets of Nature.

No wonder therefore we read in the Daily Nation of Wednesday, the 2nd August-1978 that Albert Einstein - the famous physicist and scientist who used to say 'my brain is my laboratory' decided to donate it for research after his death. He requested the removal of his brain for posthumous study. After his death at the age of 76 - some twenty three years ago - his brain was sanctioned in a laboratory at the University of Pennsylvania.

Marlin Books Kreider, a physiologist from University of Maryland in U.S.A. asserted that the evidence of God's existence lay in the design and structure of human and animal bodies. In citing an example, he writes "speaking of the brain, that possesses unbelievable abilities yet little more is known as its physical basis than that it can initiate and conduct electric-like charges and that some chemical changes take place. But its numerous functions - who can explain or account of them? It is responsible for co-ordinating all muscular activities and controls even the most basic bodily functions such as respiration and heart-beat. It contains memory, and holds thousands of mental images available for instant recalling. Is there any physical explanation of the integrating and problem solving ability of the brain, or of reason and common sense, of motivation, desire and serenity?"

Undoubtedly when one marvels at this great wonder of Nature, can one help but acknowledge the existence of Allah whose every action is designed with remarkable wisdom?

For some years in the recent past, a question has been occupied the minds of scientists whether a human brain can reveal past experiences.

Recent scientific research has revealed some of the marvellous wonders of human brain. It has produced observed evidence on how the brain with its 12 billion cells stores memory of past experiences. The evidence seems to indicate that everything which has been in our conscious awareness is recorded in detail and stored in the brain and is capable of being played back.

As narrated in the book 'I am OK - You are OK', during the course of a brain surgery, a neurosurgeon from McGill University in Montreal, Dr. Wilder Penfield conducted a series of experiments during which he touched the temporal cortex of the brain of the patient with a weak electric current transmitted through a galvanic probe. His observations of the responses to these stimulations were accumulated over a period of

several years. In each case the patient under local anesthesia was fully conscious during the exploration of the Cerebral Cortex and was able to talk with Penfield. It was observed that the stimulating electrode could force recollections clearly derived from the patient's memory. Dr. Penfield reported "The psychical experience thus produced, stops when the electrode is withdrawn and may repeat itself when the electrode is reapplied."

One student of the brain gives the following experiment from Dr. Penfield's research:

"One woman heard the voice of her small son in the yard outside her kitchen, accompanied by the sounds of hooting cars in the neighbourhood, barking dogs and shouting youngsters. One patient listened to an orchestra in the operating room playing a number that she did not herself know how to sing or play, and that she only vaguely re called having heard it before."

Apparently the brain stores a complete sequence of all life's experiences. It is though a mental tape recorder making a permanent recording, and electric stimulus can cause playback of even long forgotten experiences. Dr. Penfield has offered evidence to the National Academy of Science that 'parts of the brain work like an audio-video tape recorder, preserving the details of everything that a man sees and hears'. He says that these areas of preservation of experiences are in the two temporal lobes of the brain. Islam has given the name of 'Kiramun Katibeen' - the two honourable angels, one on each shoulder of a man to record his good and bad deeds and words. They are called honourable because they will never record anything that has not actually taken place.

"And most surely there are two keepers (watchers) over you. Honourable recorders. They know what you do"
(Al-Infitar v. 10-11-12)

But one may wonder about the significance of this brain recording of all human experiences be they vocal, visual or physical.

One of the essential articles of faith is the belief in the Day of Judgement when Allah will exercise full justice to one and all. Does it not therefore lead us to believe that the purpose of creating the two temporal lobes in human brain described as 'Kiramun Katibeen' in the holy Quran is to record all man's actions and testify them posing as witness on the Day of Judgement? Is it not to warn mankind that not only Allah is All-Knowing but He also created human brain so marvellously capable of recording everything he does, so that he cannot deny his deeds on the day of reckoning.

And over 1300 years ago, Hazrat Ali a.s., the cousin and son in-law of the Prophet of Islam, has spoken on this subject in these words as recorded in Nahjul Balagha:

"O people. Allah is not unaware of all that you do during day light and in the depth of the night. He knows everything that you do and every thought that passes in your mind. He is Omniscient(العليم). Even your mind and your limbs will bear testimony

before Him of your actions and thoughts. Parts of your body are soldiers of His army, your conscience and your mind are His spies against you. Your private life is fully known to Him."