

ou are standing in line at the checkout counter. Suddenly, you lose all memory of why you are there. People behind you are getting annoyed, muttering amongst themselves. You see the checkout lady on your left making odd hand movements and looking at you strangely, but you don't understand what she means.

The above scenario describes what would happen if you suddenly forgot what a checkout counter was for. In other words, this is what would happen if you were suddenly unable to tap into the relevant part of your brain. Have you ever considered how your brain is designed to allow you to remember?

Let us take a journey into our miraculous brain.

**♦ First Dimension: Analytical Thinking**Scientific Understanding of the Human Memory

cientists divide our memory into two types: **Implicit** and **Explicit** memory.

Implicit memories are based on past experiences that you remember without having to think about them. These are the memories of behaviours you have learned. An example of this is remembering how to tie your shoelaces.

Explicit memories are related to facts and events that can be consciously recalled. For instance, an explicit memory could be of the day you won first place in a swimming competition. You are able to recall what happened, who was there and what you saw and heard. The memory of that day, that event, is explicit.

Memories can be short-term or long-term.

o you remember what we learned about neurons? Neurons act like a platform through which messages are transferred using a combination of electrical impulses and chemical signals. So, for example, if you are looking at a cute, fluffy kitten, the image of that kitten is recorded onto your retina (at the back of your eye). Then, a message is sent along your optic nerve to a specific destination (let's call this destination A) in your brain. That message is processed in your brain so that you are able to distinguish that what you are looking at is a kitten (versus a puppy for example).

Messages get transferred through your brain by means of electrical and chemical signals. The electrical signals in our brains can follow as many possible paths as there are neurons and connections between neurons. However, no one really grasps how certain sequences of electrical signals in our brains are interpreted. There is only so much that scientists, with their limited knowledge and capabilities, can comprehend or discover. The little that has been discovered is tremendously impressive.

#### Amazing Scientific Facts about Human Memory:

- Half of your brain could be surgically removed without substantial effects on personality or memory.
- Your memory can associate a scent with a particular occurrence or event.
- Forgetting is good psychologically and biologically; deleting unnecessary information.
- Fusiform Face Area is the dedicated part of the brain to recognize faces.



### **Second Dimension: Analogical Thinking**

**Human Memory vs. Digital Memory** 

et us try to compare our short-term memory (or working memory of our brain), to a computer's working memory, or RAM. RAM can function and 'remember' things only when the computer is powered on.

Our working memory is extraordinary. Its role is to store small pieces of very recent experiences in order to decide which course of action to take. If short-term memory does not work the way it is supposed to, our daily experiences would remain meaningless to us.

RAM 'remembers' things i.e. it retains its contents whether the power of your computer is on or off. It is the part of the computer that is pre-programmed with information from the factory. For instance, RAM is used to store the pre-programmed start up instructions for a computer.

ow is our long-term memory mechanism superior to a computer's RAM?

The role of our long-term memory is more than simply remembering yesterday's events or random facts and figures. Our memory holds information about our emotions, how to speak, how to move and so much more.

Your memory has an incredible recording capacity as well. If the brain works like a video recorder recording TV shows, we would run out of storage after continuously watching TV for more than 300 years.

In short, even though we do not truly understand how memory works, we certainly understand how important for our life and civilization. It is extremely elegant and beneficial when we compare it to any man-made recording devices. Indeed, it is so remarkable that no man-made devices can remotely compare with it. In fact, no device could be invented without the miraculous memory.



"If the brain works like a video recorder recording TV shows, we would run out of storage after continuously watching TV for more than 300 years."

## **♦Third Dimension: Critical Thinking**

Exploring the Maker of the Human Memory

et us remember man-made memory storage devices. What does it take to make them?

The history of digital devices goes back thousands of years. First, objects were primitively represented with symbols. Then, humans learned how to count. Indeed, it was almost five thousand years ago when Sumerian came up with the abacus to teach counting. Many generations later, humans learned to do computational work such as addition, subtraction, division, and multiplication. The primitive computer-like device- the calculator-was invented in 17th century.

Now reflect on your memory. It is much more complex and elegant than the most sophisticated computer. So, how did you get such a fine memory? Did it come into existence on its own without any cause?

s discussed before, our memory is more elegant than any electronic device. Unlike a computer's memory, our memory is selective. It is designed to help us focus on what really matters and filter out unnecessary information. A healthy memory and mind are key to achieving balance in all things.

No reasonable person would deny the fact that the very invention of a computer with its RAM, transistors, and other components requires an agent with will, knowledge, and power. Indeed, it was only possible to invent a computer after thousands of years of accumulated human knowledge. Thus, it is not far-fetched to understand and conclude that human memory, which is infinitely more

amazing than any man-made memory storage devices, could not be possible without a Maker with will, knowledge, and power. Then, who is the Maker of human memory? Let us find out more about the Maker of our memory and His hidden message.



### **◆Fourth Dimension: Meditative Thinking**

Reflecting on the Attributes of the Maker

f we study the structure of our brain, we will see how part works in harmony with all the other parts so that we can remember. Even the movement of electrical signals along the brain's neurons is extremely well coordinated and accurate. All these precise and complex activities can only be the result of an enormous reservoir of knowledge, wisdom and power.

It is as though each electrical signal knows which path to take for the purpose of establishing memory.

Is it possible that our memory is aware of its connection to our brain and to the world around us? Does our memory have the power and the wisdom to control our brain or the world? The brain is made of unconscious matter. Therefore, it cannot possibly perform the function of remembering on its own. Indeed, the brain is just a tool given to us to

help us remember our daily experiences.

If neither material causes or blind chance can be the cause of our ability to remember things, then how did this ability come into being? The connections of our brain to the air, to oxygen, to plants, to sunlight, to the world and to the universe are like signs indicating that the Maker of the brain can only be the One Who has control over air, oxygen, plants, sunlight and the whole universe. He is the One who has the knowledge, wisdom, power and will to create and sustain every living thing and indeed, the whole universe. Thus, our memory speaks about the Hidden Reality, and reveals its Maker, as being All-Seeing, All-Knowing, All-Powerful, All-Wise, Most-Merciful, Most-Kind, the Preserver, the Protector, and the Guardian. The more we learn about our memory, the more we know about its Maker.

# **♦ Fifth Dimension: Moral Thinking** *Responding with Better Character*

hink of what would happen if you suddenly memory loss as a result of a brain injury or disease. Imagine what your life would be like if you could not remember how to do basic tasks, like eat, drink, move around, speak or understand language.

Where did you buy your precious memory? How much did you pay for it? Of course, it is not available for sale. Even if all the scientists in the world pooled their resources and knowledge together, they would not be able to replicate the brain's memory mechanisms in their glorious perfection. The One who created you gave you a splendid working memory to navigate the world around you with ease. He wants you to leave a memorable legacy. Thus, you should offer the True Bestower of gifts three things in return for this valuable memory: remembrance, reflection, and gratitude.

Pause and reflect: can we control our memory and choose what to forget? We do not control our memory. The Maker of our memory enables us to use it. He gives us life right now. We are his guests. He takes care of our needs. The more we reflect, the more we can understand how generous and compassionate our Host is. And the more we enjoy His gifts, the more we feel grateful to him. The more we realize His compassion, knowledge, and power, the more we can trust Him and turn to Him for help.

Remembrance is realizing that there is a Creator and Maker of our memory.

Reflection is thinking of our priceless, miraculous memory as a gift of our Creator's mercy.

Gratitude is being thankful to the Creator for bestowing upon us such a precious blessing.

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