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Research Paper

Memory Lane in Brain: A New Perspective

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ABSTRACT

The ability to reorganize the previous thought from your memory lane in the brain and do act accordingly and perform a proper solution to the problem. The perception, recognition and interpretation of external stimuli is mostly based on your previous storage in memory lane. The storage of information in the way like in the program run by the computer and the concept of AI. The storage is in the brain in the form of many layers and makes the rings of long-term memories. The memory rings are very much similar to the annual rings in the plant stem. These plant annual rings are used to decide the age of the plant. The concept of annual rings was well defined in plant studies i.e. botany.

Keywords: *Memory Lane, Brain, Memory in AI, Information-States, Requirement of Brain in Memory; Neuroscience*

The concept of our memories, throughout, life events are stored in the different parts of the brain, as a memory. As the time passes short term memory stored in the brain is called long-term memory. Whenever we try to recall that past history of life, it will come back from the past storage lane of memory. The concept of memory lane may be very useful in the area of AI research of consciousness. The concept of memory lane is defined that all types of incidental memories, either short term or long term are stored in the brain and may recover as required. The memory lane is well arranged in the form of annual rings of memory lane.

The concept of memory rings

The adaptability of AI in processing memory lane concepts are in the multimodal information of text, images, sound, and other senses of human beings.

This isn't just about the layering of memory lane but perception on top of cognition or vice versa. This reflects some idea of the scientific insights into the storage in the brain as a cognitive-perceptual continuum and adds a layer of experiences and recall in the form of apperception and belief.

The concept of neuropsychology

To discover the history of research in this area as in 1953, a patient named Henry Molaison had his hippocampus surgically removed during an operation in the United States to treat his epilepsy. However, after the surgery he was completely unable to permanently

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store new information. The long-term memory which was stored in the brain areas as memory lane was totally diminished. However, still able to improve his performance on various motor tasks, even though he had no memory of ever encountering or practising them.

As researchers believe that the neocortex is the largest part of the brain In humans and involved in higher functions such as, perception, motor commands, spatial reasoning and language. The amygdala of the temporal lobe is attached with emotional significance of memories.

The storage of these memories suggests that interactions between the amygdala, hippocampus and neocortex have a crucial role in storing the long-term memories. Many researchers have explained the storage of memory in different parts of the brain. (1)

A new study published in Lancet, CT scan of the brain of a 44-year-old civil servant who has lost more than 90% of his brain tissue due to hydrocephalus, but lives almost a normal life with two children, having verbal IQ 84 and performance IQ 70 (Lancet. 2007,370(9583):262). The scan picture supports the view that for conscious activities, minimal neural structures required are the upper layers of the cerebral cortex and the brainstem.

Taxonomy of memory

The classification on the concept of structural and functional biological sciences memory may be classified in different types of the basis of utility. The short term, long term and immediate memory was well explained. The concept of working memory is in the research work as well as the book ' working brain ' by Luria (2)

The prefrontal cortex the part of the neocortex is the most recent addition to the mammalian brain, and is involved in many complex cognitive functions. His experimental work was well explained emotions and brain functions.

Human neuroimaging studies using Magnetic Resonance Imaging (MRI) when people perform tasks requiring them to hold information in their short-term memory. (3)

The brain’s exact storage capacity is not well established and it is difficult to calculate, but memories are well organized, coordinated and reproduced in the form of knowledge due to systematic storage in the memory lane. The taxonomy of a flower is in an organized way like, sepals, petals, stamens, and carpels. Our brain is just like a structure of flowers having different parts but as the form of an active brain called mind.

Deterioration in functional memory

The concept of memory lane rings will be explained by the study of the old aged population suffering from Alzheimer's dementia, they always memorize the long-term memory compared to recent incidents. They mostly recall the things which were stored when the brain was in the young age incidents, when the brain was also in the developing phase. The reason may be that the earlier age of incidents was well stored in the memory lane, because our brain may keep up as we seek new experiences over our lifetime.

Memory refers to the psychological processes of acquiring, storing, retaining, and later retrieving Information. Human memory involves the ability to both preserve and recover

information. However, this is not a very simple process different studies were conducted on where and how much maximum storage capacity in the brain are under questions.

Emotional perceptual Memory

There are effects of emotional perceptual Incidental storage on memory formation. Emotion interferes with receptivity of inputs and execution of outputs in the memory process. When the feeling of sadness or anger, the formation of memory is poor because of poor receptivity. (4) There is, however, a kind of emotional memory, which regains one's life experience of the original perception of substances in the past storage. As examples, memories of an accident, attack, death of a near and dear, joy of the first love, joy of entering into one's chosen profession etc. Characteristically this Incidental memory is robust, and it evokes similar emotional reactions as it did in the original situation.(5) There are both neurological and psychological reasons for reproduction of the same Incident. Psychologically, there is more involvement of life events in such situations. Mechanism of Storage of Memory is not Clear, but memory stored and recovered. These actions of memory are localized by the central nervous system, either in the hippocampus and the amygdaloidal regions of the brain. (6)

Neuroscience and memory

Neuroscientists have also worked on memory disposition and developed, different models to describe how memories are transferred from short- to long-term memory, and stored in the area of the brain.

The researchers are trying to establish the fact of consciousness with AI, but simply they are using it to store the memories in the working robots. The concept of the memory ring lane will also be useful in AI research on storing the system vise of the memory and consciousness.(7)

My observation was during review of the literature on memory research that the whole brain is responsible for storing the memory of long term as well as short term in the active brain means when we are active not sleeping. In the active stage, all senses are full in the working stage and every incident is analysed and stored in the brain and after proper screening and evaluation go into the annual memory lane.

CONCLUSION AND FUTURE ASPECTS

Every step of formation, storage, recall and retrieval of memory is mysterious. My paper is the new Vista in memory thinking in compression to biologic in nature and compared with annual rings of plants. We propose the memory lane rings, mysteries and also show some ways to reach a solution for this. Our research paper concludes with the statement that the mystery of storage of memory is intertwined with plant science. The memory system can acquire, store, recall and retrieve memory. This paper finally evokes the basic question, how and where memory exists and Mistry of revival. Memory is also some evidence of memory after death. The emerging perspective from this paper is the role of biological sciences in the future of AI. Our earlier paper (8) throws adequate light on the issue of intelligence in which the memory was well explained as part of mental assessment.

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Conflict of Interest
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