

## **Joshua 1:8b, Review: Theology of Neurology: Repetition & Memory; The Association Cortex; Facilitation**

As we learn, four measurable changes occur in the neurons and their synapses creating this memory trace:

- a. Morphological: Structural;
- b. Dynamic: Blood flow and oxygen uptake increases;
- c. Biochemical: Synthesis of new proteins; and
- d. Physiological: Electrical properties.

### CONCLUSION:

- 1) Learning causes the brain to expand its capacity for thought by initiating permanent change in the tissue of the brain.
- 2) This change results in the creation of memory.

## **XI. The Association Cortex: Staging Area for Academic Understanding:**

### SUMMARY:

- 1- The cerebral cortex is the outer covering of the animal brain and is developed to the maximum level in the human of the species.
- 2- Human consciousness, reasoning capacity, language abilities, and decision making occur in this cortex.
- 3- In order for decision making to occur, all pertinent data must be analyzed and brought to the individual's academic understanding.
- 4- Making up the greatest percentage of the cerebral cortex is the association cortex.
- 5- This is the central area for data analysis prior to thought, decision, and action.

- 6- Human volition considers the information gathered in the association cortex and is thereby challenged to act or not to act, accept or reject, believe or disbelieve.
- 7- The decision to accept and believe the information initiates the electrochemical process that results in the establishment of a long-term memory trace.

#### CONCLUSION:

- 1- The association cortex is associated with the **νοῦς**, the place where the Holy Spirit makes divine thought understandable to the finite human mind.
- 2- Since the believer is incapable of understanding divine thought, the Holy Spirit must make it perspicuous to him.
- 3- At the point of academic understanding the believer is left free to accept or reject, believe or disbelieve the revelation.
- 4- However, even if he accepts and believes, his finite mind is incapable of processing divine thought into a memory trace.
- 5- Transfer of doctrinal truth from the association cortex into a permanent memory trace must be the work of the Holy Spirit.
- 6- It is He who must initiate the synthesis of new proteins, it is He who must ignite the action potential of the first neuron, and it is He who must coordinate the interconnections of the neural network, which establish the memory trace.
- 7- In short, it is the Holy Spirit who must convert **γνώσις** into **ἐπίγνωσις** and store it in the seven compartments of the stream of consciousness.
- 8- The biblical documentation for this was noted in a brief review of the corrected translation of 1 Corinthians 2:12-13.

## **XII. Facilitation: Changing the Path of Least Resistance:**

#### SUMMARY:

- 1- Facilitation means to make a task easier to perform.
- 2- In neurology it refers to the principle that a behavior pattern becomes more and more habitual with every repetition of the act.
- 3- Positive volition initiates a positive charge called an action potential and synaptic excitation.
- 4- When this results in the message crossing the synaptic cleft it sets up an excitatory potential.
- 5- If the signal is strong enough, the potential becomes a reality and the neighboring neuron fires.
- 6- Negative volition, on the other hand, initiates a negative charge and results in synaptic inhibition.
- 7- This causes the individual to either stop an action or prevents it from ever starting.

#### CONCLUSION:

- 1- A facilitated memory trace presents the volition with a path of least resistance.
- 2- If that path is a wheel-track of wickedness, the likelihood of the believer doing the wrong thing is very high.
- 3- If that path is a wheel-track of righteousness, the likelihood of the believer doing the right thing is very high.
- 4- Under the filling of the Holy Spirit inside the Divine Power System, the believer is enabled to recall the right wheel-track and is delegated the power to choose it and then execute it toward man and circumstances.