

## **INTRODUCTION - SECTION 1 DETAILS**

### **WHAT IS THE PURPOSE OF THE ALPHABETICAL BRAIN™ WEBSITE?**

**March 10, 2021**

The purpose of this educational website is to explain the fundamental characteristics of your brain's physical structures as well as your mind's mental functions, including your unique willpower and your agile ability to imagine, reason, and remember.

This website presents a sensible humanistic scientific explanation of the new brain research. It proves beyond any doubt that you can optimize your brain knowledge. Now the distinction between your brain's structures and your mind's functions is a crucial new fact that has been proven repeatedly by scientific experiments and your own common sense.

In short, this website gives you a new vocabulary of brain words and definitions with which to control your thoughts and feelings and other bodily behavior. This new linguistic logic provides a new perspective to unscramble the technical language invented by brain scientists in collaboration with cognitive psychologists to explain in plain English how your brain works.

The cause of your mind's mental functions is an understandable sequence of biological and psychosocial processes that you can easily learn to control. This means that you can feel less anxious and be more self-confident after you have learned the new brain vocabulary definitions and meanings.

The definitions explain how the parts of your brain are interconnected and interactive so you can move your body, think creative thoughts, and control your feelings by yourself, if you consciously maximize your brain knowledge!

The integration of the 15 brain-ideas emphasized on this website is a brand-new intellectual challenge in human history. The purpose of this website is to help you understand the *hundreds of brain-facts* which support the **15 brain-ideas**. The new brain knowledge can educate you about how your brain's major organs and body's microscopic neurotransmitters and hormones cause your *mind's mental functions*.

Specifically, you need to understand the names and meanings of the main parts of your brain, which control your *unique willpower* and *creative imagination*. By learning a new mindset of brain facts and ideas, you will be able to conquer your doubts and confidently maintain your sanity as you increase your own curiosity about the meaning of life.

To achieve success, you need to add feelings of positivity to the new brain words, which can increase your own self-esteem. Your self-esteem is based on good feelings that you have about yourself when you are making ethically significant decisions. Then new thinking habits can provide you with even more health, wealth, and happiness.

The new brain information on this website emphasizes the profound connection between your working memory function and your long-term memory function. These two key brain ideas are #1 and #15 on the following **Circle of Consciousness Symbol©**:

### **CIRCLE OF CONSCIOUSNESS SYMBOL©**

You can see that #1 and #15 are next to each other on the circle, which can remind you that they are inseparably connected inside your brain.

If your working memory function (located in your prefrontal cortex) and your long-term memory function (located in your hippocampus) were not connected by a lifeline of healthy neuronal pathways, you would not be aware of whom you are. And you would not be able to talk coherently, so you could only confabulate!

### **YOUR PREFRONTAL CORTEX, ANTERIOR CINGULATE CORTEX, AND HIPPOCAMPUS**

The shockingly dreadful dilemma of the victims of Alzheimer's disease, which is the most common and most often fatal form of dementia, is that the conscious self-awareness function of a victim cannot connect with his or her unconscious long-term memory function.

The neuronal pathways between your prefrontal cortex and your hippocampus are known as your anterior cingulate cortex (plural: anterior cingulate cortices). These two neuronal pathways, one on the inside of the left hemisphere and one on the inside of the right hemisphere, can be obstructed or disconnected in several ways. Many kinds of abnormalities and dysfunctions can obstruct the neuronal signals from flowing through your neuronal pathways.

When these neuronal pathways are disrupted, dementia victims become progressively less aware of their past memories, whose "*triggers*" are located in the hippocampus part of their limbic systems. Then their perception of reality and their self-awareness of their own *sense-of-self (secular self or self)* is diminished: often to the point of no return.

Tragically, when the *victims of Alzheimer's disease* lose contact with their memories of the past, they forget the faces of their friends and family members and also forget where they are and forget how to speak appropriately

during conversations. If the connection is severely damaged, then the self-identity of victims becomes permanently altered, since essential self-defining memories cannot be recalled. Then victims are compelled to *confabulate* in order to fill the cognitive void: they can only make up nonsensical explanations!

Alzheimer's victims provide *solid evidence* for the meme:

***"You Are Your Adaptable Memory!"***

Since there is no guaranteed way of preventing Alzheimer's disease, it is important that you maintain a healthy brain by sleeping adequately, eating well, doing regular physical exercise, and challenging yourself daily to increase your cognitive reserve. Such a proactive growth mindset of healthy activities can reduce your risk of getting Alzheimer's, or possibly delay the pace of deterioration of your brain structures and your mental functions far into old age.

From this perspective, the best additional *mantras* to repeat daily are:

***"I move, therefore, I am!"***

***and***

***"I can predict, therefore, I will be!"***

## **DETAILS, SOURCES, AND QUOTATIONS**

The **15 *brain-flash-cards***, which introduce the **15 *brain-ideas***, have quick links to files that are named **DETAILS** and **SOURCES**.

The short ***declarative statements*** on both the fronts and backs of the 15 brain-flash-cards provide an easy way to learn the basic brain vocabulary needed to understand what causes your adaptable self-identity. The ***question and answer format*** can help you rapidly memorize the brain ideas and their relationships. The ***Q/A format*** provides a scientific perspective concerning the true causes of your sense-of-self (secular self or self).

The brief ***declarative statements*** on both sides of the **15 brain-flash-cards** can coalesce in your long-term memory function to strengthen your unique willpower so you can use your creative imagination to construct your own adaptable self-identity.

Soon you will be able to comprehend the **15 brain-ideas** just as easily as you understand the meanings of familiar household words such as "**table**" and "**chair**" and "**kitchen**" and "**bedroom**."

In addition, there is a special link on the website homepage Index called **Quotations about Human Consciousness**. It contains a variety of definitions of consciousness taken from recent books about neuroscience, evolutionary biology, cognitive psychology, and neuro-philosophy. They are all based upon the secular humanistic ethical perspective of the meaning of human life.

## **COGNITIVE NEUROSCIENCE AND YOUR CONNECTOME**

This new scientific perspective is known as ***cognitive neuroscience***. This new knowledge about the true functions of human brains can replace obsolete traditional psychological and philosophical ideas about the functions of your brain. Your ***connectome*** is the new name for your brain and nervous system, which operates

as a unified system in all of its nano-microscopic miniaturization. The computerized microscopes have allowed researchers to "*see*" smaller organisms and molecular interactions in the brain and body than were ever seen before in human history.

Today, one of the most important scientific studies ever undertaken in human history is the "*mapping*" of the human connectome. The connectome is the name used to describe the *neuronal pathways* of your brain and nervous system. This gigantic mapping project is a monumental worldwide multicultural neuroscience research quest that will provide even more benefits related to human behavior and medicine in the future.

Now with the new discoveries from *microbiology* about the human genome, epigenetics, and jumping genes, there is incontrovertible evidence that we humans can control our own destinies by using our willpower and creative intelligence! In addition, new understandings of the *fossil evidence* and the *principles of heredity* by paleo-archaeologists and evolutionary biologists about *evolution by descent* explain the diverse sources of human nature best.

This new brain research seeks fundamental knowledge as well as medical knowledge about how human brains work. There is a special emphasis on brain disorders and diseases in the hope that new insights will be discovered to better treat abnormal physical, mental, and emotional disorders. However, new scientific insights into brain functions are being discovered and verified daily by scientists all around the world.

After the new brain vocabulary is safely memorized and accessible in your permanent long-term memory function, you will be able to understand how your

*unique willpower* and your *creative imagination* and your *emotional intelligence* all depend upon your using specific *critical thinking skills* and *critical reading strategies* to understand the new brain vocabulary.

The goals of living long and well require that you keep *fresh blood flowing* through your blood vessels and keep *sparks of electrochemical ionic signals* flowing throughout your connectome. You will learn why it is so important to keep asking the question "**WHY?**"

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In this regard, many humanistic brain scientists have endorsed the idea of the existence of willpower (free will and your *secular self (or self)* by promoting the following meme:

***"Use your adaptable brain or lose it!"***

The essay at the following link provides the best modern analysis of the factors involved in understanding the cultural context of your unique *willpower (or free will)*.

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***instantly go to:***  
**WHY DOES FREE WILL MATTER?**

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A brief summary of highlights follows from the above link about your *willpower (or free will)* by the webmaster:

Free will (or willpower), which humans have evolved, is for following the rules of culture. Any animal can do whatever it wants, but the purpose of human free will is a more advanced way of behaving. People must inhibit impulses and desires and find ways of satisfying their needs within the complicated rules of society. Also they must consciously imagine various future scenarios and guide their present actions based upon their trained disciplined imagination. (*Paraphrased from above essay*)



To understand human life, you must understand how this vital inner decision-making process works. Few psychological phenomena are absolute dichotomies and most psychological phenomena are on a continuum. The freer actions include conscious thought and decision-making, self-control, logical reasoning, and the pursuit of enlightened self-interest. Self-control qualifies to be defined as a kind of freedom since it begins with not acting on every impulse! *(Paraphrased from above essay)*

Primitive uneducated human brains and simpler animal brains act whenever something triggers a response: a hungry animal sees food and eats it. However, the most recently evolved parts of human brains have a complex mechanism for overriding sensory impulses. For example, willpower enables us to reject food when we are hungry for a variety of reasons. *(Paraphrased from above essay)*

Free will or self-control gives us the possibility of acting from rational principles rather than acting on impulses. *(Paraphrased from above essay)*

*Willpower* is really real: but only if *you train your brain to use it!*

## QUANTUM EFFECTS, PLASTICITY AND WHOLE BRAIN GROWTH MINDSETS

The new brain knowledge is based upon the newest brain experimentation concerning the intricate tiny nano-microscopic functions of the physical structure of the human brain. These previously unknown tiny brain structures make your mental and emotional brain functions possible.

But "**How?**"

This new revolutionary humanistic idea relies on the theory of quantum effects, which is beginning to replace the old scientific reductionist and deterministic cultural stereotypes. They claimed that free will was an illusion. However, in the mid-20th century, the experiments were inadequate and based upon ignorance. Therefore, the conclusions were wrong. In addition, the old metaphor that the brain was like a clock or a computer with fixed wiring has been debunked by the new brain knowledge about the brain's *neuroplasticity (plasticity)*.

Plasticity is your brain's natural ability to change by itself and adapt at all ages. It gives you the capacity to create a growth mindset whenever you want to do it!

This new brain knowledge of the past 100 years explains more completely than ever before in history how the human brain and nervous system are connected at the very tiny nano-microscopic scale. In addition, the science-based whole-brain model of thinking and decision-making is emphasized on this website. More details are revealed in **Section 2** and **Section 4** of the Introduction. The detailed explanations provide an objective way for parents and teachers to use their own personal knowledge to teach children about the significance of the human brain.

To summarize, the new brain research can explain the objective biological sources of your subjective perceptions about your self-awareness and your *sense-of-self (secular self or self)*.

Now it is known that your mind's mental functions (brainpower) can control your emotions and habits, if you have the personal knowledge that includes facts about your unique *willpower* and your *creative imagination*.

**WHY THIS MATTERS:** The purpose of this website is to assist you in understanding your brain's physical structures and your mind's mental functions. It explains how the new scientific brain vocabulary can improve the quality of your reasoning ability and your creative imagination. This can give you more effective control over your own thoughts and feelings and behavior.

**REMEMBER ALWAYS:**  
*You Are Your Adaptable Memory!*

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*Printable Form*

**WHAT IS THE PURPOSE OF THE  
 ALPHABETICAL BRAIN™ WEBSITE**  
*(for your own editing and memory consolidation)*

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**RECOMMENDATION:** You can re-read this summary according to a *reinforcement schedule*, such as a few hours later and a few days later and then several times in the next week or two. This strategy can help you take advantage of the power of the *spaced-repetition method of memorization*. Such deep introspection can strengthen your willpower and increase your self-esteem by changing your adaptable self-identity.