

ALPHABETICAL BRAIN™ VOCABULARY HUMANIST FAMILY BRAIN STUDY

LEARN THE 15 BRAIN IDEAS FAST March 13, 2019

Knowing how your brain works is essential if you want to thrive in the future. The main purpose of the **Alphabetical Brain™ Vocabulary** website is to help you understand how your brain works in the most efficient way possible. This website is designed to provide you with the most accurate descriptions of current scientific knowledge about your brain's physical structures and mind's mental functions in an easy to understand context that you can share with others.

The new brain facts and ideas can help you establish what is real and what is fake about the abundant choices that you must make in our global digitized high-tech society. By deliberately repeating this learning process several times, you can easily consolidate and retain the new brain information in your long-term memory system.

Now there is solid new evidence that your conscious self-awareness and adaptable self-identity are really self-constructed perceptions of reality based upon a combination of internal biological and external cultural influences or "forces." The perceptions are just as objective as the earth and the sky even though you experience them as being the subjective core of your existence.

The fundamental presupposition of this website is that your self-awareness and self-identity are true facts and not illusions. It is important to know this scientific fact (basic truth), since there have been so many thousands of false ideas about the true characteristics of your brain and mind built into the structure of the English language during the past few hundred years, since it emerged from Latin and other European languages.

Therefore, it is imperative that the new scientific insights about the true descriptions of your brain's structures and mind's functions need to replace the old obsolete ideas about the so-called spiritual or mystical nature of mental functions.

Modern science has proven beyond any reasonable doubt that the ancient assumption that there is a "**spiritual soul**" is untrue. Unfortunately, that unscientific "**faith belief**" is still assumed to be true by millions of Americans and most of the rest of the earth's more than 7 billion people.

Nevertheless, humanistically speaking, there is only a biologically driven secular "**self**" that can experience a range of wonderful emotions. This is the most important liberating fact of the modern world, since *you can learn how to use your thoughts to control your feelings* if you choose to use scientific reasoning as the basis for trusting democratic values.

Your brain and mind can now be understood as being two distinctly different specific living things that depend upon being connected to a living human body in order to be alive!

This new scientific distinction must be described accurately without being obfuscated by ancient ideas about the brain and mind that had mysterious characteristics associated with them when primitive humans were ignorant of the brain's true structures and the mind's true functions.

Now it is possible to use modern computerized microscopes and the scientific method of investigation to explore and understand the true functions of living human brains and minds.

Now it is important not to be confused by the old ideas that were added to the English language (built into it) during ancient times when there was no scientific understanding of the brain and mind and their true interactions.

Now, early in the 21st century, you can learn what is true and what is not true about your mental functions by choosing to adopt and understand the new language of the brain vocabulary, which has been invented by highly trained professional scientists who care about true evidence-based factual knowledge.

The unique emphasis of this website is on the connected relationship between your working memory system and your long-term memory system, which is the vital connection that causes your conscious self-awareness and your adaptive self-identity. Furthermore, this website explains how your brain's dynamic structures produce your mind's fine-tuned self-organized memories.

The primary fact is that your consciousness is caused by the interactive dynamics of your working memory's random access memory system located in your prefrontal cortex and your hippocampus's permanent hard drive consolidation memory system located in your limbic system.

The interactive dynamics of these two memory systems both evolved to help our species, *Homo sapiens*, win the fierce competition for survival over the past 40 to 60 thousand years by remembering vital survival information. In addition, the new scientific approach to understanding human nature and human behavior involves the development of a specialized scientific brain vocabulary as well as an extensive general vocabulary.

The word *neuroplasticity*, for example, is often shortened to "plasticity" by brain scientists and science

journalists. It refers to your evolutionary brain's ability to **"change itself by itself"** even when you are asleep. This phenomenal plasticity process is the reason that your mind can make you free to think for yourself and to control your emotions and to create your self-identity.

For example, the function of your working memory (short-term memory) and its information processing speed is called **"fluid intelligence."** It peaks in your 20s and declines considerably in older age.

In contrast, the function of your long-term memory is called **"crystallized intelligence."** It involves how much you actually know, and how well you can access that knowledge. It improves up through middle age, and then declines far more slowly than fluid intelligence, if at all in old age. **Alison Gopnik**, the author and child development expert at UC Berkeley, just confirmed these brain facts in an article featured in the **Wall Street Journal** about the cognitive advantages of growing old (October 2, 2018). [Gopnik is the author of the book: **The Philosophical Baby — What Children's Minds Tell Us About Truth, Love, and the Meaning of Life** published by Farrar, Straus and Giroux, 2009]

The new scientific approach to understanding human nature and human behavior can help you understand your brain's physical structures and your mind's mental functions in the holistic context of 15 brain ideas. They represent hundreds of trillions of intricate interactive relationships among the parts of your brain. They are the true cause of your conscious self-awareness and your adaptive self-identity.

The new brain vocabulary explains how your brain's physical structures and your mind's mental functions are in a dynamic holistic interactive relationship described by the 15 brain ideas emphasized on this website.

CIRCLE OF CONSCIOUSNESS SYMBOL©

The quickest way for you to get a new perception of the relationship between your brain and your mind and a new perception of the source of your conscious self-awareness is to explore the following four paired diagrams of the **Circle of Consciousness Symbol©**.

The four metaphorical diagrams identify the dynamic intimate interactive tangled relationships that exist among the 15 essential brain ideas explored on this website:

CIRCLE OF CONSCIOUSNESS SYMBOL© THE NAMES OF THE 15 BRAIN IDEAS OUTSIDE YOUR AMAZING BRAIN

**TAP, CLICK or SWIPE:
TO MOVE THE NAMES OF THE 15 BRAIN
IDEAS INSIDE YOUR CONSCIOUSNESS**

**Events
Diagram #1**

**ALL 15 RED ARROWS OUTSIDE THE CIRCLE
INDICATE THAT YOU HAVE LITTLE OR
NO CONSCIOUS BRAIN KNOWLEDGE NOW**

MEANING OF THE CIRCLE OF CONSCIOUSNESS SYMBOL©

The **Circle of Consciousness Symbol©** represents a simplified holistic view of the global connectivity necessary for human consciousness to exist.

It was created to convey a powerful visual image of the previously unimaginable coalescence of the many

diverse and interactive physical structures of your awesome self-manifesting holistic brain. Your evolutionary brain's dynamic and malleable mental functions include your creative mind's ability to imagine, reason, and remember.

ALPHABETICALLY ARRANGED BRAIN GLOSSARY

The alphabetized list of definitions of the 15 central brain ideas provides you with a comprehensive linguistic context with which to study the 15 brain ideas that are its central core reality. In addition, dozens of other important brain vocabulary words provide you with a unique complete modern evolutionary context of meaning for understanding your own brain as well as the brains of others.

Now you can see the complexity of your brain structures and mental functions at the following **Brain Glossary** list where the 15 brain ideas are marked in **BOLD RED**. They deal primarily with your intellectual and emotional control systems and your memory circuits. And they involve complicated interactive feedback and feedforward circuits and systems that make your self-identity possible:

CLASSIC BRAIN KNOWLEDGE

Now you can quickly review 18 brain images on the following three charts that depict the classic brain knowledge. All children learn about the classic brain knowledge by middle school or high school science classes. The two mini-brain charts and the one mini-brainstem chart provide you with the 18 names and definitions of the classic 18 brain structures and functions of your brainstem and both sides of your brain: your Left Hemisphere and Right Hemisphere.

Your two hemispheres are separated by membranes and connected by three nerve cables known as your corpus collosum.

The structure of the mini-brain charts was designed for maximum memory retention of the fundamental brain facts. They include six named brain images on each chart and additional charts with six unnamed brain images for you to use to learn the basic universal facts about your brain's physical structures and your mind's mental functions. They provide you with the easiest way to apply the most powerful learning technique known, which is the spaced-repetition method of memorization.

The following link provides easy access to the classic brain information that has been known for many years but updated with the remarkable new discoveries made during the **U.S. Brain Initiative** of the past few years:

CLASSIC BRAIN KNOWLEDGE AND THE 15 NEW BRAIN IDEAS

By focusing your attention on the 15 major brain ideas on this website in the context of the classic brain knowledge, you will be creating a powerful intellectual foundation for all of your future choices and decisions. Both the older classic brain knowledge and the 15 new brain ideas provide you with the latest updated brain information.

You can do a lot to improve or restore your cognitive brain functions. You can take advantage of the opportunities of living in the most advanced democratic society in the history of humanity, which has the most advanced scientific basis for understanding your brain structures and mental functions.

However, in addition to knowing the new brain vocabulary, you must deal with disruptive influences caused by the menacing mass media and social media conglomerate, which demands that you pay attention to them and conform to their incessant commercial pressures to **"Hurry up and buy things!"**

Advertisements assault your brain every moment of each day and night with overwhelming distractions and temptations to influence you to buy things or waste your time. But this is precisely the kind of immense challenge that your brain has evolved to conquer. You can learn how to avoid many of the persistent ads by deliberately (mindfully) deciding to ignore them or forget them.

If you avoid useless social behaviors and avoid dangerous addictive habits, you will be able to create more time to make effective plans to achieve your most passionate and fulfilling goals.

USE YOUR INTELLECT AND MEMORY SYSTEMS WISELY

This new educational focus can provide you with a new practical way to think about your brain's phenomenal power to understand how your adaptive plastic brain and creative intentional mind can be engineered to work together to transform your subjective self-awareness into an objective self-identity: without the need for divine influence.

Instead, what you need are the correct scientific words and a correct appreciation for the importance of the role of science in your life. Science trumps magical metaphorical mythical thinking all of the time!

After you have memorized the brain ideas and have learned to manage your thinking habits, you will be able

to organize your long-term memories by choosing realistic categories of subjects (chunks of data) with which to store appropriate new memories to strengthen your new evolving self-identity.

Since all of your memories are "**constructed**" memories, they can be "**re-constructed**" anytime you bring them into your consciousness. You can alter a memory by making a new judgment about its relevance at the moment. By consciously recognizing that the executive control function of your prefrontal cortex (working memory) in conjunction with the long-term memory function of your hippocampus can provide you with a fresh new context for the mental process of "**re-framing**" your memory of anything you want to change.

Whenever you want to change a memory, because you now know that it has a false or inferior meaning based upon some past thought or feeling that you experienced long ago when it was first created, you can "**re-construct**" or rebuild it with new thoughts and feelings that you decide to associate with the new memory you are creating as you erase the old memory.

This may take several specific efforts to accomplish just like deliberately choosing to drive on a different road sometimes feels strange until you do it a few times.

Whenever you become aware of this remarkable power of your own mind, you can enhance nearly any old memory by combining specific memories of past events or attitudes with your new situational awareness at the present moment. This transformation of behaviors and thoughts and feelings is what routines and rituals are all about whenever you are in a situation to do them willingly. The negative aspect of routines and rituals is when you are forced to do them by someone else and the results are not fulfilling.

For example, you may want to have a particular older memory embellished or discarded due to new factual events or ideas or feelings that you are currently experiencing. This natural memory process usually happens unconsciously, but can be controlled by you if you learn how to do it properly.

For example, you can create more optimistic attitudes and more effective self-talk about your memories in order to strengthen the new memories that you want to save in your brain. Also, you can write down or type notes about your thoughts and feelings to memorize them easier than by simply perceiving them, which is a form of self-directed multisensory perception.

If you make a habit out of writing a journal or diary, you can create a personal immersive multisensory learning environment in addition to using the spaced-repetition method of memorization to reinforce and shape your new memories about your brain's physical parts and mental functions.

Also, you can simply plan to study the brain ideas at regular intervals by using the infographic images and text on the **Alphabetical Brain™ Vocabulary** website. One easy way to create a reinforcement schedule is to plan to spend 20-30 minutes every night or every other night at the same time and in the same place of study to focus on only your brain and mind.

This is a powerful way to establish a habit of studying the 15 brain ideas and their interactions for your own personal growth or for sharing them with your family members and friends. That is when good thinking skills and good reading strategies are essential for using your time wisely when making important choices.

QUICK REVIEW

With proper study, the new brain ideas and the evidence-based facts that support them can become a part of your declarative memory circuits. Their triggers are in your long-term memory consolidation system in the hippocampus part of your limbic system.

Then your working memory system, in your prefrontal cortex, can use the new factual memories about your brain's structures and your mind's functions to enlarge your creative imagination and activate your logical and psychological aspects of reasoning as you use your mental force (brainpower) to focus and perceive the wonders of the real and imaginary worlds all around you!

In addition to the organized information on this website, there will be more information at the **Alphabetical Brain™ App**, which will be launched soon to provide more evidence of the validity and relevance of the 15 brain ideas and their synergistic interactions.

An Amazon book will be published later this year with the title, **DISCOVER YOUR ALPHABETICAL BRAIN HANDBOOK**. It will explain consciousness, free will, happiness, and success according to evolutionary biology and modern humanism. The handbook contains written memory boosting exercises to help you memorize the 15 new brain ideas.

By learning the new brain information, you will have the opportunity to expand your self-awareness and change your self-identity as you become a more enlightened science-oriented humanistic person. You can use this new way of organizing brain knowledge to develop a modern 21st century philosophy of life for your future growth and social influence. You must understand your secular self in order to transcend its limitations by caring for others.

NOTE: See in context the 15 brain ideas, including: working memory #1; neurons #2; dendrites #3; axons #4; nucleus of a neuron #5; glial cells #6; synapses #7; potentiation #8; connectome #9; plasticity #10; cerebrum #11; prefrontal cortex #12; limbic system #13; pleasure circuit #14; and your long-term memory #15.

RECOMMENDATION: You may print this pdf version and read it and edit it by adding or deleting ideas. Also, you can underline or highlight with colored inks. All of these *memory boosters* can help you capture the important information in your long-term memory.

Then read your edited version of these ideas 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 to take advantage of the power of the *spaced-repetition method* of memorization. Deep introspection can change your self-identity and increase your positive emotions.