

INTRODUCTION - SECTION 2
WHAT DOES THE ALPHABETICAL
BRAIN™ SYMBOL MEAN?

July 24, 2020

The **Alphabetical Brain™ Symbol** represents the unique relationship between your *brain* and *the 26 letters* of the American English alphabet. Since English is currently the universal language of business and science around the world, it is the lingua franca of our modern era.

The **Alphabetical Brain™ Symbol** stands for the importance of understanding the *causative* relationship between your brain's physical structures and your mind's mental functions. The 26 letters of our English alphabet enable you to create complex thoughts to control your specific unique behavior in all kinds of social relationships and emotional situations. The fact that the same 26 letters of the alphabet became so adaptable that they can symbolize the hundreds of "*sound bits*" necessary for the survival of our contemporary American democratic empire is truly astonishing!

This website is designed to add coherence and authenticity to the fundamental new brain knowledge created by scientists, which is known as cognitive neuroscience. This brain science way of thinking is fully aligned with altruistic optimistic humanistic liberal ethical values.

The new brain science knowledge is essential for you to understand in its full scientific and philosophical linguistic context. The new brain vocabulary describes how you can optimize your mind's mental functions in order to reason more logically so you can achieve your cherished goals.

Expert modern historians and professional linguists agree that the human communication process made possible by our alphabet and the multi-cultural aspects of our American English language are among humanity's greatest achievements. In this regard, the amazing English alphabet is the most obvious identifiable cause of our exceptional American human self-awareness and human intelligence.

Personally, your brain is the most complex matter in the universe and your alphabet activates that **3 1/2 pounds** of organic brain tissue that is the source of your consciousness and self-awareness. Because of your brain's significance in your life, it is protected by your tough evolutionary skull.

Also it is further assumed that the new humanistic **Alphabetical Brain™ Vocabulary** linguistic model can provide you with the most essential cognitive tools that you need to manage your brain's potential. It can help you maximize your unique willpower and creative imagination.

In short, this website explains what causes your *natural willpower* and your *adaptable self-identity* with the most relevant scientific words ever created. They describe how your *sense-of-self* emerges from your mental functions and how you can change yourself enough to flourish in the future.

During the past 100 years many new discoveries have been made about your true brain structures and mental functions. And during the past 30 years, hundreds of new brain-related words have been created to explain how your brain's most important interactive physical structures produce your mind's most important interactive biochemical mental functions. They have been verified consistently during the past few years by thousands of scientific experiments done with the most powerful computerized microscopes ever invented.

In summary, the new brain vocabulary consists of dozens of essential brain words which can benefit everybody living today. They will have lasting value to you and they will benefit all future generations. They are definitely worth the time you invest in studying these new brain facts and ideas.

HISTORY OF LANGUAGE AND CONSCIOUS SELF-AWARENESS

Therefore, it is important for you to realize and remember that because of your stable alphabet and ever-changing vocabulary, your ability to communicate with others is extremely versatile and very adaptive. This is a trait you share with all other healthy human beings.

However, your brain is a fragile organ and the thinking process is very susceptible to the *"fake news"* and political propaganda of the mass media and social media and the obsolete dogma of many social and political institutions, including religions, cults, and authoritarian leaders. Fundamentally, you must create your own essence by learning the new brain knowledge.

Now we know that your flexible mind's mental functions or *"mental forces"* are the genuine source of your willpower and your ability to imagine, reason, and remember. Your brain is the source of all meaning in your life, whether you optimize it or not.

This expansive optimistic *"growth mindset"* of mental self-empowerment can help you increase satisfaction on a daily basis as you improve your life throughout your lifetime. This positive attitude is in contrast to the traditional restrictive fixed attitude of behavior defined by the *"fixed mindset."*

That fixed way of thinking and behaving can make many people vulnerable to being confused, alienated, anxious, or depressed, especially if they do not know how their brains work. That simplistic negative attitude toward change can lead to "*brain-lock*," which is a form of **Obsessive Compulsive Disorder** or "**OCD**." Treatment for this serious emotional disorder requires rigorous cognitive psychotherapy and often some form of reprogramming through group counseling.

That was because people in the ancient world before **1500 CE** ("CE" means Current Era) did not have access to democratic political words and scientific brain words to explain how important their brains were for thinking and controlling their own decisions and emotions. But now it is known how significant human brains are and how consequential brain-related words are for providing the intellectual tools (new ideas) to explain how human brains actually work.

Fortunately, we now live in a more inclusive democratic social system, where women and minorities are becoming more equal opportunity partners with men in the running of our society and government. This change in our own social class system has become possible only because of the advances in science and technology and education over the past 100 years. The invention of printing and all sorts of machines since **1450 CE**, made life much easier for educated people and ruling social elites all around the world.

Our alphabet-powered language now represents an incredible number of important life-sustaining ideas. Our current American English alphabet, which has been developing for almost three millennia, since its beginning about **800 BCE** ("BCE" means Before the Current Era) in Greece, features four new vowels that were added to the **Phoenician language** to create the classic **Greek language**.

Many cultures used that basic linguistic structure for thousands of years until our American English was supplemented by the addition of thousands of new scientific words during the past few decades.

The following *eleven books* cited in the information box contain glimpses into the profound impact that the alphabet has had on the quality of human life on earth. These references describe the great influence that the invention of the alphabet and written language have had on human behavior and the expansion of self-awareness. The first six books are linked to detailed outlines and descriptions:

Book 1:

ALPHA BETA:

How 26 Letters Shaped the Western World
by John Man.
Barnes & Noble Books,

Book 2:

HOW LANGUAGE BEGAN:

The Story of Humanity's Greatest Invention
by Daniel L. Everett.
Limelight/WW Norton, 2017
(I-xviii, 330 pages)

Book 3:

LANGUAGE:

The Cultural Tool
by Daniel Leonard Everett.
Pantheon Books, 2012 (351 pages)

Book 4:

LETTER PERFECT:

The Marvelous History of Our Alphabet from A to Z
by David Sacks.
Broadway Books, 2004 (416 pages)

Book 5:

THE LETTER AND THE COSMOS:

How the Alphabet has Shaped
the Western View of the World
by Laurence de Looze.
University of Toronto Press,
2016 (218 pages)

Book 6:

**THE STORY OF ENGLISH
IN 100 WORDS:**

by David Crystal.
St. Martin's Press, 2012
(i-xxi, 260 pages)

Book 7:

THE TALKING APE:

How Language Evolved
by Robbins Burling.
Oxford, 2005
(i-ix, 286 pages)

Book 8:
THE TALKING BABY:

Helping Your Child Discover Language
by Margaret Maclagan and Anne
Buckley. Finch, 2016 (i-viii, 183 pages)

Book 9:
THE ORIGIN OF LANGUAGE:
Tracing the Evolution of the Mother Tongue
by Merritt Ruthlen.
John Wiley & Sons, 1994 (i-xi, 239 pages)

Book 10:
ADAM'S TONGUE:
How Humans Made Language,
How Language Made Humans
by Derek Bickerton.
Hill and Wang/Farrar, Straus
and Giroux, 2009 (237 pages)

Book 11:
THE STORY OF WRITING:
Alphabets, Hieroglyphs & Pictograms
by Andrew Robinson.
Thames & Hudson, 2007 2nd ed,
1995 (235 pages)

[**Note:** All eleven books cited will have
outlines and reviews online very soon]

As cities became larger trading centers, computation and communication systems became more sophisticated for thousands of years. Written languages were first formulated in the ancient world by the **Mesopotamians** and **Egyptians** when cuneiform symbols were used to denote numbers for measuring commodities for trade inside and outside their empires.

The primary trading products were grain, beer, bread, wine, and pottery for everybody and luxury goods for the top social elites of the eight distinguishable empires around the **Mediterranean Sea** before **1200 BCE**. That is when all hell broke loose among the leading trading powers due to famine, drought, volcanoes, and wars, which changed the power-sharing structure around the **Mediterranean Sea** forever.

Nevertheless, in earlier more peaceful times, the Ancient Egyptian *hieroglyphic symbols* were translated into *hieratic script*, which was the cursive form of hieroglyphic writing. It was used especially by the pharaonic priests of ancient Egypt for most of the 3,000 years of the empire. They wrote on papyrus leaves, which were beaten into a form of paper. That practical need to write down ceremonial proclamations and rules for everyday behavior made communication easier for the royal families and priestly class to manage the rest of the great majority of uneducated Egyptian people. However, only about **1% or fewer of the Egyptian population** could read or write during most of the 3,000 year span of Ancient Egyptian history.

Written alphabetical symbols were created about **3200 BCE** (5200 years ago) for business and also for describing religious myths and political exaggerations for propaganda purposes. Mandatory rules of behavior and religious rituals glorified the Ancient Egyptian pharaoh-kings and perpetuated their dictatorial control over the masses of people.

Their writings included spelling out the magical spells used on the walls of temple art and tombs. Their priests and artisans had to fulfill rigid codes designating proper burials in the futile hope and promise that rulers could transcend death and enable everybody else to become immortal in the process too. The *hieroglyphic ideograms* have recorded their belief in superstitions and magical thinking for more than **50 centuries!**

In addition, the demotic script was the ancient Egyptian script of and for the common people. It was used in handwritten texts from the early 7th century BCE until the 5th century CE. It was derived from northern Egypt's forms of the *hieratic script*. It was used primarily in the Nile Delta. [Source: partly from *Wikipedia*]

Our own American English has evolved for almost 3,000 years since our alphabet, was originally created in 800 BC by the Greeks. This process of innovation and progress in the development of written language was accelerated by the invention and proliferation of written materials by the **Gutenberg Press** starting in the middle of the 15th century.

After the moveable printing press was invented and perfected, new social and technical ideas were created by larger numbers of people faster than ever before in human history.

That is why the mathematical term "*exponential*" is now used in the 21st century to describe the fast speed of the creation of new knowledge. It also describes the huge impact that scientific knowledge has had and is having on all aspects of the global growth of national economies and technologies. Historically, our language continued to evolve from the influences of Latin, French, Italian, Spanish, and ultimately the Old English language during the past two thousand years.

As written language grew in its intricacy and complexity, especially since the 15th and 16th centuries of the Renaissance; and the 17th and 18th centuries of the Enlightenment; and the 19th and 20th centuries of the Industrial Revolution our American English alphabet exploded in relevance during the modern Scientific Revolution with the addition of thousands of new scientific words.

This trend has been spiking upward with the new secular basis for science, democracy, and economic growth.

Now the profound influence that the earliest alphabets have had on human culture, consciousness, and self-awareness is well-known by educated liberal thinkers. And in addition, we now have the scientific symbols of the new brain vocabulary to represent the literal truth about mental functions. Now you do not need to accept the traditional mistaken magical mythical fictional religious and spiritual metaphysical opinions of the primitive and violent past perpetuated by ruling elites to confuse citizens of their genuine human potential.

In fact scientific thinking (the scientific method) and religious thinking (the golden rule) were united social forces in the development of the modern world during the past 500 years and especially during the growth of the United States since the **Revolution in 1776** and the creation of our **U.S. Constitution**. The most significant changes in world history have occurred during the past few hundred years because our founders, most notably Jefferson, Franklin, Washington, Hamilton, Burr and the Adams brothers, established many classic Greek and Roman democratic ideals (limited as they were then) after they won the **Revolutionary War** against **King George, III** and the great naval fleet of Great Britain.

Thereafter, our country has been in the forefront of developing the democratic ideal that all hard working educated (white) males should have equal dignity and opportunity. Since then, our country has absorbed millions of immigrants and enlarged our American English language until today when the words “***Black Lives Matter***” can motivate millions of Americans to act politically!

Within the context of the history of alphabets and the realization that language is essential for complex human consciousness, you will learn how your own “***sense-of-self***” depends upon how well you think and communicate with other people.

In other words, the quality of your socializing with real people and the way you think about imaginary people can make big impacts on your perception of your self-identity. Whether you fully realize it or not, through the reading of books (literature) or seeing pictures or reading text on the screens of phones and tablets and computers from the internet or in theaters or listening to words from radios, your self-awareness can change.

Your memories contain stories you remember about your past and stories you imagine about the future. For a well-rounded complete adult education in our digital global society, you need to integrate the new brain knowledge into rich memories so you can take advantage of all of the human achievements of the past and also add to them.

The best way to stay emotionally grounded in reality is to focus on the immediate moment --- to live in the present. This strategy can be difficult when you are being constantly distracted by excessive amounts of information, misinformation, and disinformation.

However, the new brain knowledge emphasized on this website include ways to properly evaluate information for its value to you. The 15 brain ideas use thousands of words in your personal ***active vocabulary*** that are a significant strategic resource for you. In addition, you can also think of the thousands of other words in your ***passive vocabulary*** that you can use to infer meanings from the contexts of the sentences and paragraphs in which you see and hear them.

So the American English language has enormous value for your continuing lifelong learning. The good news is that the new brain words can influence your behavior as you become more aware of how you can adapt your behavior and change your significant memories. Then it will be easier for you to motivate yourself to achieve your core life goals.

In addition, the meanings of the new brain-related words emphasized on this website can dramatically improve both your **IQ (*Intellectual Intelligence*)** and **EQ (*Emotional Intelligence*)**. When you add these two kinds of cognitive knowledge, you end up with an essential third type of intelligence called **SQ (*Social Intelligence*)**.

If you learn how the **1,000 trillion synaptic switches** of the **100-200 billion neurons** in your brain and nervous system --- in your connectome work, then you can control your unique willpower and creative imagination.

The neuronal pathways connect the dozens of important organs in your brain that cause your consciousness. Detailed descriptions of the interactive connections among your many neurons are integrated in a logical pattern on this website.

You can try this thought experiment: *How do babies and children improve their capacity to express themselves?*

They use their brains to increase the size of their vocabularies and add to their intelligence and improve their personalities. This fantastic fact can be observed on a daily basis if you watch babies and children grow up. Their vocabularies naturally increase as they use the alphabet to figure out how to understand words and to create sentences with which to think.

The fact that newly born babies have no capacity for verbal language and can only cry or use their body language to gain attention provides objective evidence of the importance of the cultural basis of language. That means that people teach people how to speak and read language!

The developmental stages of the language acquisition of babies and the achievement of their grammatical milestones are phenomenal up to age five and even beyond. The total neurons in a child's brain continue to be "*pruned*" until puberty at about age 10 to 12. That means billions of neurons are lost as neuronal memory circuits become established. This happens so signals in neuronal pathways can be reinforced by synaptic plasticity so routine daily behaviors can flourish during puberty when so many other bodily parts are changing so quickly.

It is important to remember that older children enthusiastically seek to name things with words and to follow rules of behavior as they develop their vocabularies and intelligence and personalities. However, we usually take for granted the changes in the self-awareness of babies and children since it is such a slow persistent process of brain development over many years.

The relevance of the **Alphabetical Brain™ Vocabulary** model for understanding the brain/mind connection is obvious when you realize that your *alphabet* is essential for human consciousness and that your vocabulary is essential for developing an adaptable self-identity. In fact, the more names and definitions you have for the many physical structures of your brain and the many mental functions of your mind's neuronal circuits, the more you can activate your *mind's mental forces*.

This means that you will become conscious of the dominant role that your *unique willpower* can play in your life. It can help you control the quality of your choices and decisions and the meaning of your life.

Think of your personal vocabulary as your special super-power. Imagine that it can transform your conscious self-awareness and your adaptable self-identity any time you choose to use your natural willpower and creative imagination to improve your ability to reason logically and make fulfilling ethical decisions.

This aspect of developing and expanding your own self-awareness, and especially that of your children, should be obvious. However, language skills are often taken for granted and usually adults fail to develop them further after their formal academic education. That is why this website emphasizes using your critical thinking skills and critical reading strategies to think about your potential for developing a *growth mindset*.

For example, the book, **Cognitive Neuroscience of Language**, whose bibliographic facts are in the following information box, provides ample evidence of the positive impact that language can have on the behavior of both young and old alike:

COGNITIVE NEUROSCIENCE OF LANGUAGE

by David Kemmerer.

Psychology Press/Taylor and French,
2015 (599 pages)

However, in order to integrate the new brain knowledge into your own long-term memory system and to use it with your working memory system to transform your self-identity, you will need to focus on the 15 brain ideas presented on this website until they are completely learned.

You can memorize them until they become part of your unconscious habitual behavior. Then the ideas will be ready whenever you need them to augment your willpower and creativity. Then you will be able to purposefully use your free will to optimize your willpower and creative imagination to solve problems and achieve your goals.

The separate "*sensory*" and "*motor*" neuronal pathways and connections within the dozens of major organs of your brain and nervous system can be understood only when you have learned the accurate scientific words necessary to describe your brain's structures and your mind's functions.

Mysterious spiritual metaphors sound good because of the grammatical "*reification structure*" of the English language. But those particular traditional religious and spiritual metaphors do not define reality accurately. All historical hunches and religious metaphors purported to relate to human behavior, which involve abstract ancient metaphors from past history are wrong since the ancients knew nothing about the true functions of their brains.

Those faith-based beliefs --- with *no objective evidence* to support assertions of supernatural powers especially involving the claims about eternal life --- must be questioned and reevaluated in the here and now. Human brains do not need the help of mysterious superhuman gods or goddesses to solve their problems.

Ancient people had nothing but guesses and superstitions because they lacked our modern scientific method and widespread public education. They were dismally ignorant about their brain functions and most of their other bodily functions!

On the other hand, the context of this new modern secular "*evidence-based*" brain knowledge can give you the ability to think and feel and predict the most probable outcomes of your present actions and your planning for the future. Within this context, you can use your own *willpower* to succeed.

What your mind can *conceive*, you can *achieve*: if you know how your brain works!

REMEMBER ALWAYS:
You Are Your Adaptable Memory!