## ALPHABETICAL BRAIN™ VOCABULARY HUMANIST FAMILY BRAIN STUDY

## SUMMARY ABOUT YOUR ENLIGHTENED SELF-AWARENESS March 8, 2021

*note* = This brief essay is a summary of a longer essay, which describes your human consciousness. It has more details including embedded references, at the *Details About Your Consciousness* link at the Index on the homepage of this website.

At the fundamental biological level, your brain is the real cause of your mind and your mind is the real cause of your *unique willpower* and *adaptable self-identity!* 

Unfortunately, hundreds of millions of Americans (and billions of human beings living today in other countries) are ignorant of the way their physical brains work and their minds function. They are unaware of the fact that their brainpower can be understood to be a powerful set of mental forces (mental functions) consisting of creative willpower skills, imagination skills, reasoning skills, and memory skills, which all can be improved by specialized training.

Regrettably, most of the nearly eight billion people living on Earth today have very foolish ideas about the evolutionary purpose of their brains and the mental functions of their own minds. This brain ignorance has caused the long stretch of tyrannical political power structures of empires, kingdoms, and nation-states for the past 10 thousand years of human history. Some authoritarian dictatorships persists today by ignoring brain knowledge. However, the great majority of nation-states in Europe today are democratic. Now there is conclusive evidence that your enlightened self-awareness is really your mind's "*self-constructed*" educated perceptions about reality. In other words, your creative willpower is based upon a combination of internal instinctual biological causes and external learned cultural causes saved together in your brain's *long-term memory system*.

Nevertheless, with the invention of the newest and most powerful computerized microscopes of the 21st century, we can now "see" the physical structures and the mental functions inside living human brains at the nano-microscopic molecular level in real time. This incredible technological innovation has finally provided solid scientific evidence about how human brains work.

During the past few years, scientists have learned how human mental functions operate in the **31/2** *pounds* of soft brain tissue located deep inside our boney skulls in the most protected area of our heads. This new brain knowledge can help you learn how to optimize your *mind's mental forces* (brainpower) for success.

This new brain knowledge can give you a better realization of how awesome it is to be alive today. For most people at most times during the past 10,000 years of recorded human history, living conditions were much worse than they are now, even with the novel coronavirus pandemic crisis spreading around the world. Fortunately, our medical knowledge and health services are infinitely better now than at any other time in history.

**NUMBER ONE:** Therefore, the first basic presupposition of this website is that your creative willpower and adaptable self-identity are true facts; not illusions. This declarative statement means that your perceptions are just as *"objective"* as the earth and sky even though you experience them as being *"subjective"* because of the way that you define your core identity as a person using a mix of words from the language that you were taught as a baby and later as a child.

At that time your language was reinforced by your family and those others close to you as you grew up to become an adult. Unfortunately, your thinking process was probably locked into the earliest words you were forced to absorb from your family and educational and social communities. Your earliest perceptions as a child remain in your adult memories, if you were not taught critical thinking skills and critical reading strategies as you grew up!

Nevertheless, your brain and body are made up of the same kinds of chemical compounds as everything else on Earth. However, they are in different combinations of the molecules of the basic organic and inorganic elements on Earth. Humans are made up of special organ systems that evolved over three and one-half million years and especially during the past 300,000 years of proto-human evolution to produce us Homo Sapiens with our complex human intelligence 60,000-40,000 years ago.

During the past 5,000 years, since human languages have become more complex, to keep up with the increasing size of cities and the demands of trade among countries around the Mediterranean Sea, more significant ideas have been expressed based upon new scientific and technological advances in human knowledge and named with thousands of new words.

It is important to understand this basic humanistic assumption in the most intense positive emotional way. This is necessary because there have been so many false ideas about the real characteristics of your brain and your mind that were built into the structure of the American English language in the past few hundred years. For about 500 years, since the end of the middle ages and the ancient world about 1450 CE, the traditional obsolete words that described the body and its parts continued to be used. They are still used today, more than 100 years after scientists discovered what the human brain was really made of and what it is for in evolutionary terms.

The ancient practice of keeping obsolete ideas in one's memory, as though they are still relevant, makes communication about brain structures and mental functions difficult to explain. Because of the caste-oriented cultural taboos today, most people are still brain-ignorant meaning they are unable to discuss the true functions of their own brains in public.

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

For example, modern science has proven beyond any doubt that the ancient assumption that you have an immortal *"spiritual soul"* is untrue.

You can shout out this premise from your rooftop because nobody has any evidence that a disembodied *"soul"* exists --- anywhere!

Unfortunately, that ancient faith-based belief was and still is based upon ignorance and a misunderstanding of how human brains are influenced by both thoughts and emotions. The idea of a disembodied soul is simply not a true fact about reality!

But it is a true fact about your imagination! For example, you can imagine being a *"spiritual"* anything!

This has been proven by billions of human beings for hundreds of thousands of years who have made false inferences about the relationship of their own human nature compared to the physical environment.

In the historical record, there are countless examples of all kinds of gods and goddesses with all kinds of special alleged superpowers. During the Bronze Age, the miners and metal workers had gods that represented Thunder and Lightening since they lived in active volcano and earthquake geological areas southeast of the Mediterranean Sea.

Also, there are all kinds of definitions of heaven and the afterlife. This is a fact about the ability of the human imagination to fantasize (imagine unreal things) about serious topics such as the meaning of life and death and even about alleged afterlives.

But none of these religious fantasies are assumed to be *"real"* from the perspective of modern scientific values. Science requires presuppositions, observations, and the logic-based scientific method for thinking and searching for evidence explained by transparent reasons.

**NUMBER TWO:** The second basic presupposition of this website is that, humanistically speaking, the source of your unique willpower is your brain-centered, emotion-driven secular self. Your physical brain produces your mind's mental functions, which you can manipulate with your language skills, memory functions, and creative imagination.

However, just like implicit gender biases and implicit racial prejudices can interfere with trusting relationships and opportunities for success in life, simply having unfounded opinions about brain functions instead of genuine brain knowledge based upon scientific evidence can limit your full potential as a human being! If you feel such limitations about your potential or are not as self-confident as you would like to be, then your attitudes, decisions, and behavior are probably controlled more by ignorance than by educated humanistic enlightened self-awareness!

This is because systematic disciplined focus on any subject is made possible because human brains have the quality of neuroplasticity. This spectacular ability means that brains can heal themselves with special care. However, to change your attitudes and behavior, you must understand how to use your mental forces (mental functions) to do some systematic hard thinking in order to create the kind of new habits and behavior you want!

The word *"plasticity"* is commonly used to describe this natural capacity of the human brain to adapt to complex factors and complicated issues. But your brainpower potential is useless without your using the physical properties of your brain to influence your mind's further ability to take control of your brain and body!

Surviving and mating are just two of the most important purposes of being alive. The third most significant purpose is to learn how to cooperate and collaborate in order to keep the human species alive on a habitable planet!

It is important to acknowledge at the beginning of your serious study of your brain that human brains have been poorly understood and brutally treated throughout most of human history. There are many horrible examples of inhumane slaughter and stupidity in history that should never be forgotten, such as the big religious examples of the Inquisition and the burning at the stake of scientists.

Moreover, the longest empire in history, which flourished from 3,300 BCE to 32 BCE, the **Ancient Egyptians**, drained the brains (through the royal noses of their dead pharaohs and their social elites who could afford royal burials) before their bodies were mummified! Other major human organs were preserved in canopic jars placed next to the entombed sarcophagus (fancy casket) filled with a dead body wrapped in salted and tarred cloth (mummy). This ingenious way of burying dead leaders and their associates was believed to give them all greater chances of surviving their own personal deaths and even altering the country's governmental structure for eternity!

Also, the Ancient Greek philosopher, **Aristotle** (c.384 BCE to 322 BCE) famously assumed that the functions of the human brain originated in the stomach. This incorrect assumption stalled the development of medicine in the Western world for most of the 11 centuries of the Middle Ages along with the iron grip of the Catholic religion in the form of the **Holy Roman Empire** during that time.

During that whole time, ignorance caused immense amounts of misinformation (the perpetuation of false ideas) about human potential. For example, since words were created to name human organs like the "heart", which is now known to be a pump that pushes blood and hormones around the body and into the brain, it was falsely thought to be the cause of human feelings, especially the source of romantic feelings! It is now known that this was a flagrant historic mislabeling of a major human experience!

The tragic mistake of misconstruing the function of such an important major human body part as the heart-pump as being the source of romantic feelings has been a significant cause of the ignorance about other brain structures and body functions. This mistake has been made ever since the beginning of written human languages (over 5,000 years ago) until the past 100 years for most people who have ever lived on planet Earth! Even today in 2020, there is vast ignorance about brain functions and brain chemistry.

The dismal ignorance of simple brain facts is universally pervasive in spite of the fact that the most important brain-facts (physical structures) and mind-facts (intellectual and emotional functions) can be understood easily by any person with an *"open mind"* who has a *"growth-mindset"* and who has had the awesome opportunity to have enjoyed a secular humanistic education during the past.

Fortunately, all healthy human beings can learn to manage their own mental functions more intelligently for better results. They can learn how to cope with the gaps or blind spots in their basic knowledge. In addition, all healthy people can learn to think their way out of being controlled by *"fixed mindsets."* For example, children are usually forced to learn such fixed mindsets. as they grow up in our traditionally Puritanical American society. Any effort to change from a *"fixed mindset"* to an *"open mindset"* about one's own creative mental forces (brainpower) takes lots of cognitive effort.

**NUMBER THREE:** The third basic presupposition of this website is that your brain and the mind can now be understood to be two different living things. They are by nature interconnected in order for you to be alive and be self-aware. In other words, they are inseparably connected together throughout your lifetime!

This new scientific distinction can now be described accurately without being obfuscated by foolish ancient ideas such as the false traditional assumption that the genuine "*mortal brain*" is somehow separate from an imaginary eternal "*immortal soul.*"

Such ignorant assumptions have been held by the vast majority of people throughout the ancient world, from the end of the last **Ice Age** (Typically defined as the

**Pleistocene Epoch** that began about 2.6 million years ago and lasted until about 11,700 BCE). This is the time farming began and cities were invented in **Mesopotamia** and **Ancient Egypt**. By 3,200 BCE, written language was beginning to be used for religious and government rituals and trade.

Significantly, Egypt had the longest stretch of royal hereditary institutions (leadership dynasties) for about 3000 years! The Ancient Egyptian empire lasted until the death of **Cleopatra** in 32 BCE, which is considered the end of pharaonic Ancient Egypt. From then until the end of the **Roman Empire** in 450 CE ["Current Era"] (or "AD"); and throughout the middle ages from 450 CE to 1450 CE just prior to the beginning of the **Renaissance**, there has been almost total ignorance about human brain functions.

Only a few independent thinkers out of more than a billion people who lived during that whole long period of time could imagine the immense value that their brains gave them for controlling the exploration of planet Earth. During that long period of many centuries, many different words were used to describe many different foolish ideas about the imaginary causes or purposes of human behavior and the human brain.

Even during the past 500 years --- up until now --virtually all humans have been ignorant about the complex structures of their brains and the specific manageable functions of their minds. In spite of the *Renaissance* of the 16th and 17th centuries, and the *Enlightenment* of the 18th and 19th centuries, and the *Industrial Revolution* of the 19th and 20th centuries, during which time the *Scientific Revolution* emerged in full force. For clarification, it is important to remember not to be confused by ancient ideas about physical brain structures and mental mind functions. The ancient ideas about human behavior were thought up during ancient times, long before there was an English language or the invention of modern science. Vast numbers of people have believed in imaginary myths and fallacious opinions to explain the causes of their own behavior and life itself.

However, the discovery of neurons and their essential functions in human consciousness and human memory functions was a spectacular landmark of human achievement by the late 1800s CE and the early 1900s CE and then throughout the 20th century.

In spite of that marvelous discovery, there is still been very little reliable brain knowledge accessible to ordinary people in the formal public and private education systems of America and the mass media worldwide. Most educated individuals have had very little knowledge to understand how they could control their own behavior and mental functions until the 1990s, during the **U.S. Decade of the Brain**.

However, after 30 years of focused government and private institutional brain research, and with discoveries about the brain becoming more accessible in the mass media and social media and in scientific text books and journals and DVDs, reliable brain information is now more widely available in bits and pieces to the public.

From kindergarten through college, everybody can learn how to control his or her behavior more efficiently and effectively by learning several skill-sets. They can learn how to turn their emotions on or off by using their own willpower potential and by knowing how their brain functions actually work. Now there is a vast consensus among scientists and therapists in democratic countries. In addition, scientists are now able to use computerized microscopes and laser beams to "*see*" human brains actually functioning at the nano-microscopic level. Now, finally, after dozens of millennia scientists can identify and measure brain functions and brain health. Also, they can explore other issues related to the brains and behavior of all kinds of animals and plants at the tiniest levels of human perception with the aid of powerful computerized microscopes.

Also, the new technologies are helping doctors "*look*" at neurons and their connections, which are synapses. The current huge government-funded science effort to understand the brain's connectome is designed to help sick patients who have brain disorders and diseases so they can be treated better. Also, as a side-benefit, the research will be able to help everybody live longer healthier lives in the future.

Remarkably, a new pivotal understanding of the evolution of consciousness has resulted from research using the fossil record. By studying the history of the existence of ancient single-celled and simple-celled plants and animals, new evidence is providing a fascinating timeline of the development of conscious life on Earth.

Now, after 350 million years of animal consciousness, there is new evidence of the emergence of "*distance vision*" in some marine animals such as squid and octopuses. This discovery has shown how the use of conscious decisions or "*strategies*" helped various sea creatures locate and capture food using the evolved visualization capability (over hundreds of millions of years) of their incredible eye structure. From then on in the timeline of the history of the development of consciousness, some species could strategize and think of alternative ways to catch prey up to 20 feet away, instead of having to eat whatever they bumped into!

Now, in the early **21st** *century*, you can learn what is true and what is not true about your mental functions. You can choose to learn the new brain vocabulary, which was invented by professional brain scientists working tirelessly for more than a century, from the late 1800s until now. Today, it is known that your brain makes possible your own enlightened self-awareness based upon modern scientific understandings about evolution by descent.

Now there is no need for ancient traditional faith-based beliefs in the magical powers of supernatural beings to make human meaning possible. When children and adults are properly taught about deep history in a secular humanistic educational context, they can grow up with the scientific language that they need to thrive in a multiplicity of ways. That is because human life itself is multi-dimensional, depending upon how brain savvy people are. This essential awareness of a person's mental forces (brainpower) depends upon how many important brain words (derived from science) there are in that person's vocabularies.

You can think about your own resilient adaptable self-identity as craving consilience with all of nature and the universe. "In science and history, consilience is the principle that evidence from independent, unrelated sources can converge on strong conclusions" and thus provide authentic verification of existing scientific facts. [Source of definition = Wikipedia]

For example, the idea of consilience is now an active principle in neuroscience, where cognitive neuroscientists, evolutionary biologists and psychologists, as well as philosophers and artists can collaborate in dynamic teams to analyze all the new brain data. Then they can comprehend what it means and explain it to other scientists and the general public, so everybody worldwide will be able to understand the truth, using the English language! Also, it is essential to remember that when you optimize your brain knowledge and focus your curiosity, you will be using 100% of your mind's willpower to become more self-aware. This phenomenon requires the interaction of your prefrontal cortex and your limbic system in new synergistic ways. This secular humanistic realization can help you fulfill your most passionate plans for achieving a meaningful life.

At the highest levels of intelligence, you have four major mental functions: creative willpower, lucid thinking, logical reasoning, and long-term memory consolidation. These powerful civilized psychological forces (cerebral-driven brain) can override and control your primitive biological urges (reptilian emotion-driven brain) in order to satisfy your current mindful intellectual and emotional needs.

For example, your *creative willpower*, can change what you are feeling and thus help you postpone instant gratification long enough to see the big picture of future possibilities. In other words, your behavior can be managed better when you understand just how profoundly your brain's physical structure makes possible your *mind's mental functions*.

It is especially important to learn how the *"executive function"* of your prefrontal cortex interacts with the dopaminergic neurotransmitter circuit in your *limbic system (reward center)* in order to motivate you to choose altruistic social behavior and also provide you with pleasure.

The philosophy behind this new educational approach to explaining the importance of understanding your brain's structures and your mind's functions is called the *"whole brain"* model of cognitive training. You can use this model to optimize the functions of your mind and be more focused on your most important personal values and social goals. Then you will be able to avoid useless social behaviors and dangerous addictive habits.

## **RECAPITULATION OF MAJOR IDEAS**

Today, a science-oriented way of thinking can be the basis for establishing a rational method of increasing trust in democratic principles, rather than relying on the mistaken obsolete religious ideologies of the primitive pre-scientific past.

It is time to replace obsolete spiritual and economic ideas with informed reasonable democratic programs which foster equality of opportunity and lifelong learning. The function of your creative willpower can help you understand the principles of *"intellectual freedom"* and the *"right to read"* for everybody.

Children can grow up to become responsible people with rational altruistic utilitarian social values, when they are empowered by secular scientific educations. There is no need anymore for superstitious thinking to explain human brainpower since we now have genuine knowledge about the mind's mental forces.

You can now delete the false memories related to magical mythical religious words, such as *"soul,"* that might be in your childhood memories. Then you can start thinking about more constructive rational scientific humanistic ideas, such as whole brain cognition, enlightened reasoning, and creative imagination. You can learn to use each of your powerful mental forces to strengthen your willpower and conquer anxiety and negativity.

In this new context, certain national economic policies should be changed, which favor only a small percentage of our American society. Many economic policies give huge monetary advantages to only a small part of our population and the rest of the world. The 15 brain flash cards, which introduce the 15 major brain ideas, all have quick links to files, which are named **DETAILS** and **SOURCES**. Also, essential **QUOTATIONS** from the perspective of science (concerning the sources of human consciousness and free will) are documented with references to neuroscience, biology, and psychology books. The quotes are directly accessible from the **Quotations about Human Consciousness** link on the homepage of this website.

To conclude, the text on the 15 brain flash cards promoted on this website, with the 15 brain diagrams, provide an easy way to learn the basic details required to understand your mind's interactive functions and your adaptable self-identity.

They provide you with a sensible and comprehensible scientific context for managing your new brain knowledge and your new brain vocabulary. With the new knowledge and skill-sets, you can re-define yourself and your infinite human potential: one idea at a time!

**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 using your adaptable self-identity.

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