ACTING LIKE ADULTS

The Question of Human Nature,
the Four Minds of the Human Brain,
and Humanity's Long Struggle to Grow Up
(So Far, Unsuccessfully)

Tom F. Shadid, Ph.D. with Kerri Shadid

© 2024 by Tom F. Shadid. Last edited February 14, 2025. All rights reserved.

TABLE OF CONTENTS

DEDICATIONS	3
ACKNOWLEDGEMENTS	4
PROLOGUE	4
PREFACE	5
TABLE 1: Quadrune Mind and Levels of Consciousness of the Human Brain	15
TABLE 2: Healthy Developmental Stages of the Human Brain	18
TABLE 3: Afflictions of the Human Brain That May Cause a Dissociation of Minds	21
TABLE 4: The Four Minds of the Human Brain	32
INTRODUCTION	6
Humanity's Long Struggle to Understand Human Nature	9
Panpsychism	10
Integrated Information Theory	11
Interpersonal Neurobiology	11
The God of the Integrated Human Brain	11
Neurodiversity	12
CHAPTER 1: FROM TRIUNE BRAIN TO QUADRUNE MIND	13
Healthy Developmental Stages of the Human Brain	17
Afflict the Brain, Dissociate the Minds	20
The Quadrune Mind	23
CHAPTER 2: FOUR MINDS, FOUR NATURES	30
Infantile Mind/Behavioral Reptilian-Like Nature	33
Childish Mind/Emotional Herd Old Mammalian-Like Nature	34
Adolescent Mind/Intellectual Primate New Mammalian-Like Nature	35

Grownup Mind/Spiritual Human Nature	36
Healing the Afflicted Brain/Dissociated Minds	37
Therapeutic Process	39
Therapeutic Process for Parents and Parenters	40
Good Parenting and the Four Minds	42
CHAPTER 3: EXAMPLES OF THE FOUR MINDS IN ACTION	47
Working in the Hanford Nuclear Complex	47
Tara Westover and History's Age of Reason	49
Religiosity versus Spirituality	52
Recovering from Trauma	55
CHAPTER 4: MISCELLANEOUS SAMPLES OF THE FOUR MINDS	57
Autocrats and Infantile Narcissism	57
Compassionately Correct	59
Disaster Capitalism	60
Growth Capitalism and Degrowth Economics	61
Education	62
Foxhole Mentality	62
"Gut" Reactions	64
Irredentism	65
Life as a Perpetual Competition Elimination Game	66
Litmus Tests for Friends and Family	68
Mad Mobs	69
Naïve Realism and Implicit Bias	69
Punishment and Discipline	70

Self-Loathing Self-Loathing	71
STEM for Grownups	72
Stop and Grow a Rose Garden	73
Ultimate Sacrifice or Ultimate Gift	73
Upstream Actions/Downstream Consequences	74
You Can't Change the Game by Winning It	76
THE END	77
POSTSCRIPT: A NEW APPRECIATION OF HUMAN NATURE BEGINS	79
Spirituality Beyond Rationality	80
APPENDIX A: Essays, with URLs, in Reverse Chronological Order	83
APPENDIX B: "How Would You Describe Human Nature?"	88
APPENDIX C: 80 Aphorisms from the Quadrune Mind Perspective	90
GLOSSARY	98
NOTES	101
RESOURCES	137
BIOGRAPHICAL NOTE	137

DEDICATIONS

In memory of Paul D. MacLean, M.D., the Copernicus of the neurophilosophy of mind universe, and the progenitor of the quadrune mind secular model of human spiritual consciousness.

To John Mayfield, who was present at its birth, and who is the original godfather and ever steady guardian of the quadrune mind model.

ACKNOWLEDGEMENTS

The quadrune mind model would not exist without my daughter, Kerri's, creative collaboration, editorial suggestions, and technical support. Along the way, she taught me that the model's real innovation was not about spiritual consciousness, but as a new understanding of human nature.

The unsung hero is my wife, Gloria, who, besides being an unparalleled proofreader, was also a tireless supporter through my many challenging days and nights of creative fervor and fever.

PROLOGUEⁱ

In the 1950s I was a young boy who loved astronomy, especially in October. By then, autumn was well-established, and nighttime came hours before bedtime. I lived in a relatively undeveloped part of Oklahoma City that was literally left in the dark by the more ambitious parts of town. I still remember stepping outside, looking up, and seeing the Milky Way galaxy, my galaxy, dominate the starry night.

My little telescope was strong enough to show me the crescent Venus, Jupiter's four large Galilean moons, and Saturn's spectacular rings, artistically tilted for dramatic effect. And that the moon really did have craters. But I imagined what might exist beyond my telescope's power to reveal.

I picked a star at random and concentrated my gaze on it across the hundreds of lightyears, and I wondered if there were eyes looking back at me on Earth. What would that creature look like? What kind of nature would it have?

It was a thought I had recently during another October night, 65 years later, when I realized that *Acting Like Adults* is a direct descendent of my 12-year-old questions about life in outer space. I realized that human beings often seemed to be alien life forms whose nature has also been difficult to imagine. Finally, for me at least, this book brings human nature down to earth.

The quadrune mind model of human nature shows how it's possible for some people to look at another human being and see vermin. For example, how it is humanly possible for some adults to drive a car into peaceful demonstrators, cheat people out of their homes and land after a natural disaster, pull babies and children from the arms of desperate people seeking help without knowing or caring what would happen to the babies and children, prevent food from reaching starving families, or commit savagely violent genocide. It is *not* because it's the evil side of our human nature.

The quadrune mind model of human nature also shows how it's possible for other people to spend their lives loving unconditionally and universally; skillfully caring for humans, animals, and the earth; and doing the work to grow into spiritually mature adults and helping others do the same. It is because that *is* our true human nature.

PREFACE

Paul D. MacLean's triune brain model was introduced to me in 1984. It was part of an in-service training for the staff of an alcohol treatment agency where I was working as an outpatient alcohol counselor. MacLean was a neuroscientist and chief of the Laboratory of Brain Evolution and Behavior at the National Institute of Mental Health. He developed a new evolutionary approach to understanding the human brain. He believed that our brain contained elements of our evolutionary past from reptiles, older herd mammals, and newer primate mammals. Those three "layers" of neural development become one brain in human beings: a triune brain. Consequently, with our inheritance of ancestral brain types, we also inherited ancestral behaviors. I use MacLean's idea of the triune brain as a foundation for the new "quadrune mind" model of human nature that I present in this book."

MacLean understood that the brains of extant species have been significantly modified from their evolutionary ancestors. But it was the similarities that remained that were helpful to understand human behaviors within an evolutionary context. The quadrune mind asks, "How is it neurologically possible for some human beings to cold-heartedly condemn fellow human beings to a lifetime of suffering—to generations of suffering—for the petty purpose of money, power, and privilege for themselves, while other human beings would risk their own life to help save someone they've never met from a concentration camp or an oncoming subway train? The quadrune mind perspective is that there is enough similarity among the brains of ourselves, primates, mammals, and reptiles to account for the complete range of "human" behaviors (minds), from the callous disregard of all life to one's self-sacrifice for strangers.

When American neuroscientists threw out MacLean's triune brain bathwater, iii they also threw out a genius neurophilosophy-of-mind baby. This book is about introducing you to that baby. I hope that you will come to believe this new way of thinking about human nature has a promising future, and you will wish to help it grow strong.

I am not attempting to make an authoritative argument to convince you that the quadrune mind is the greatest approach to understanding consciousness and human nature ever devised. As a non-scholar in neuroscience, philosophy, and theology, I appropriately do not feel qualified to make an authoritative argument for the quadrune mind based on professional specialization. I just happen to be the person "chosen" by these ideas to be their host. With a Ph.D. in applied

behavioral studies and experience as a licensed psychologist, I might describe myself as a "human behavior generalist." Or, even though my undergraduate degree is in psychology, it was my philosophy minor courses that I really loved and are part of my life-long interest in philosophy, is o I might identify myself as a "citizen philosopher."

I am also expressing a personal rant. viii A rant is an angry, hopeful cry for desperately needed help. ix I'm angry that there are people who take pride in, and brag about, their self-serving vices. They celebrate being rude, violent, and closed minded. These actions are presented as being honest, righteous, and principled. I'm angry that cold-blooded wealthy power elites and their servile underlings congratulate themselves for crafty business and political actions that lead directly, and knowingly, to the sickness and deaths of working people and their families, as well as indirectly and knowingly, to the industrialized degradation of their air, water, soil, and food. I'm angry that all fanatics believe they can be as vicious as the fanatics of the other side because *their* viciousness is obviously justified and necessary for survival.

I am crying out desperately because it looks like in the 21st century that Malthus, Hobbes, and Machiavelli^x (a disturbingly powerful consulting firm with influential offices around the world) have been employed to help us destroy ourselves more efficiently than ever. This may not be the reality, but it currently seems that way to me.

My hope is that humanity will not be soon destroyed but become stronger, not just to survive, but stronger and wiser. After all, I believe there should be a good reason for humanity to exist. For example, I believe we can learn to be lifetime healers in this suffering world.

And I need help because no matter how convinced I am that I have good ideas about the big topic of human nature, I am still overwhelmed by the suffering in my near world—not to mention the global suffering I read about almost every day.xi

This book is for adults who are dissatisfied with both trivialized ethical standards and frail moral relativism,^{xii} but also reject the reassuring confidence of religious dogmatism and guns. In this book I argue that spiritual consciousness is an inherent quality of the healthy human brain and the essence of human nature. But first we need to know what human nature isn't.

INTRODUCTION

The trees, it would seem, stand up for endless scrutiny while the forest escapes without much notice. —Jay L. Brand

Acting like an adult is not the same thing as growing up. Adulthood is simply a legal recognition of being a certain age, like 18 years old. Being a Grownup, on the other hand, is a specific state of mind.xiii

Our confusion about who is an adult is fueled by our confusion about what human nature is. Most of us think badly about human nature and have low expectations for decent adult behavior. Consequently, we believe that our only recourse to make a better world is divine intervention or more prisons, or both.

The gravest source of our misperceptions about humans comes from the belief that a person with an adult body must also possess one adult mind share by all. We take the physical appearance as sufficient evidence that the person (including ourselves) possesses adult human consciousness. Therefore, we think that people's clearly immature, stupid, greedy, and vicious behavior must fall within the expected range of "human nature." This conclusion is unfounded.

In this book I argue that the human brain can support four very different minds. Three minds represent immature states of consciousness in human beings: infantile, childish, and adolescent. Only from the *healthy adult brain*, though, can the fourth mind—the *Grownup mind*—emerge, representing our true human nature, which is inherently spiritual. Afflictions can prevent the brain's healthy development, leaving us stuck with a damaged brain and an immature mind. The history of humanity records our long struggle to heal our damaged brains and grow up.

The quadrune mind is a model of human nature that states that everything we do has consequences for the advancement or obstruction of the spiritual development of ourselves and those we might affect, both directly and indirectly. When we lie to take advantage of someone sexually, financially, or politically, we damage our own spiritual potential, but we also impede the spiritual growth of the person we lied to, as well. Some people have the power to lie to and take advantage of millions of others, obstructing the spiritual development of whole nations, and committing acts of "antihumanization" against the victimized masses. From the quadrune mind perspective, humanity's worldly future is of a piece with our spiritual future.

In this book I will give multiple examples of how we see the four minds in the world, so that we can better understand how to identify infants, children, and adolescents acting like adults, as well as Grownups embodying our true human nature. It is this struggle to achieve our true spiritual nature as humans that all of history is about. The expansion of human spirituality is the grandest, most difficult thing we will ever be a part of in our lives. This is the life that is meant for Grownup human beings to live. My rant is for humanity to quit acting like adults and grow up!

Finally, this book is about MacLean's neurophilosophy-of-mind baby, which I adopted in 1997. Now, the quadrune mind model is a mature 27 years old, and I believe that it can show us *how* humanity can grow up and the dire consequences when we don't.

It seems that everyone is looking for, or claiming to be, the adults that everyone else should listen to. Humanity is like a large family with too many children^{xv} and not enough Grownups to care for them. As with many families today, working adults are stretched to the breaking point, and sometimes beyond, and older children are left with the responsibility of raising younger siblings, while trying to become adults themselves. Or, the children are left to figure out life on their own. This is much of the world in which we live.

In this book I will explain why our profound confusion about human nature leads us to mistaken ideas about adulthood and who is really "grown up." I will use two models of consciousness to make my arguments: the triune brain model by Paul MacLean and the quadrune mind secular model of spiritual consciousness, developed by my daughter, Kerri, and me. (This book has extensive endnotes from scholarly and popular sources that support, elaborate, and enrich the content of the text. The endnotes could fill a readable book on their own. I hope that you enjoy this additional content by reading the endnotes before, after, or throughout the book.)

I believe that Paul MacLean is the Copernicus in the field of the neuroscience of human nature. Copernicus replaced Ptolemy's complex system of heavenly objects with the earth at the center of everything. Ptolemy's model was a good, but complex, explanation of the observed motions of heavenly objects. Copernicus' system was much simpler but dislodged earth's privileged position at the center of *everything*. The established church authorities forcefully resisted this change, which also eventually dislodged them from positions of privileged power.

MacLean's model of consciousness has an elegant simplicity that can replace much more complicated theories of human nature by neuroscientists as well as theologians, psychologists, sociologists, and other professional specialists. However, MacLean's model has been scorned by the neuroscientific establishment as being "simplistic." But this time, instead of religion resisting a simpler, deeper explanatory science of nature, it is science resisting a simpler, deeper explanatory philosophy of human nature.

Scientist and philosophers can examine reality at different levels of detail. For example, at a fine level of detail, individual trees of a forest can tell us a lot about their differences. Some researchers, known as reductionists, go even finer-grained, studying the different kinds of leaves of trees, leaf photosynthesis, and the chloroplast organelles that support photosynthesis. The knowledge gained by such study is important for people's stewardship of trees; maybe not so helpful for our stewardship of forests.

Another option for scientific and philosophical enquiry is to take a coarse-grained approach, seeing the larger picture of emergent properties. The quadrune mind model relates to many areas of study connected with vast bodies of popular and scholarly literature. For example, neuroscience, philosophy of mind, childhood development, religion, and psychology. These interests could each be pursued for a lifetime with only a small, specialized area of study mastered by any individual.

If you look at the cells of the leaf of a tree in a forest, then you can understand the interrelationship of its molecular parts with each other. If you look at the forests, then you may understand its interrelationship with us. The quadrune mind model of human nature is a forest-level understanding of the human brain and human nature. Sorting out the finer details of humanity would require years of specialized study. Of course, the best understanding of reality is through the integration of fine- and coarse-grained knowledge. As a pioneering neuroscientist said, "Understanding the pieces fosters understanding the whole and vice versa." xviii

Humanity's Long Struggle to Understand Human Nature

What would you say if I asked you, "How would you describe human nature?" Do you have a quick, perhaps snarky answer, or would you have to write a book? Before reading on, take time to record your answer on your favorite device. Is your favorite device your mobile phone, laptop, social media? Perhaps your favorite device is paper and pencil. Does your choice of technology, what "feels" most "natural," have anything to do with your human nature? When you finish the book, record your answer again. Do you have the same answer, an answer suggested by the book, or your own completely novel answer, unavailable from AI?

What if you asked some of the people you know, "How would you describe human nature?" What kind of answers would you get? If you would like to have a real-life taste of humanity's struggle to understand human nature, try asking a variety of people, such as family, friends, teachers, police officers, preachers, priests, rabbis, monks, philosophy professors, lawyers, combat veterans, physicians—anyone you would feel reasonably safe to ask for their opinion of human nature. Keep an anonymous record. See if you can find some patterns in the answers. (See Appendix B for my survey sample results.)

If you really want to be daring, you could then ask them, "Why do you think that?" or "What makes you think that?" (I did not.) But ask respectfully and accept the first answer with appreciation. People do not like to be asked, "Why?" repeatedly, as parents of young children know. And, as even children know, the answer often ends up being an exasperated, "Because I said so!" Remember, Socrates was executed for asking powerful people, "Why?" too many times, which is especially risky during socially unstable times such as ours. "Viii

Perhaps what sets humans most apart from the other living beings on earth is that we are surely the only creatures who *must* ask ourselves sometime during our life, "What is my nature?" Unfortunately, we have been coming up with wrong answers as long as we have been conscious enough to ask the question. Neuroscience and philosophy, along with religion, sociology, and psychology, have constructed ever more complex descriptions of human nature with ever more sophisticated confusion.

Early neuroscientific awareness that people might have more than one consciousness, or mind (nature), developed from Roger Sperry's "split brain" studies. ** It appeared that two different consciousnesses, two personalities, could be revealed in people who had surgical separation of the left and right cortical hemispheres. ** It appeared that two different consciousnesses, two personalities, could be revealed in people who had surgical separation of the left and right cortical hemispheres.

Popular culture represents hemisphere specialization in simple terms; for example, the left hemisphere is more logical, and the right hemisphere is more creative. Neuroscience reveals a more complicated picture of the brain. Interestingly, hemispheric differences change as we age and are less pronounced in more healthy adult brains. Left and right hemisphere differences are also associated with biological differences, but may more accurately describe gender biases in the culture. In the 21st century, neuroscience moved from simply observing neural patterns for explaining human behavior to neurotechnologies capable of directly modifying the human brain and, consequently, human nature itself. XXXV

Paul MacLean considered lateral hemispheric research to miss the point of what are the most significant differences in brain architecture for understanding human nature. He believed it was the sequential growth of the brain from bottom up and inside out that really mattered. This was the general pattern followed by the brain as it evolved from reptiles to old (herd) mammals to new (primates) mammals to humans. It is a corresponding pattern followed by the human brain as it matures from infancy to childhood to adolescence to adulthood. xxvi

Currently, there are three perspectives related to human nature and consciousness that seem particularly compatible with the quadrune mind model. One theory is from philosophy of mind—panpsychism—and two are from neuroscience—the integrated information theory and the interpersonal neurobiology approach. Like the quadrune mind, each approach argues for the existence of a continuum of consciousness, within the natural world, from the very simple to the very complex.

These models fit well with the quadrune mind, which says that the physical human brain supports four different levels of consciousness, from less to more complexity and with increasing degrees of self-awareness. The infantile behavioral mind has no awareness of self and others as individual humans. The childish emotional and adolescent intellectual minds have low to moderate degrees of self-awareness. The Grownup spiritual mind is not only the highest

level of self-awareness humans can have, it also possesses the greatest degree of awareness of others and the external world.

Panpsychism

Philosopher Philip Goff has presented cogent arguments for the panpsychism model of consciousness. Goff believes that a materialistic view of the universe, which has been adopted by science since Galileo, is incoherent without a place for consciousness. Furthermore, panpsychism proposes that consciousness is an essential feature of the "physical" universe, from the complexity of human beings to very simple life forms. It never goes out completely, though, even in elementary entities such as electrons and quarks. *xxviii*

Integrated Information Theory

Integrated Information Theory (IIT) is a recent and increasingly popular theory of consciousness. IIT can calculate a score (phi), which measures the amount of integrated information a system has. The higher the score, the more complex is the consciousness. IIT can measure the level of consciousness of any system; for example, comatose patients, infants, animals, plants, robots, and next generation AI. XXVIII

Interpersonal Neurobiology

Neuroscientist Daniel Siegel is a pioneer in the field of interpersonal neurobiology. XXIX Siegel's definition of mind in his interpersonal neurobiology model is one of the most relevant definitions of mind for our purposes. XXIX Siegel states that the mind is a self-organizing process that emerges both from functions within the body and interactions with the external world. The mind regulates the flow of energy, both internally and between us and the external world. Consequently, for Siegel the "mind" extends beyond our individual physical body. Siegel emphasizes integration of the neural circuits as essential for the development of mental traits that the quadrune mind model would identify as Grownup, such as emotional balance, response flexibility, fear modulation, empathy, insight, and moral awareness.

The God of the Integrated Human Brain

As a *secular* model of spiritual consciousness, quadrune mind cannot make any metaphysical claim for the existence of God, as traditionally described. As a secular model of *spirituality*, quadrune mind does not make any claim against the existence of God, as traditionally described. XXXII Although spirituality does not require a God in the way religions typically do, the quadrune mind model, as a secular model of spiritual consciousness, does have a specific identity for its God. This identity is based on the structure and function of the human brain. XXXIII In the quadrune mind model, God is that which "brought" the human brain and, therefore, the

potential for human spiritual consciousness, into existence. There are no temples other than the structures of the brain; no archaeological artifacts except the evolutionary ancestry of the brain; no creed except how the major neurological areas relate to each other and the world. Scripture is written by the prefrontal cortex upon the human mind.xxxiii If God is the force that brought the human brain into existence, then God's intention for human nature can best be learned by watching how people live who have healthy, mature, fully integrated brains. It is from such brains that the healthy human spiritual consciousness emerges.xxxiv

Consequently, the quadrune mind model would extend Siegel's benefits of a fully integrated human brain to include a spiritual consciousness, a sense of the holy or God. However, unlike some Gods, the God of the healthy human brain would never send people out to murder other people because of a difference of opinion over who God is. The God of the healthy human brain is not a jealous, insecure, or vengeful God. Neither does this God expect humans to perform rituals for the ego of God or to manipulate God, although rituals can be practiced by people for community and mutual support in times of overwhelming hardship. The God of the healthy human brain is holistic and inclusive.**

Neurodiversity

Essentially, neurodiversity is the idea that there is no one "normal" way for our brains to function. Instead, each individual has a unique neurological makeup, which can manifest in various ways. —Nicola Killops

On two separate occasions early in my presenting the quadrune mind model—then called "neurospirituality"—a person attending a program broke into tears. I attempted to respond supportively, but it was only much later that I had a possible insight into what may have happened. I believe the reactions occurred during the program at about the same point where we are in this book. It makes sense to me that each person may have had an elderly family member suffering from some form of dementia, or a child with Down's Syndrome or on the autism spectrum. To my chagrin, I think they may have concluded from my talk that their loved ones were excluded from the level of consciousness that the model associates with spiritual consciousness, or perhaps even from a subjectively-felt presence of God.

There are four points about the model that may be helpful. First, because quadrune mind is a secular model of spirituality, the model cannot say that anyone is going to heaven or hell because of their level of consciousness in this life. Second, those of us who love others who have damaged brains can share our Grownup-mindedness with them, if we have it. In any case, they can be some of our most humanizing spiritual teachers. Third, each of the four minds can be expressed in healthy ways. Therefore, individuals who, for whatever reason, are not able to access their Grownup mind can still have a positive impact on the world from the mind in which

they are "stuck." For example, if an adult only has access to their childish mind because of an affliction, they can be a loving member of their family and add great value to the lives of those in their immediate circle. Fourth, the quadrune mind model is a forest-level model of brain structure and function. Reality is very messy in the details. However, just as the fine differences among reptiles, mammals, primates, and humans is fuzzy, scientists as well as the public still find the labels useful in understanding the world. I believe the same consideration applies to differences among infants, children, adolescents, and adults, and their minds. For example, we can recognize that human brains are dizzily complex and still find the mental model useful.

The first known use of the term *neurodiversity* was in 1998, xxxvi about the same time that I was beginning to present this model. Since then, a large body of popular, professional, and scholarly literature has developed. xxxvii I regret that I was not aware of the concept of neurodiversity in my early presentations, but I am grateful for its lessons today.

CHAPTER 1: FROM TRIUNE BRAIN TO QUADRUNE MIND

Paul MacLean^{xxxviii} was chief of the Laboratory of Brain Evolution and Behavior at the National Institute of Mental Health. He developed the "triune brain" model^{xxxix} of the human brain. He believed that the three general brain systems of brainstem, limbic system, and neocortex corresponded to the brain structures of our evolutionary ancestors: reptiles, old mammals, and new mammals, respectively. Because corresponding structures^{xl} to those ancient brains continue to exist in our human brain, we remain capable of behaving in evolutionarily regressive ways. ^{xli} Elements of this neurological inheritance are vitally adaptive for our survival, but they also pose unrecognized serious threats to the survival of human and nonhuman life on earth.

Paul MacLean's neurophilosophy of mind approach corrects 60,000 years of error and confusion regarding the true nature of human beings. He conceived a human brain that belonged not only to humans, but elements of which are shared with our evolutionary ancestors. His evolutionary neuroethological model of three-brains-in-one—triune brain—can account for the full range of observed human behaviors without appeal to supernatural forces or complicated pathologies. From the quadrune mind perspective, most of our so-called "human" behaviors are the result of our older brain areas. Only the fourth and newest part of our brain, the prefrontal cortex, can support our one, true human nature. The quadrune mind represents a transition from MacLean's "three brain types, one mind" model to a "one brain, four minds" model of human consciousness. Xliv

Table 1 shows the relationship between each "sub-brain," or "brain type" in MacLean's terminology, between our evolutionary ancestors and human developmental stages. The mind/level of consciousness column indicates how evolution, normal human development, and

different minds in adults correspond to each other in the quadrune mind model. For example, the behavioral level of consciousness is considered functionally analogous among reptiles, infants, and adults who are mentally dominated by the brain stem area of the central nervous system. In this case, the subjective experience of each one's state of consciousness is to have little awareness of self as an individual or of the external world beyond their instinctual survival-oriented behavior. They each lack the capacity to perceive the emotional, intellectual (cognitive), and spiritual aspects of life.

Continuing Table 1, the worlds of old (herd) mammals, young children, and childish adults extends only as far as their emotionally-enmeshed biological or surrogate family. They do not have the capacity to fully comprehend abstract language or experience the spiritual aspects of life. New (primate) mammals and adults limited to an adolescent level of thinking tend to be stuck within divisive ideologies, such as nationalities or religions, and are unable to share the unifying experiences of a spiritual life. Only in the well-integrated, healthy adult brain of the spiritually mature Grownup are human beings able to coordinate their behaviors, emotions, and thoughts in order to serve the well-being of humanity and the earth. This, and only this, level of consciousness reveals our true human nature.

Table 1: Quadrune Mind and Levels of Consciousness of the Human Brain^{xiv}

<u>Dominant</u> Brain Region	<u>Evolutionary</u> <u>Stage</u>	<u>Human</u> Developmental	<u>Mind/</u> Level of
<u></u>	<u> </u>	Stage	Consciousness
Brain Stem	Reptiles	Infancy	Infantile/ Behavioral
Limbic System	Old Mammals	Childhood	Childish/ Emotional
Neocortex	New Mammals (Primates)	Adolescence	Adolescent/ Intellectual (Cognitive)
Prefrontal Cortex	Human	Adulthood	Grownup/ Spiritual

¹mind [Gk *menos* spirit, intent] **3c:** the sum total of the conscious states of an individual **3d:** the sum total of the individual's adaptive activity considered as an organized whole though also capable of being split into dissociated parts < as the conscious and the unconscious ~ >.

Webster's Third New International Dictionary (Unabridged) and Seven Language Dictionary. (1971). Chicago: Encyclopædia Britannica.

The enormous complexity of the one brain is obvious. But what is also phenomenally obvious are the four minds as seen in the significant variety of human behaviors. The quadrune mind model asks, "How is it neurologically possible that one species can exhibit such a dramatic variety of behaviors?" Neuroscience may one day answer that question. For example, the "connectome" approach to neuroscience is a finer-grained look at how parts of the human brain make up the whole mind. It might be interesting to know how connectome data might be interpreted if its leaf-level approach to the brain asked the kinds of consciousness questions that MacLean had. xlvii

Problems arise because the three brain types can work somewhat independently of each other. When the connectivity of the whole brain is well integrated, then the prefrontal cortex is dominant over the older parts of the brain. The prefrontal cortex is the only part of the brain that can integrate all the sensory input from within the body with all the sensory input from the outer environment to create one harmonious, humane consciousness.

However, if the neural connections among the major brain areas are poorly formed, damaged, or deteriorating, then the neural interconnections among the lower sub-brains with the prefrontal cortex are disrupted. It is like an irrigation system of pipes. If the pipes are well fitted and in good condition, then the system delivers a full stream of water to its proper destination. If the pipes are poorly fitted originally, or the connections have become rusty or damaged, then there may be leaks, and the system operates much less efficiently.

In general, MacLean associated the brainstem with the reptilian brain type, xlviii the limbic system with the old mammalian (herd) brain type, and the neocortex with the new mammalian (primate) brain type. MacLean noted that the prefrontal cortex is the most recently evolved part of our brain. He believed that it was the development of the prefrontal cortex that allowed the emergence of a new kind of mind in humans that is unprecedented in the history of biology. xlix It is the prefrontal cortex that looks inward and allows us to have an empathetic connection with others. MacLean said, "It is this new development that makes possible the insight needed to plan for others as well as for oneself, and to use our knowledge to alleviate suffering everywhere."

As the human brain experiences increased neural integration during growth, the person's level of consciousness becomes more developed, complex, and "humane." MacLean did not explicitly describe this newest mentality as "spiritual," but I do. Spirituality as a *naturally* emerging mental quality of the healthy, mature human brain is the unique "fourth mind" of the quadrune mind model.

Healthy Developmental Stages of the Human Brain

The individual human brain matures bottom-up and inside-out in the same sequence as its ancient ancestors evolved. From the quadrune mind perspective, the four areas of special interest, from oldest to newest, are the brainstem, limbic system, neocortex, and prefrontal cortex. Even though the spinal cord is not included as a sub-brain area associated with one of the four minds, it is included as part of the central nervous system and is a vital feature of human consciousness.

In the healthy life course of the human brain, each stage of neurological development introduces a higher level of integration, each represented by a brain type inherited from our evolutionary ancestors. The newer brain type then becomes interconnected with the wiring of the neurons supporting the previously organized stage of neural development. Table 2 presents brief descriptions of the growth stages of the human brain and their corresponding levels of consciousness, or minds. Ii

Table 2 also gives a broad evolutionary classification to identify when the appearance of each brain type is clearly present, with a few of its traits; when neurological development begins to support each stage in humans; and the developmental stage in which each mind becomes dominant, most of the time, in the healthy, well-integrated human brain. Each sequentially developing brain type supports an increasingly conscious mind.

Table 2: Healthy Developmental Stages of the Human Brainⁱⁱⁱ

<u>Mind</u>	Neurologically Available	Mind Becomes Dominant
FETAL/NEWBORN (Somatic) Sensory reactivity and processing in each modality—tactile, auditory, visual, vestibular, olfactory. Developing motor activity.	About 8 weeks gestational age/ 6 weeks conceptional age	Pre-Birth
INFANTILE (Behavioral) Self-regulation and emerging interest in the world. Purposeful communication. Intentional behavior.	2 to 4 months	During Infancy
CHILDISH (Emotional) Represent or symbolize experience: pretend play or verbal expressions of feelings.	15 to 18 months	During Childhood (Or never)
ADOLESCENT (Intellectual) Create logical bridges between ideas. Reason about right and wrong.	About 2 years	During Adolescence (Or never)
GROWNUP (Spiritual) Able to self-observe & reflect on one's own & other people's inner feelings. Able to observe self in past & future, as well as present and across space. Behavior, emotion, and thought are harmonious in spirit and intent.	About 3 years	During Adulthood (Often never)

From *Developmentally Based Psychotherapy*, by S. I. Greenspan, 1997, Madison, CT: International Universities Press. Copyright 1997 by Stanley I. Greenspan; and *The Growth of the Mind: And the Endangered Origins of Intelligence*, by S. I Greenspan with B. L Benderly, 1997, Reading, MA: Perseus Books. Copyright 1997 by Stanley I. Greenspan.

Adapted with permission of the author.

The Newborn Pre-Reptilian-Like Sub-Brain of the Spinal Cord

The central nervous system area associated with this sub-brain is the spinal cord and brainstem.

Somatic (Reflexive) Consciousness. The purpose of this proto-mind is to sense stimuli adaptively. The pre-reptilian-like sub-brain "guides" the fetus's brain to neurologically integrate the sensations of gestation, birth, and a few post-birth months (and/or the self-organizing "brain" animates the nascent mind). At about eight to ten weeks of pregnancy, the fetus is developing the ability to move limbs and shows many reflexive behaviors.

A kind of integrative learning, or adapting to environmental stimuli, is present; for example, the lessening intensity of the startle response to a repeated auditory stimulus, such as loud claps near the mother's belly.

The Infantile Reptilian-Like Sub-Brain of the Brainstem

The central nervous system area associated with this sub-brain is the brainstem.

Behavioral Consciousness. The purpose of the reptilian-like sub-brain is to integrate behavior so that it can be directed in an intentional, goal-directed way.

Along with emotional and cognitive milestones, there are many behavioral milestones during an infant's first several years that indicate how successfully the behavioral mind is developing. By about two months of age, the infant can indicate normal behavioral intelligence in several ways; for example, by moving its arms and kicking, lifting its head while on its stomach, reacting to noises, and making sounds.

The Childish Old Mammalian-Like Sub-Brain of the Limbic System

The central nervous system area associated with this sub-brain is the limbic system.

Emotional Consciousness. The purpose of the old mammalian-like sub-brain is to insure the survival of the family/tribe/"herd." The life of the individual is inconsequential compared to the on-going security of the group. This can be any identifiable group of people upon which the person is emotionally attached at a symbiotic level of object relations. In other words, if the group does not survive, the individual intuitively "knows" (at a pre-rational level) that they would not survive either. The group could be a family, gang, cult, or military unit, among other possibilities. As in traditional cultures, expulsion from the group means to become a nonperson, which is worse than death. In other words, the person has no "survivable" independent identity apart from the group identity. The relationship of the childish-minded adult to the group is essentially the same as that of a young child to their family.

Emotional intelligence is indicated when a person can experience the full range of human emotions without self-censorship. They are also able to experience emotions felt by a group and join in to express those emotions in a healthy way.

The Adolescent New Mammalian-Like Sub-Brain of the Neocortex

The central nervous system area associated with this sub-brain is the neocortex.

Intellectual (Cognitive) Consciousness. The purpose of the new mammalian-like sub-brain is to imagine things that cannot be physically perceived.

The successful thinking mind of a healthy adult generates abstract concepts and ideas including in the fields of science, morality, and ethics. It recognizes value in the pursuit of knowledge. The adolescent abstracting mind can envision the concept of humanity as a loving family.

The Grownup Human Prefrontal Cortex

The prefrontal cortex is the part of the central nervous system that reaches its highest development in human beings.

Spiritual Consciousness. The purpose of the human brain is to decrease suffering and increase healing for the self, other people, all living creatures, and the environment.

A successful fulfillment of the purpose of the Grownup mind might seem like a piety-in-the-sky goal: the capacity for a sense of responsibility to, and communion with, people never met, all living beings, and the earth. The practiced, habituated behaviors of the infantile mind have been replaced by intentional, healing action directed toward tending the environment, comforting the suffering, and mending the broken. Grownup-minded individuals expand the childish mind's emotional intelligence to feel compassion for all creatures, not only members of their group. They use the knowledge gained through their adolescent mind to promote a state of peace for people at all levels of personal and social organization.

Grownups seek opportunities to hone skills at all levels of consciousness needed for success in the spiritual life: patience, compassion, forgiveness, and respectfulness, among others. Grownups take every opportunity to pass on those skills to others. Spiritual success is the *only* meaningful measure of *intelligence* for the life of a human being.

Afflict the Brain, Dissociate the Minds

To create suffering without recognizing it—this is the essence of unconscious living.... —Eckhart Tolle

In the quadrune mind model, an affliction of the human brain is anything that prevents or disrupts the integrity of the neurons' communication with each other. Afflictions include maternal stress during pregnancy; environmental exposure to heavy metals; alcohol and other drugs; chaotic, unstable, or resentful families of origin; emotional neglect in infancy or early childhood; lack of physical activity; brain infections; brain trauma; and genetic and epigenetic effects. As a result of neural disruptions, people can suffer intellectual, emotional, and social dysfunction for the rest of their lives. Afflictions are ubiquitous but usually discriminatory. For example, brains of all newborn and young children are vulnerable to afflictions, but the infants and children of people who are socially discriminated against suffer "first and worst." [iii]

By causing disconnects of neural circuitry, afflictions prevent the adult brain's ability to function as a unified "one mind" under the direction of the prefrontal cortex. It is the prefrontal cortex that puts together information from the outside world, provided by the neocortex, with information from the inside world, provided by the limbic system, brainstem, and spinal cord, in order to create one unified consciousness capable of both compassionate self-awareness and a sense of loving connectedness with everything beyond the physical self. Iiv

In a brain compromised by genetic, biological, social, or environmental afflictions, the three older areas of the brain can become less connected with, and overly independent of, the prefrontal cortex. Consequently, one of the pre-human sub-brains may become the dominant sub-brain, leading the person to function primarily from an immature level of consciousness. When and what areas of the brain are especially afflicted may determine the person's dominant level of consciousness as an adult.

If affliction occurs during infancy, then the disruption of the developing neural circuits may leave a person dominated by their infantile behavioral mind. During childhood, faulty neural connections can result in a childish emotional state of consciousness in adulthood. And if disruption of neural development occurs during adolescence, then the adult may function from their adolescent intellectualizing mind. Table 3 contains a list of possible afflictions that may prevent the development of an integrated, Grownup mind.

Table 3: Afflictions of the Human Brain That May Cause a Dissociation of Minds^{IV}

- (1) Maternal stress during pregnancy may alter the hormonal balance in the placenta, leading to disruption of normal brain development in the fetus, especially during the first or second trimester. The child may experience dysregulation of the hypothalamus-pituitary-adrenal (HPA) axis or reduced ability of the hippocampus to mediate stress responses.
- (2) Infants born to mothers contaminated by mercury have profound neurological disabilities, including intellectual disability and cerebral palsy. Environmental

exposure to heavy metals (including lead, manganese, mercury, and cadmium) has been linked to violent behaviors, alcoholism, cocaine use, learning disorders, language deficits, shortened attention spans, and slower reflexes.

- (3) Exposure to alcohol may negatively affect neural development and functioning from the embryonic period through adolescence, as well as during adulthood, perhaps leading to psychosis, dyslexia, epilepsy, poor social and family relations, autism, and dementia. Effects can vary by age and by affected structures of the brain.
- (4) Even by 3 months of age, well-cared-for babies are able to suffer discomfort without invoking the stress response versus babies who experience more chaotic, unstable, and resentful family origins.
- (5) Emotional neglect in infancy/early childhood is associated with reduced pituitary production of the hormones oxytocin and vasopressin, which may inhibit positive social and sexual relations in adulthood.
- (6) Lack of physical activity during childhood may dampen cerebellar development. Deficient cerebellar enhancement limits not only physical coordination, but cognitive coordination as well. Virtually all higher abstract thought, such as mathematics, music, philosophy, decision making, and social skills, depends upon a well-developed cerebellum.
- (7) Brain infections can lead to a wide variety of diseases; for example, rabies with extreme restlessness and hallucinations or Rubella with intellectual disability.
- (8) People tend to show psychopathic traits when they have brain damage to the paralimbic system. The paralimbic system assigns emotional value to experiences and handles decision-making, high-level reasoning, and impulse control. Conversely, brain images of psychopaths tend to reveal underdeveloped paralimbic areas, which is associated with impaired emotional development. It appears that life experiences and genes both contribute to the development of psychopathy.
- (9) Epigenetics is the study of the epigenome: DNA (the genome) plus various environmentally caused chemical markers that can attach to DNA. Epigenetic markers can change the expression of genes but are *reversible* and do not change the DNA sequence. Environmental stressors, such as maternal separation in mice, can disrupt the neural connectivity of the brain and lead to poor social and cognitive functioning in descendants. A wide array of human traits, including obesity and intelligence, may be related to epigenetic inheritance. Epigenetic studies indicate

that childhood abuse may damage the way certain stress-fighting genes function, leaving victims more vulnerable to stressful events throughout their lives. Because of epigenetic inheritance, it may take several generations for a population to recover from ancestral exposure to poverty, war, or dislocation.

The consequence of unhealed afflicted brains is that most of us have never grown up. We are acting like the adults that other immature, damaged adults have modeled for us. Theodicy is not needed to explain "evil." It is original affliction or trauma, not original sin, that is the source of humanity's suffering.

Humanity wants its great sufferings to have great causes: a cosmic battle between Light and Darkness full of supernatural temptations, divinely inspired heroics, and martyrdom with eternal benefits. Great nations at war with great stakes worth the suffering and deaths of millions of human beings, including children, babies, the intellectually disabled, the blind, the deaf, the confused, the frightened, those in jails, in hospitals, beloved pets, and humanitarians—in other words, people just like us. "Civilian casualties," used disingenuously or mindlessly, never does justice to the carnage of warfare.

But the truth is tragically more banal. Genocides, bigotry, greed, fatally unsafe buildings and bridges intentionally built with cheaply inferior designs or materials, billionaires amidst widespread strategized poverty, viii exploitation of poverty-bound labor by corporate owners, massive imprisonment/serfdom, drug lords, global warming, indifference to the suffering of others, viii no sense of responsibility to others, disrespect for the elderly or young, impatience with the slower of mind or body, devastation of the environment, cruelty to animals, torture, terrorism, political brinksmanship, gambling, corruption, refusal to give practical aid and comfort to anyone in need, and savagery in short, all of humanity's unrelenting, worldwide suffering—is caused by our overwhelming acceptance of our afflicted, immature behaviors as representative of human nature.

Few people have the opportunity to appreciate the God of the spiritual Grownup brain. It is much more difficult to heal our lives together and become newborn Grownups than it is to become part of a ready-made religious group of "adults." Consequently, our world is filled with people who serve the Gods of our unhealed, afflicted brains. But instead of God healing the damaged brain, the damaged brain creates a damaged God, which further afflicts humanity. For example, many people confuse immature religious fervor as Grownup spiritual consciousness. Ix Immature minds worship immature Gods.

The Quadrune Mind

What is a person but part crocodile, part horse, part computer, and part angel; therein lie all the conflicts of humanity. —Tom F. Shadid^{lxi}

There are four kinds of adults in the world: infants acting like adults, children acting like adults, adolescents acting like adults, and Grownups, who are the real adults. Adults may share any of the four mentalities and still live very different lives. Just as babies differ in temperament, infants acting like adults can also have different personalities. After all, there are accommodating babies, and there are demanding babies. Healthier and unhealthier versions of personalities also exist for children and adolescents who are acting like adults. Each of the four minds has unique features, which shape how we live our lives. Each mind becomes successively dominant in the heathy brain as we age. Most people will experience periods of time, from decades to moments, when one mind or another dominates their level of consciousness. And all four minds can exist within an individual, with each consciousness dominant at one time or another, as long as that mind is neurologically available.

For example, fear or stress can regress someone who normally functions from their childish or adolescent mind to their infantile mind. On the other hand, the integrated Grownup mind can access and use each mind in an appropriate context. For example, the Grownup mind is not emotionless but rather feels emotions in an appropriate and healthy way. A Grownup can still feel a strong emotional bond to their family (a hallmark of the childish mind), while not being stuck at that level of consciousness because they can expand that emotional connection outward. Similarly, the Grownup mind can respect behavioral rituals without condemning anyone who rejects those rituals from another culture, for example. The Grownup mind can even benefit from the use of the adolescent abstracting mentality, as long as the ideology or technology of that mind is in service to the wellbeing of humans and the environment.

However, most people will live most of their lives under the dominant influence of one of the four minds, which yields the four kinds of people in the world. It is the dramatic differences in how each mind leads us to live that create all of humanity's conflicts across the world and throughout history.

The popular and professional appeal of Paul MacLean's triune brain model is because it is a very useful model of consciousness to explain our mental experiences. It has been helpful for psychologist and psychotherapists. The triune brain model has also been adapted to the Buddhist tradition. However, I believe that moving from a "brain" focus to a "mind" focus makes the quadrune mind model the most accessible way for us to understand why people act, feel, and think the way we do in everyday life.

The quadrune mind model is less about the structure of the human brain and more about how it is *neurologically possible that four distinct kinds of consciousness can naturally coexist* within one species. And why comparing our three immature minds, which correspond to our prehuman sub-brains, to the behaviors of our neuroevolutionary ancestors can provide valuable insights into the nature of *Homo sapiens*.

The quadrune mind model of human nature describes four different minds that emerge from the maturing human brain. Three of those mentalities—the immature minds that correspond to the "pre-human" sub-brains—are considered functionally analogous to characteristics of the minds of reptiles, old (herd) mammals, and new (primate) mammals. Human beings go through the developmental stages of infancy, childhood, and adolescence, which broadly recapitulate the evolutionary behavioral patterns of our ancestral relatives.

In general, the infantile, behavioral mind can be likened to a reptilian consciousness, such as the crocodile. The childish, emotional mind is analogous to the consciousness of herd mammals, like a horse. The externally focused, abstracting adolescent mind can be compared to a coldly calculating computer. Finally, I use Grownup as a term for the healthy, spiritual consciousness of the human mind, which appears to have no analogue from the quadrune mind model's perspective.

The quadrune mind associates certain brain areas with an increasing mental complexity: the brainstem with an infantile mind, limbic system with a childish mind, and neocortex with an adolescent mind. In a healthy adult human brain, the prefrontal cortex is integrated with all other areas of the brain and "dominates" the three previously integrated pre-human brain areas. This interconnectivity naturally leads to the emergence of the spiritual human mind.

Gone is a "fallen" human nature. Gone is the drama of a cosmic battle between the forces of Good and Evil, Light and Darkness, with the human soul as the battleground, and the prize to the winner. Gone is the righteous murdering of other people for God, who apparently *needs* a holy war by the courageous faithful. Ixx Gone are the privileged few who, because of the right religion, are the eternal winners while all others are the eternal losers.

What is left is a new vision of human nature. So far, it has been largely unidentified and unattained. The unique human nature emerges from the structure and function of the healthy adult brain. This Grownup human being lives a life with a different set of values and responsibilities unlike those of any other creature that has ever existed. lixxi

From Pre-Reptilian Sub-Brain to Fetal/Newborn Somatic (Reflexive) "Mind" lxxii

At birth the newborn's brain has billions of neurons but few neural connections. Because the spinal cord, brainstem, and cerebellum have the most well-integrated neurons of the central nervous system^{lxxiii} for the first few months after birth, the reflexive level of consciousness is the dominant "mind" in the newborn. The brain of the newborn responds to anything that is "sensed;" such as a smell, touch, sound, sight, or taste. Ixxiv Sensations are experienced by the body as pleasant or unpleasant without the newborn knowing why.

Interestingly, complex reflexive responses to external stimuli are present in very simple lifeforms, including brainless slime mold. |xxv|

Sensation is the body's awareness of a sensory stimulation, such as a sudden noise. Perception is our understanding of what the stimulus is, based on our experiences; for example, we recognize that a sudden noise going off is a siren. At the reflexive level of consciousness, the brain is not yet able to form perceptions. Each sensation is reacted to individually as either physically attractive or something to be avoided. It is only with the repetition of experiences that the growing brain can connect various sensory experiences into early sensory patterns of meaning; for example, "That sweet smell is mama."

We can experience this kind of consciousness as adults in certain situations. For example, a loud bang wakes us up in the middle of the night. Our immediate response is a fully alert body, using all our heightened senses to scan the darkness for some understanding of what just happened. Burglar? Party next door? Gun shot? In a few moments we are able to glean the meaning of the sound and respond with the appropriate emotions and actions. Or, we're driving at highway speed when some object ahead moves onto the road, catching the corner of our eye. Animal? Child? Garbage bag? We hope we have time to gather the more conscious meaning of what it is to act rightly.

From Reptilian Sub-Brain to Infantile Behavioral Mind

The baby's brain is about two things: internal homeostasis and an emerging engagement with the external world. The brainstem maintains the internal physiological stability necessary for the baby's instinctual need for survival. The cerebellum coordinates the physical behaviors needed for the baby's emerging intentional interaction with the external world. How these two brain areas are integrated with the whole brain will largely determine how well we relate to our "insides" and "outsides."

When baby's internal homeostasis is threatened early in life, the brainstem puts more emphasis on adaptive behaviors, internal and external, that will protect the infant's physiological stability. If the external world is threatening, then the cerebellum will also emphasize reflexively protective behaviors toward the outer world. "Gut" reactions direct the person's behavior, not external reality. If the body's physiological state is well stabilized, and the external environment is safe and nurturing, then the brainstem and cerebellum can fully integrate with later developing sub-brains, like the limbic system, to produce well-balanced behaviors that support healthy self-care and emotional engagement with the external world.

The behavioral level of consciousness in an infant is analogous to the subjective experience of a lizard. This mentality leads to a life on behavioral "automatic pilot," with limited flexibility to adapt to changes in the external world. Change is initially experienced as life-threatening to

the body's homeostasis. Change as an opportunity for growth must await the maturity of later developing emotional and intellectual minds.

In the infantile mind, there is no sense of time. There is a general lack of awareness of the outer world. The "self" is ill-defined, with fuzzy boundaries between the physical body and the physical world. The adult intellectual cognitive mind is not aware of infantile experiences, either at the time of the experience or as a later recalled memory. Infantile "amnesia" exists because memories are filed in the body of a behavioral mind, and the verbal language of the intellectual mind is not necessary to access them.

The unselfconscious behavioral mentality is probably the most common level of existence for most of us in adulthood. "Mindless" living is a common condition of our daily lives, including driving, eating, having sex, and working. "Consumer" shopping behavior is influenced by insidious neuromarketing techniques. Daily commuters may have no memory of their drive on any given day, unless something unexpected happens that makes them "wake up" enough to make a conscious decision, like not driving through the street workers' new barricade.

The infantile behavioral mind is associated with the brain stem, which governs the life-or-death homeostasis of the body. Consequently, anything we do habitually becomes associated with the necessities of life. For example, the adult who is driving on automatic pilot is mindless of the (human) drivers inside other cars. At the same time any disruption by the mindlessness of another car (human driver) sets off an instinctive reaction ("idiot" driver) as a life-threatening event, even when it is just starting off "too slowly" from a light changing to green. Ixxix This is why even mild slights to the integrity of the behavioral-minded person elicit "scorched earth" responses. There are no small threats. Every inconvenience requires disrupting the behavioral-minded person's habitual routine (homeostasis). Everything is life-or-death. In effect, the biology of homeostasis has become the behavior to preserve the status quo of the world.

The vital need of the infantile, reptilian-like resistance to change in the adult behavioral mind is to live one's life without adapting to the reality of an ever-changing world, perceived as ever threatening to the integrity of the "self." The "meaning" of life never changes; time and space must be frozen. |xxx|

From Old (Herd) Mammalian Sub-Brain to Childish Emotional Mind

Reptiles are generally born ready for independent life (precocial). Mammals and birds, on the other hand, are born in an immature state of dependence (altricial). Baby reptiles have no separation call for mama, because they are already finding their own way in the world. Besides, if they cried for mama, she might eat them. Baby mammals are born almost helpless to care for themselves and need continuous parental care for some time, so they do cry for mama. Animals, including mammals, need five freedoms in order to live their true nature as juveniles

and as adults. The five freedoms are: (1) Freedom from hunger and thirst, (2) Freedom from discomfort, (3) Freedom from pain, injury, or disease, (4) Freedom to express normal behavior, and (5) Freedom from fear and distress. The need for these freedoms is related to the increasing maturity of the limbic system and its connections with an increasingly complex emotional repertoire to motivate social bonding behavior. Human beings *need* these basic "freedoms" for more than 20 years of upbringing to have an opportunity to live our true human nature as Grownups.

As in the young of other herd mammals, such as horses and sheep, human childhood is dominated by an emotional drive to belong to a nurturing in-group and to be protected from the "Others" of an out-group. In the young child's herd-like mind, no one else in the world is quite as important, or the same, as family members. Family is life. The childish mind perceives other people as predators, competitors, or prey, but never as the same kind of human as "one's own." To the childish mind, the world consists of two parts: home and everywhere else. Home is the place of familiar faces with familiar eyes, skin, smells, speech, clothes, food, play, and fears.

However, if the childish mind encounters people from outside the family who have familiar-enough traits, or who are experienced in a home-like context (i.e., any group with which they are emotionally enmeshed, such as a first grade classroom, sorority or fraternity, college, or company), then the childish mind may "adopt" those people into the person's "family" and treat them with the same level of emotional attachment. Those outside the group remain a different species than the family. Or, at best, they play for an opposing "team" with a mascot that's a different species. The childish mind is on full display among emotionally enmeshed sports fans of teams, whether peewee, college, or pro.

It is obvious that the childish mentality dominates the emotions of most adults around the world, who are constantly picking "sides" for every "cause." Adult-sounding reasons for the immature, but often deadly, playground behaviors of "us versus them" are eternally invoked; for example, labels related to "race," religion, politics, socioeconomic status, ethnicity, God, shapes of eyes, skin tone, cultural smells, body types, gender, "accents," clothes, food, "evil," and "ugliness." Ixxxii

From New (Primate) Mammalian Sub-Brain to Adolescent Intellectual (Cognitive) Mind

The adolescent mind is associated with the neocortex and its increasingly complex integration of cortical networks. The neocortex reaches its greatest development in humans. The human brain is not the largest among animals, but it has the greatest number of integrated neurons in the neocortex of any lifeform on earth. | xxxiii

The adolescent mind^{lxxxiv} is an abstracting mind. It allows a person to imagine ideas in the mind without external sensory stimulation to the body. For example, the intellectual mind provides

the neural basis for the conception of language, morality, culture, ethnicity, and mathematics. However, the "abstractifying" adolescent mind can also replace human beings with numbers without knowing the difference. IXXXXV

Over the past several decades, it has become known that the differences between animal and human cognition exist on an irregular continuum among species, rather than as a uniquely large leap of cognitive power upon the appearance of human beings. Ixxxvi In fact, it turns out that many animals can think abstractly, including orangutans, dogs, chimpanzees, bears, and pigeons. Ixxxvii However, from the quadrune mind perspective, primates are considered the best evolutionary analogue to the human developmental stage of adolescence for abstract thinking, as well as for more general behavioral patterns relating to each other and the environment; that is, culture.

Grownup Spiritual Mind

Spiritual consciousness requires a set of learned specialized skills. We do not expect anyone to just "naturally" become an elite plumber, novelist, or athlete. Professionals know that it takes years of "behind the scenes" deliberate practice, error, mentor feedback, self-correction, and more practice to achieve an elite level of any skillful activity. It has been said, "Amateurs practice until they get it right; professionals practice until they can't go wrong." lxxxix

Expressed alternatively, attainment of an elite status as a bigot can be restated as, "Amateurs practice until they get it right, but it's no longer fun and quit; professionals practice until they can't go right." For example, a person may have a momentary laugh at a bigoted joke, but reflecting on it, rejects the joke as bigoted even though it was shared by friends and may have been "funny." This person may be seen as an amateur bigot who quits bigoted joking because it is no longer "fun" to be mean-spirited toward other human beings.

But a person who has been raised by people with bigoted thoughts, makes friends with bigoted thinkers, and works for bigoted organizations is a person who may have practiced bigoted thinking, emotions, and behaviors like a professional. "Everyone" tells bigoted jokes and thinks the jokes are hilarious even though they may be quite cruel. This person, their friends, and family have practiced bigotry until they cannot get spirituality right.

The person who reflects and rejects bigotry as a way of life faces very painful choices. One of the most difficult things about growing up is that it may mean a "growing away" from some of the most important people in our life, including best friends and family members. **C Oftentimes, the person will forego growth, and accept a lifetime of inner conflict, to avoid a final separation from loved ones. Or, the person rejects the values of growth to regain harmony internally and with friends or family at their less mature level of consciousness.

It is true of most of us that to become spiritually conscious requires a strong desire to live differently than we have been because of some inner spark of dissatisfaction with our current way of life. And, that we have the support of skillful and loving helpers.^{xci}

Yet, we think people can just "decide" to have an elite level of consciousness. That they can be directly enlightened, spiritual, or saved if they follow a prescribed ritual, experience an approved charismatic event, or sincerely admit to being a sinner, which will be followed straightway with a religious transfiguration. For example, some people who admit to being sinners believe that once they have publicly accepted Jesus Christ as their personal lord and savior, *nothing* they do afterwards threatens their place with him forever in heaven. One and done. Alcoholics Anonymous, on the other hand, considers that admitting to being an alcoholic is just the *first step* to recovery. And there is still a healing life of service *after* spiritual awakening. It is not expected that the recovering alcoholic could resume old ways of drinking and still be in a state of "grace."

From the quadrune mind perspective, human beings are in the peculiar predicament that to achieve our true spiritual nature, we must work unnaturally hard to earn it. No baby is born under a curse of original sin, but no baby is born spiritually conscious, either. A child's emotions are never "wrong" or "bad," but children need skillful help to understand and express their emotions in life-enriching ways. Adolescents can be humanely idealistic, but they need enough practical life experiences to apply their idealism helpfully in the real world. They will not just wake up one day divinely inspired to be "woke" in the necessarily self-reflective way.

Buddha knew this twenty-five hundred years ago. He taught that enlightenment^{xciii} occurred in one who is "heedful, ardent, and resolute." These adjectives describe the needed effortful attention required for the task of "growing up." Alcoholics Anonymous and Buddhism require study and practice of specific skills to live a recovering, awakening, healing life of service.

In the next chapter, I go from a primarily neurological description of the four minds to a more behavioral perspective of each mind.

CHAPTER 2: FOUR MINDS, FOUR NATURES

Perhaps you've had the experience of telling an adult, "Quit acting like a baby!" Or, "Don't be so childish!" Or perhaps, not quite as dramatically, "You're not a teenager anymore. Get a job. Grow up and move out into the *real* world." (Not necessarily a place an adolescent would feel safe or prepared to be in.) Usually, the person's behavior does not change even though you told them in no uncertain terms to "grow up." The problem is not that an adult is acting like a baby, being childish, or still living like an adolescent; it's just the opposite.

People do not grow up "naturally." Becoming an adult just takes time, but becoming a Grownup takes skillful parenting, nurturing friends and family, and a fair amount of good luck and, helpfully, the absence of bad luck. We do not act badly because, as adults, we occasionally act immaturely. We act badly because we are trying to act like adults with damaged, immature minds.

Table 4 describes adults who have experienced afflictions to the brain that lead to the life of an immature mind. It is not cultural or personality differences that divides humanity, it is our levels of consciousness: the behavioral mind is unmoved by emotions, the emotional mind is unaffected by reason, and the intellectual mind does not comprehend wisdom. Each mentality is baffled by the natures of the other minds. It is almost as though humanity is made up of four separate species, each existing with conflicting, mutually exclusive goals of life. However, the healthy human mind integrates our behaviors, emotions, and thoughts in the service of wisdom: knowledge of what human nature is.

Table 4: The Four Minds of the Human Brainxcv

<u>Infantile</u>	<u>Childish</u>	Adolescent	<u>Grownup</u>
Behavioral	Emotional	Intellectual	Spiritual
Sub-emotional	Sub-intellectual	Sub-spiritual	800,000 to 200,000
About 335,000,000	About 220,000,000	About 75,000,000	years ago Rapid brain
years ago First reptiles	years ago First mammals	years ago First primates	enlargement and reorganization
Striatum Brain stem	Limbic system Paleocortex	About 7,000,000 ya First hominins	About 300,000 ya First Homo sapiens
Infancy	Childhood	About 2,500,000 ya First Homo species	About 60,000 ya Conceptual religion
Instinctual survival	Group survival	Isocortex	About 2,600 ya
Undifferentiated object relations	Attached (partially differentiated)	Neocortex	Philosophy
Highest Good:	object relations	Adolescence	Prefrontal cortex
Homeostasis "Status quo"	Highest Good: Loyalty	Ideological survival	Adulthood
High "Drama":	High Drama:	Individuated object relations	Well-being of all
Control of "others"	Group conflict	Highest Good:	Integrated object relations
Defense mechanisms	Tribalism Colonialism	Reason/Knowledge	Highest Good:
Roles, Rules	Imperialism	High Drama: Debates	Wisdom
Rituals,	Wars	Debates	No High Drama:
Precedents	Team sports	Axial Age	Equanimity
Legalism, Militarism	·	Modernity	
Habit, "Tells"	Demagoguery	Relativism	Learn and practice
Tradition, Elitism	Nationalism		the skills to do good
Conservatism	Xenophobia	Alienation, Angst	Elimination of
Irredentism	Ethnocentrism	Nihilism, Anomie	craving
Dogmatism	Sexism, Mobism	Absurdity, Atheism	
B" 1 1	Denominationalism	(0.7.1. (The Arts/Creativity
Ritual speak	Downstown	"Value-neutral"	Aesthetic distance
Ritual identity	Drug abuse	science, STEM "Abstractification"	Universal love
Automaticity Ennui, "Solipsist"	Us vs. Them, Cults	Abstractification	Compassion
Elliui, Solipsist	"Good" guys vs.	Bigotry	Forgiveness
Drug addiction	"Bad" guys	Sectarianization	Inclusiveness/
Drug addiction	"Racism"	Gottariariizatiori	No exceptionalism
Cold-blooded		Meaning	
murder or sex	Fantasies	Patriotism	Mindfulness
	Entertainment	Utopianism	Sense of awe
Scientism	Happiness	Doctrinaire	Engagement
Monarchism		Ideologue	Stewardship
	Seek pleasure		
Psychopaths	_ Avoid pain	Imagination	Finding the sacred
Stalkers	Feeling good=		in all things
Oin also asia de la	Being good	Morality, Ethics	Darley # 1
Single-mindedness No schemata	Ugly = "Evil"	Altruism, Liberalism	Reduce suffering Increase healing
Homo rostilios	Homo	Homo	Home enimiters
Homo reptilian	paleomammalian	neomammalian	Homo spiritus

Infantile Mind/Behavioral Reptilian-Like Nature

[T]he one person who has more illusions than the dreamer is the man of action. He, indeed, knows neither the origin of his deeds nor their results. —Oscar Wilde

Infants acting like adults have a concern only for the suffering and dying of themselves.

—Tom F. Shadid

Reptiles are born ready to survive without family or friends. They do not have a sense of self. Because the human brainstem, homologous to the reptilian brain, is the only fully functioning part of the infant's brain at birth, it must be responsible for the life of the infant before the baby is aware of self or family. The family is not the source of the baby's survival; rather, survival is dependent on the baby's state of homeostasis, just as it is for reptiles. Consequently, preserving the internal state of equilibrium is more vital for the baby than is preserving a relationship with another person. This continues to be largely true in the adult who is dominated by the infantile mind.

One of the greatest dangers to humanity is the mindlessness with which so many of us live our lives. **CVI* The infantile mind is a behavioral level of consciousness. As with infants and reptiles, adults dominated by this mind have little to no capacity for introspection. There is no empathy toward others or self!

There is no cognitive awareness of what is happening in the environment. For example, we are eating a meal when we suddenly realize that someone has been trying to get our attention, and finally shake us by the arm. We have no recollection of what the person had been saying, the presence of the other people around us, or what we have been eating. This is an infantile behavioral level of consciousness.

There is no concept of "free will" at this level of consciousness; behaviors are not "chosen." Infantile-minded adults do not cognitively control their behaviors; the behaviors control them for the purpose of maintaining biological stability. *cvii Consequently then, the infantile adult's political, religious, legal, economic, and social stability must similarly be preserved, even if their status quo is hurting the health and lives of others who share their city, state, or world. This preservation may be paramount even for infantile-minded adults who do not occupy any privileged class in those areas of life.

This adult has not outgrown "stranger anxiety." In unafflicted babies, stranger anxiety starts at about 8-9 months but usually abates around 2 years of age. This is the healthy developmental time when the expanding emotional bonding during childhood has become neurologically dominant in the unafflicted child.

In a stuck adult's infantile mind, however, a "stranger" continues to be anyone whose physical appearance is different than those first faces seen soon after birth. Having a face with differently shaped eyes or nose, a different skin tone, eating different food, smelling different, or have an accent are all sufficient grounds for rejecting the humanness of that person. Even a friendly smile on a different-looking face can be mocked, no matter the other person's good will or sincerity. And their babies are never precious.

The infantile behavioral mind perceives the world as black or white with no gray, and certainly no rainbow. If people have broken a law, there are no mitigating factors. "Misbehavior" must be punished; there is zero tolerance for even the slightest deviation from the rules of law, church, or state. God is always in agreement with them. The inner state of any transgressor is not material because the behavioral mind cannot conceive of any emotional or intellectual element of overt behavior, including their own. Behaviors are punished, not humans.

Childish Mind/Emotional Herd Old Mammalian-Like Nature

Enmeshment creates almost total dependence on approval and validation from outside yourself. —Susan Forward

Children acting like adults have a concern only for the suffering and dying of their own "family" with whom they remain emotionally enmeshed. —Tom F. Shadid

This mind is an emotional level of consciousness in adulthood which, as in a young child, is still enmeshed with the family. This adult has no more of an independent sense of self than an 18-month-old child does. The area of the human brain associated with the childish mind is the limbic system; a shared brain type is dominant in herd mammals. Juvenile herd animals do not survive well on their own and neither do human children.

The childish emotional mind is apparent in adults who function mentally at the level of a very young child. The emotional bond with the identity of their group *is their* identity. Most of us can remember when we had no notion of living our lives without our family. We would never grow up and leave, and they would never die. There is no awareness of a changing world over time in the childish mind. As children acting like adults, we never did grow up, never emotionally left home, and the *family* still lives our lives, for good or ill, long after their death.

Sooner or later, we must replace the physically lost original family with another physically present family, even if it's only digitally. As with early childhood and herd animals, the childishminded person has no individualized self-concept to enable going it alone. The replacement family could be *any* group, such as a sports team, inner-city gang, service organization, group of coworkers, or celebrities selling us stuff, with which we become emotionally enmeshed. The

emotional bond is the most important thing in one's life. The survival of that bond *is* life for the childish mind.

Adolescent Mind/Intellectual Primate New Mammalian-Like Nature

[T]oday the abstract thinkers are in charge, and abstract thinkers get locked into abstract debates and arguments that aren't based in reality.... In my experience, people become more radical when they are thinking abstractly. —Temple Grandin^{xcix}

Adolescents acting like adults have a concern only for the "suffering and dying" of their own ideology. —Tom F. Shadid

Adolescence is an age of ideas. The mind is no longer anchored to the physical world. The brain area associated with abstract thinking is the neocortex, and the number of animal species able to experience abstract ideas has increased with the evolutionary expansion of the neocortex.^c The neocortex is a prominent brain area for all primates but is significantly larger in the brains of the great apes and humans.

The adolescent mind is capable of independent thought, which may not reflect society's established values. For example, the adolescent mind first becomes available around 2 years of age. The 2-year-old becomes able to say, "No!" to parents who are telling them what they should do (or think or feel). This early intellectual independence is labeled as the "terrible twos" by some people. In some cases, the child may have as good of a "reason" for saying, "No," as the parent has for what they are telling the child to do.

For abstracting adolescents, physical objects can come to represent abstract concepts. For example, printed paper rectangles or plastic cards can represent "money," which can be used to buy physical stuff. Great apes have learned to treat tokens as symbols of a physical reward, such as food. In human adolescence abstract symbols can represent other abstract ideas. Imagination becomes a tool for creativity: to see what does not yet exist.

Imagined possibilities of the future can be hopeful or dreadful. The adolescent mind, depending on the integrated health of the adolescent's brain, can imagine such abstract concepts as forgiveness, universal inclusiveness, and a loving force inculcating all life. Another adolescent mind can imagine "honor killings," "races," and a vengeful God needing avengers. Also, the abstracting mind can perceive human beings only as numbers on a financial spreadsheet, or simply a tally of deaths of blazing forest fires or starvation somewhere in the world.

Technology involves the skill to create objects that do not previously exist in nature. Examples include push-button machines introduced into the workplace or software engineers' computer program algorithms for workers to follow. Both likely originated in an adolescent mind. Both can

be designed with abstract numbers to stand in for the real human beings who will be the ones actually using them. The adolescent mind can expect workers to act more like the machines they work with (or for).^{cii} Workers can also be expected to adjust their thinking to fit the requirements of the software directing their work. In fact, the human brain and, consequently, the human mind and nature may become indistinguishable from preprogrammed software technologies.^{ciii}

Grownup Mind/Spiritual Human Nature

What does it tell us about the meaning of life when we can now say that for the first time in the known history of biology, we are witnessing the evolution of human beings with a concern not only for the suffering and dying of their own kind, but also for the suffering and dying of all living things? —Paul D. MacLean

What do we live for if it is not to make life less difficult for each other? —George Eliot

Grownups have a concern for the well-being of all living things and the earth. —Tom F. Shadid

What we "live for" defines our nature. Of all species, Homo sapiens seems most required to help each other become what we are naturally meant to be: helpful friends. The greatest purpose for the Grownup mind is to reduce suffering and increase healing for all, regardless of self-interest, family, nationality, ideology, or any of the other attributes used by the immature minds to divide the world into those who are deserving of our love and care and those who are not.

The Grownup human mind introduces a new age of consciousness on earth. Unlike our immature mentalities, there is no analogue among animal brains or machine intelligence comparable to our spiritual consciousness. The Grownup mind has compassion for all of life and a sense of oneness with all that is. And it is Good.

Specifically, Grownups live with loving kindness and respectful regard for all life and the earth because that is our true human nature! Grownups can achieve the full expression of this nature because they have not been kept from maturing by afflictions, or have received helpful healing as adults from parenters, as discussed in the following section. The purpose of the Grownup mind is to be a nurturing resource to people, animals, plants, and the earth so that flourishing during the time we have together is available for all.

Where does human spirituality come from?

Does human spirituality come down from the Gods? Or, does human spirituality grow up from the earth?

Who knows? I would really like to know the *deep reality* of the universe, but I expect that will forever be an unfulfilled wish, not only for myself, but for all of humanity forever. People who are certain that their understanding of God's mind is absolutely true and real tend to be rude, smug, or even hateful and violent toward anyone who disagrees with them. This kind of attitude would not reflect the mind of God as revealed by the healthy human brain, and as I've described in "The God of the Integrated Human Brain" section above.

There is no promise in this model for anyone to receive halos in an everlasting life beyond death. Neither is there any punishment for people who live lives of plunder, corruption, violence, theft, or greed, in order for "justice" to be served. Even reincarnation with the goal of escaping the suffering of this world is antithetical to the quadrune mind's radical spiritual commitment to the physical world.^{cv}

What is left regarding the quadrune mind model of human nature, as a secular model of spiritual consciousness, are observations of human beings without halos who live in a way that is dramatically different from how those functioning from immature minds live. Because of the secular nature of the quadrune mind model, spiritually-minded Grownups are not kind and thoughtful toward other people in order to receive a reward for good behavior in this life or any later lives. Grownups do not feel authorized to punish anyone for bad behavior or reward anyone for decent behavior. And they do all of this without knowing for certain where their spiritual nature comes from.

Healing the Afflicted Brain/Dissociated Minds

We cannot maintain an illusion that patients function at a higher developmental level than they do. —Stanley I. Greenspan^{cvi}

Psychiatrist Stanley I. Greenspan's developmental model of psychotherapy corresponds well with the developmental approach to spiritual consciousness in the quadrune mind model. CVIII Greenspan uses psychodynamic language in his model; for example, "ego structure formation." We can use quadrune mind language to gain insight into why adults with unhealed afflicted brains are neurologically unable to be Grownups.

For Greenspan, "ego structure formation" means that there is a developmental sequence that happens before we can mentally *represent* an experience; that is, to make meaning of an experience through interactions with another person. The interactions may help the person gain meaningful insight into their behaviors, emotions, or thoughts. Greenspan describes six organizational levels in which the ego (conscious mind) can represent a person's awareness of experiences. Greenspan's model of six stages of ego development corresponds to the quadrune mind's categories of infantile, childish, and adolescent developmental levels of consciousness, with minor modifications. CVIIII

Greenspan states that it is commonly believed that most people can represent more mature mental abilities to regulate, engage, interact, and represent experience simply as the nervous system develops. However, he says, "[T]hese core capacities are present in only a small percentage of individuals. For most, such capacities must be learned as part of the therapeutic process."cix

Greenspan's great insight is that an adult's mind is limited to what it can represent. In the quadrune mind perspective this conclusion means that because of afflictions to the brain, the developing ego (immature levels of consciousness) cannot function in a (spiritually) mature way. Adults cannot be assumed to be able to imagine anything above their dominant level of consciousness. Consequently, the infantile behavioral mind cannot imagine emotional warmth and nurturing others; the childish emotional mind cannot imagine the value of logical and rational arguments; and the adolescent intellectual mind cannot imagine a spiritual reality beyond logical and rational arguments.

For example, Greenspan describes a child who responded to him with the three immature levels of consciousness: it was easy to get the child to pay attention (infantile mind); form a warm, emotional relationship (childish mind); and even be logical (adolescent mind). Greenspan notes that these mental abilities had been mastered by the child's family. However, neither the family nor the child were able to consider others' needs or empathize with, or take the perspective of, other members of the family (Grownup mind). Greenspan observes, "Various representational capacities, including especially the capacity for *empathy, can only be learned interactively*. If relationships are devoid of empathy, there is no experimental basis for a child learning how to represent it."cx

From the quadrune mind perspective, we generally believe that we are functioning at a higher developmental level of consciousness than we really are. We think we are Grownups even when our behavior, emotions, and thoughts are of quite immature levels of consciousness. Our assumption is that we are Grownups with Grownup problems and Grownup demands on us, and that our reactions are understandable for a Grownup under such pressures as we have.

It is possible that an unusual level of stress can regress us to a less mature mentality. Or, it could be that we are characteristically dominated by an immature mind, which is reacting as it normally does to everyday life. The quadrune mind model says that our behaviors, emotions, and thoughts emerge from our own level of consciousness, not the external circumstances. For example, we do not treat other people dismissively because they are less than human, but only because we perceive them as less than human because of our own immature mind. Being a Grownup with an unafflicted brain appears to be rare.^{cxii}

Still, most of us believe that everyone arrives at adulthood with a standard adult brain. However, this was not true for Greenspan, and it is not true for the quadrune mind. Our task is the same for all of us: (1) learn to identify when our behaviors, emotions, and thoughts are dominated by an immature state of mind, and (2) learn how to practice being a Grownup. This is not "acting like an adult," which will never change the level of consciousness of our mind. It is more like A. A.'s "fake it till you make it," which, when used correctly, cxiii does not mean getting away with never growing up, but rather having permission to *practice* being a Grownup before you *feel* like a Grownup. cxiv

The "therapeutic process" in the context of the quadrune mind model happens whenever *any* of us has the skill and takes the time to *treat other people humanely*. It is in this way that all of us can help preserve a more civil society and prevent civil war and global savagery.

The general philosophy of healing the afflicted brain/dissociated minds is to interact in an appropriately humanizing way based on the other person's level of consciousness. Of course, you must be self-aware as well. The first task of a healer is to be at least as grown up as the person we are trying to parent.

The key to good parenting of actual infants and good parenting of infants acting like adults is to recognize the similarities of the infantile level of consciousness that they share.^{cxv} The same holds true for children and adolescents who are acting like adults. These "parenting" suggestions describe healthy behaviors that can be healing (humanizing) in our everyday interactions with adults.^{cxvi} They do not qualify anyone to treat people with clinically severe mental disorders and should not be considered as doing "therapy." Psychotherapy should be left to the professionals. On the other hand, from the quadrune mind perspective, we do not need more psychotherapists (or police, prisons, pills, and preachers) for each other, we need to learn how to be better parents of each other.

Therapeutic Process

As an example of the therapeutic process in healing relationships, I use David Sedgwick's book for professional analysts, *The Wounded Healer*. This book by Sedgwick, who is a Jungian analyst, was written for other professionals. It is not meant for the general public, who could find the content to be distressing. However, I believe it captures the real complexities and risks of parenting for all of us that no other source—that I'm aware of—has ever approached. It also demonstrates how difficult healthy parenting of a child really is. It truly takes a village, and it would be helpful if each village raising a child had a Jungian analyst in it like Sedgwick.

In the next section, I will give a few examples of analytic countertransference issues from David Sedgwick's book that seem relevant for the parenter of afflicted adults or parents of actual children, with my comments in brackets. Its use here is not to replace professional therapy but

to point out how the therapeutic dynamics that Sedgwick describes are also present in everyday parenting and, probably, all intimate human relationships. These examples certainly apply to the relationship between teachers and students.

As with other areas of specialized knowledge that I use in this book for understanding human nature, I am suggesting these interpretations only from the quadrune mind model's perspective. David Sedgwick was a faculty member of the University of Virginia's student counseling center during my academic year as a predoctoral intern at UVa; however, I did not receive direct supervision from him.

Therapeutic Process for Parents and Parenters

Merriam-Webster defines "transference" as the redirection of feelings and desires and especially of those unconsciously retained from childhood toward a new object (such as a psychoanalyst conducting therapy), cxviii and "countertransference" as psychological transference, especially by a psychotherapist during the course of treatment. cxix As parenting dynamics, these definitions translate as the unconscious feelings and desires that a child has toward their parent, and the unconscious feelings and desires that the parent has toward their child, respectively. Unconsciousness means that the person is not self-aware of these feelings and desires, as is always developmentally true for infants and children, as well as for most adults. The same is true of the dynamics between parenters and afflicted adults with whom they have a parenting relationship. It is also worth noting that parents and parenters are not the same people by definition. In fact, a healthy child can parent a scared infant, or even their infantile-minded mother or father by soothing their own parent during the parent's angry outburst. Of course, this is not a healthy relationship for the child, and being stuck in that relationship without other healthy parenters in their life may afflict the child's development and prevent them from reaching healthy adolescence and Grownuphood.

These are continued efforts to contain and re-route the countertransference to fit the patient's perceived need. But the analyst's feelings cannot be artificially altered or role-played. Changes have to be authentic—and the patient has to wait.... One hopes that the appropriate, needed response is in the making.^{cxx} [In parental terms, this means that parents cannot fake healthy nurturing feelings toward their children on demand. If the parent lacks trust or confidence in the child to meet a certain challenge, that message will be "felt" by the child, no matter how much the parent wants to be supportive. Expressions of faith must wait until the parent, or parenter, actually comes to see the child, or a struggling adult, as competent. This requires allowing the child or struggling adult enough time and space to learn, perhaps from the parent or parenter, the skills required for competence in some area of life, while the parent or parenter self-contains the anxieties of their own uncertainty].

Sometimes it's hard to be an analyst. cxxi [Sometimes it's hard to be a parent or a parenter].

The therapist's unconscious, if struggled with, will slowly begin to move in directions the patient requires. CXXIII [I take this to mean that parents must take time to question their impulsive reactions to a child's behaviors. Sometimes parents may be afraid to admit to themselves that they are treating the child in a certain way, in order for the child to meet the parent's emotional needs. For example, the parent's need to feel more powerful, loved, intelligent, good, or beautiful than the child. If the parent can bear recognizing such self-serving purposes in their treatment of the child, and step away from those purposes, then there is mental room for the parent's intuitive behavior to become more fitting to what the child really needs from the parent].

When the countertransference gets too "hot," the therapist has to shut down. Introspection becomes the technical measure to get oneself started again. [It is crucial that when the parent or parenter is reacting with intense emotion to something the child or afflicted adult has done or said, that the parent or parenter can abort the explosion with which they are on the verge of attacking the child. Intense parental emotion has less to do with the child than with the parent's own sense of control, values, or authority. To be a healthy, nurturing parent or parenter, inward reflection of one's own behaviors and emotions must come before any parenting can be done to help a child or afflicted adult develop skills to manage their own behaviors and emotions].

"You get the patients you need," as they say in Zurich, and how.... Thus, when a patient (or his imagery) says something like "You are rigid and heartless like my father," my experience is to believe him.... (Harold Frederic) Searles... cautions analysts against "using the patient to bear the burden of all the severe psychopathology in the whole relationship."cxxiv [We get the children we need. Our children, or the afflicted adults with whom we form relationships, will intuitively discover our own personal afflictions that corrupt our ability to be the loving parents we want to be and, maybe, believe we are. The child or afflicted adult desperately needs us not to fool ourselves and to really become more healed so that we can be the nurturing, loving parent that all children and afflicted adults of the world need. Consequently, the harshest criticism a child makes to a parent usually has truth in it; for example, "You're mean!" It takes a Grownup parent to be willing to see the truth (but it can set them free from being an afflicting parent). It is not a pleasant lesson for parents to learn, but it has the best benefits for us that life can offer. The healthy parent takes Searles' warning above seriously; that is, to not require the child to take all the responsibility for the problems of parenting, while the parent remains blameless. If the parent cannot, or will not, take any of the responsibility for the relationship's difficulties, then the child has little recourse but to accept their identity as "the problem"].

The decision to analyze rather than act out is often hard to maintain under patient and countertransference pressure.... The patient repetition of fly-fishing reminded me of analysis. CXXXV [It is difficult for the parent or parenter to stay focused on their own reactionary feelings and behaviors in the face of persistent demands (needs) acted out by the child or afflicted adult. This is a real test of whether or not there is a Grownup in the room. That is, Grownups are not people who overwhelm others to make them do what they need. That behavior is the only strategy available for wailing infants who are hungry, if they are ever to be fed. On the other hand, like fly-fishing, it requires the parent or parenter to develop, over time, the patience to skillfully meet recurring emotional provocations with self-reflective, self-disciplined, appropriate responses. The same way a person learns to fly-fish with a meditative, calming spirit].

Where love reigns, there is no will to power, and where the will to power is paramount, love is lacking. —Carl Jung. CXXVI [A parent or parenter who is in power struggles with the child or afflicted adult is not in love with the child or afflicted adult, and neither can the child or afflicted adult feel loved. Each is desperately trying to "win" the power struggle in order to make the other person someone who can safely be loved! Both parties usually lose].

Patients are affected and potentially limited not only by what we can see in ourselves but what we can authentically "see" in them, or for them... If we cannot eventually envision their health, improvement or, better, their wholeness, then they will not envision them. CXXVIII [For religious parents, the belief in "original sin" (in Christianity, or any tradition's paradise lost in the past or paradise promised in the future) is probably the most damning obstacle to the spiritual growth of parent and child. The parent can only hope that the child will be "saved" from their inherent evilness by intervention of an outer force administered by acceptable representatives of "salvation." The child does not need someone, parent or priest, to "save" them in order to be "whole." Rather, they need to be nourished by a parent who can already see the child, and themselves, as wholesome. In this way, parent and child are healed together. The same is true for parenters and afflicted adults].

The ultimate responsibility for countertransference must rest with the analyst. [The ultimate responsibility for parenting consciously in a relationship with children—as well as in a relationship with infantile-, childish-, and adolescent-minded adults—must rest with the parent or parenter].

Good Parenting and the Four Minds

When Greenspan founded Zero to Three, cxxix he set the precedent for my use of his clinical work as a guide for good parenting. Zero to Three is a nonprofit organization with expert resources available to parents of young children.

Parenting the Fetal/Newborn Somatic (Reflexive) "Mind"

Healthy goals for a newborn include sensory balance and calm attention. The key is to provide the newborn with a comforting environment for all the senses, rather than invasive or chaotic stimuli.

As the newborn acquires the ability to balance sensory stimulation and attend to the external world calmly, the neuroconnectivity underlying the infantile behavioral mind continues to mature and begins to dominate. The newborn can engage with the external world safely.

Children, or adults, may become disoriented and confused by a sensory overload of sounds, sights, touch, or smells. Their reactivity is not a "mental" response, but a visceral one: physiology precedes psychology.

Parenting the Infantile Behavioral Mind

Healthy goals during infancy include engagement with the world, gestural interaction, and achievement of behavioral integrity to support intentional actions. The key is to provide behavioral guidance with emotional warmth, rather than punitive anger or suffering resentment.^{cxxx} In this way the baby's brain learns to experience emotional development as a pleasant addition to behavioral development.

All the baby's behaviors are related to basic needs for survival, which the baby is dependent upon others to fulfill. Because everything the baby does is related to survival, there is no comprising with a baby. Everything is all or nothing, life or death. Neither can the baby be concerned that mama has been working all day to buy food and is too exhausted to cuddle the baby. The baby's needs come before anyone or anything else; they must. The baby is not actually selfish, because the sense of "self" has not yet developed. The baby is just doing what babies must do to survive in a world that is full of competing demands for the parent's time, energy, money, and—importantly—attention. (This is why it takes a village.)

The first challenge is for parents to not see the baby as "evil" for being demanding. Also, vitally important is for parents to not see the baby as "competition" for the limited time, energy, money, and attention available in a family. Unfortunately, immature parents see babies as undeserving of "special" attention because, in fact, the immature parents need the same degree of attention for themselves.

For children and adults, signs of overstimulation include irritability; trying to cover their eyes or ears; and feeling overexcited, stressed, or fearful of the environment. It can be helpful to reduce the intensity of the stimuli in the environment. For example, lower bright lights or move away from crowded, noisy rooms.^{cxxxi} The goal of parenting is to provide a safe, comforting space in

which the person can balance the level of incoming stimuli comfortably and maintain calm attention to the environment.

Infantile-minded adults may present the same challenges and demands as a baby does for anyone who tries to parent them. Grownup parenters of infantile-minded adults understand that the adult, like an infant, is not "evil" or "selfish" in a responsible way. While the adults can be destructively demanding, sometimes on a global scale, they are not "irrational" or "unreasonable," because these adults do not have the mental maturity to be rational or reasonable (adolescent-minded traits). However, they can be behaviorally cunning, resourceful, furtive, and ruthless.

The infantile mind in adults is always scanning the environment for any threat to their sense of security (or privilege for many adults). Threatening movements are instantly registered, while threatening words or emotional shunning may go unprocessed. The goal of parenting is to first present a soft posture of compassion. The attitude is to woo the adult as one would an actual infant. A trusting, nurturing relationship must precede any efforts to set limits or provide corrections to the adult's destructive behavior. This step could take some time and energy on the part of the parenter.

Limits must be concrete and explained in simpler statements than you might think would be necessary for an adult. Consequences for breaking the limits need to be enforceable and applied consistently. Enforcement of limits should be done calmly, but not coldly. Having empathy for the adult's reactions to limits is important, even if they do not make logical sense. Give the adult a real choice of actions they can take. Remember, despite how the adult may appear physically, their mind is functioning at the level of a very young child (infant, in the quadrune mind model). Limits properly set can help the infantile-minded adult feel safer, more protected, and more secure than they would feel viscerally in a big, dangerous world on their own. CXXXXIII

Parenting the Childish Emotional Mind

With our behaviors increasingly directed in healthy, adaptive ways, the brain's connectivity naturally supports the development of the childhood emotional mind. Goals of childhood include emotional attachment to family, the ability to self-regulate affect (emotions), and an expanding range of emotions on which the child can calmly reflect. The key is to provide humanizing (humane, decent) reasons for the expression of emotions. The child learns that warm, caring emotions make sense in a world of disparate people.

Parenting goals include providing a safe relationship in which the child can experience and express a full range of emotions, both "positive" and "negative." The parent can help the child learn how to associate different emotions with different physiological (feeling) and behavioral

patterns. Parents can help the child learn that emotions need not be feared and that the child's most intensely felt emotions will not kill the parents. They help the child learn how to understand the meaning of their emotions in connection with the child's relationship to the human and nonhuman environment.

Parenters can provide the same safe relationship to adults experiencing overwhelming emotions. CXXXXIIII As the immature adult learns to experience their own emotions with equanimity, they can also learn how to express more healthy emotions toward others. A family is the beginning but not the limit of emotional bonding, except for an adult who is stuck in their childish emotional mind.

It is much more likely that we will love if we are not fearful that the emotions of a broken heart will destroy us. The more tolerable, and perhaps deeply meaningful, that our painful emotions become, the more willing we are to share our most pleasant emotions with others, even others who might reject, mock, or be mystified by love. Still, it is good to remember that "love" does not always conquer all. CXXXIV

Parenting the Adolescent Intellectual (Cognitive) Mind

The adolescent intellectual mind is an abstracting mind. It is no longer tethered to physical behaviors or to emotional attachments to physical objects, including people. The key is to provide abstract ideas that support an expanding sense of inclusivity; that is, of an organically whole world that can be expressed in comprehensible, abstract language, to help adolescents expand their mental capacity by using inclusive concepts.

For example, our capacity for emotional bonding begins with a physical group of people we come to call our personal family. The abstracting mind can imagine this same attachment to a "global family," which is beyond our limit to "see" with our senses. Of course, if we grow up in a fractious family, it may be more difficult to imagine a unified global family.

A risk for abstract idealism in adolescence, especially in a highly "intellectualized" society, is that the adolescent may become an ideologue. An abstracting mind can imagine abstract concepts that can violently divide humanity, such as ethnicity, sects, nations, and "race." For an ideologue, defending a made-up idea in the mind, such as, "I'm a superior person because of my ancestral tribe," or "my religion," or "my country," or "my name," or "my race" is more important than the physical environment, the social human environment, or even another abstract noun, cxxxviii such as "truth." Ideologues exist across the full spectrum of human thought, right to left and progressive to reactionary. Ideology may appear "intellectual," but is aggressively and irrationally anti-life. cxxxviii

The parenting goal in adolescence is to provide the teen with opportunities to learn how to think humanely; that is, "marked by compassion, sympathy, or consideration for humans or animals." Traditionally, reflective humane thinking has been associated with a liberal education. CXXXIX However, the language expressing such thinking can be duplicated by nonhumane thinkers, including machines. Both humans and machines can sound consciously humane by using symbols to discuss abstractions like God, self-concept, love, liberty, etc. From the quadrune mind perspective, language is not the measure of human consciousness. In fact, words can serve every level of consciousness for good or ill.

Words can be used by the infantile behavioral mind to mindlessly chant rituals, long past their living meaning in people's lives. Words can be used as vulgar weapons by the immature childish emotional mind, including in presidential campaigns. And words can sound noble and pious when used by the adolescent intellectual mind, even when endorsing policies of genocide.

Words can serve grownup-sounding thinking, but they cannot verify that the *person*, or *machine*, is thinking humanely, or is a spiritually conscious human being. A Grownup spiritual mind is not revealed by words, but by how it physically, emotionally, and intellectually interacts with the world.

The greatest cause of confusion for the adolescent mind is failure to distinguish between intelligence and consciousness. The adolescent treats cognitive intelligence (thinking, reasoning, or remembering) as the only "consciousness" that a human being has, or that matters.

Consequently, they believe that very "smart" people must also be very "conscious" people.

Nothing could be further from the truth.

One of the great insights a parent can teach an adolescent, or a parenter can teach an adolescent-minded adult, is the difference between intelligence and consciousness. Our level of consciousness determines what the purpose of life is to us. Intelligence is our ability to successfully fulfill that purpose. The purpose of life for an adult at the infantile behavioral level of conscious is self-survival; the purpose of the childish emotional mind is group survival; and of the adolescent intellectual mind it ideological survival. How "smart" a person is depends on how successfully that person "survives" at their level of consciousness: individual survival over other individuals for the infantile mind; tribal dominance over other tribes for the childish mind; or an ideological argument that can squash other ideological arguments for the intellectual mind. Machine learning can support these kinds of "smarts," but it requires a wholly different type of intelligence to successfully fulfill the purpose of life for the Grownup's spiritual consciousness.

Grownup Spiritual Mind is the Parent We Need

Whatever gift each of you may have received, use it in service to one another. —I Peter 4:10a

Life suddenly becomes very simple at the Grownup's spiritual level of consciousness: Gone are the behaviors needed to *guarantee* our personal survival in competition with everyone else, who are also acting to *guarantee* their own survival—even survival after death! Gone are the emotional bonds that *require* the survival of our family, nation, or God in competition with everyone else's emotional bonds that *require* the survival of their family, nation, or God. Gone is the "logic" that makes us "know" that our ideology *must* survive in competition with everyone else's "logic" that makes them "know" that their ideology *must* survive. The Grownup's spiritual mind is harmonious in behavior, emotion, and thought: Behaviors are directed to reduce suffering and increase healing wherever possible. An emotional desire for a good life reaches out to all. The overarching "ideology" is that life is more important than ideology.

CHAPTER 3: EXAMPLES OF THE FOUR MINDS IN ACTION

Working in the Hanford Nuclear Complex

Paul Rogat Loeb describes the first generation of workers at Washington State's Hanford nuclear complex. CXI They came to work during World War II. Hanford was the largest nuclear complex in the world. These workers produced the plutonium for the first atomic explosion in New Mexico and the bomb dropped on Nagasaki.

In Nagasaki 60,000 to 80,000 people died, but not all at once. "For months afterward, many people continued to die from the effects of burns, radiation sickness, and injuries, compounded by illness and malnutrition. There was no help for them. Though Hiroshima had a sizable military garrison, most of the dead were civilians." [CXII]

For Loeb nuclear weapons work raises some serious moral issues, but the people doing the work, and their families, had minds that finessed any moral misgivings. The mentalities Loeb describes follow the quadrune mind's infantile, childish, and adolescent levels of consciousness to the letter.

Infantile Behavioral Mind

Some of the first-generation Hanford workers immersed themselves in their jobs. One worker said, "I could just as easily have been working in a coal plant." Another said, "Or making lightbulbs." One worker explained that his job was to "make machines work."

The behavior is an end in itself. Just as an infant does not introspect about their behavior, these workers also were unreflective. The mentality of these workers was not capable of conceiving higher moral issues any more than an infant could. Neither could they experience emotional

discomfort because it, too, was beyond their capacity to experience anything other than the job at hand. The only thing they could do was "follow orders."

Childish Emotional Mind

Some workers built a team spirit that was shared by the whole town. The townspeople were proud of the work being done at Hanover. The high school football team was called the Richland Bombers. A miniature mushroom cloud appeared on football helmets, pep club banners, and school commencement programs. *Go Bombers!* A new breeder reactor called FFTF went online, blessed by the daily prayers of the town's largest church: "God bless the FFTF."

The townspeople, including the church people, enthusiastically functioned from the childish mentality, which splits the universe into "us" and "them." This psychological divide usually translates into a religious "good" versus "evil." To this herd/tribal mentality, "love thy neighbor" can *only* mean "love thine own." We are humans, they are not. We matter, they do not. It is as unlikely that childish-minded people can put away their differences with "others" as it is for a wolf and lamb to put aside their differences in the spirit of a higher kinship.

Adolescent Intellectual (Cognitive) Mind

Some of the first-generation workers took pride in the "ethic of invention." They believed that technical innovation was inherently good. Progress was good. Adolescent-minded workers deferred moral responsibility about nuclear weapons to "the men who know best." The Hanford engineers said they trusted the congressional leaders and Pentagon officials who had studied whether developing nuclear weapons was right or wrong. The engineers believed that those experts would make the right decisions.

The adolescent mind is an abstracting mind. It imagines things that our senses are unable to perceive. Two people can look at a tree and describe their perceptions of the physical object to each other and be in agreement under normal circumstances. However, two people can think about "progress" with very different mental conceptions of its meaning. In any event, the "moral good" of developing nuclear weapons was as nebulously abstract in those engineers' minds as were the lives and deaths of the people in Hiroshima and Nagasaki.

Grownup Spiritual Mind

No Grownup workers are described by Loeb because they weren't there. I don't believe that a spiritually mature Grownup would be working at a plant that makes components for bombs.

Tara Westover and History's Age of Reason

In her memoir, *Educated*, Tara Westover describes her experience of growing up in her family. Westover's descriptions of her various mental states inadvertently fit very well within the quadrune mind model. ^{cxlii} An earlier version of this material appeared in our essay profiling Westover's experiences. ^{cxliii}

Fetal/Newborn Somatic (Reflexive) "Mind"

Un-integrated brain. Westover was able to navigate loud, life-threatening machines without fatal distractions during the years she worked for her father. In the book she had previously described the "thunderous" sound of the "Shear," a three-ton "pair of scissors" used to fracture angle iron in her father's scrapyard business. Yet, the sounds of BYU's campus *battered* her. Whatever the cause of her severe discomfort, it surely was not the decibels involved. What seems relevant to the quadrune mind model is Westover's report that she "heard every sound individually."cxliv

The neurons of her brain did not know how to fire in a neurological pattern that her mind could recognize conceptually. The neurons in her brain had not yet learned to "fire together" in order to "wire together" to produce a unified sensory-perceptual *gestalt*, or a conceptual schema based on pre-experienced knowledge of what a university city was like. The neurons had never been integrated to do so. Consequently, her mind was disturbed by the indecipherable noise. After repeated exposure, and probably because she had an otherwise remarkably healthy brain, it was able to settle into familiar patterns of perception in order to transform the noise into conceptually meaningful sounds.

Dis-integrated brain. Westover's life had taken her from a "junkyard" in Idaho to Cambridge University in a lightning-quick 10 years. She said it "nearly stopped my breath," and she wondered if she had "changed *too* much" in that time. Under tremendous stress, she "continued to unravel." CXIV

Westover suffered signs and symptoms of extreme stress: awakening nearly every night outside, screaming, where she had run to still asleep; days-long headaches; grinding teeth; and skin breaking out, provoking comments by strangers on the street. Finally, "One evening, I got into an argument with a friend about something trivial, and before I knew what was happening, I had pressed myself into the wall and was hugging my knees to my chest, trying to keep my heart from leaping out of my body. My friend rushed toward me to help and I screamed. It was an hour before I could let her touch me, before I could will myself away from the wall."

The quadrune mind model can help us understand Westover's symptoms in a new light. The most relevant point for the quadrune mind is Westover's inability to feel comforted by her

friend's touch. It fits a hypersensitive, pre-infantile "somatic" state. Shock stuns the adolescent/reasoning, childish/emotional, and infantile/behavioral sub-brains, leaving the person reactive only to sensations, unable to recognize anyone as another person, much less as a friend wanting to help. The only information that the brain is processing are the internal physiological sensations of extreme biological threat. The mind is almost completely unable to take in any information from the external environment.

Re-integrated brain. Under severe stress, Westover's brain regressed to a lower state of consciousness that was better integrated than the higher state of consciousness was in that environment. However, because of Westover's mental resilience, her neural circuits were able to re-integrate to the intellectual level of consciousness by the next morning, allowing her to reflect, "So that's a panic attack." cxlvi

Infantile Behavioral Mind

Much of *Educated* is devoted to Tara Westover's efforts to survive, and live with, the rituals, rules, and roles of her survivalist father, even after she physically moved out of his home. Survival of the self is the only goal of the infantile mind. For any group, including families, which holds survival as its essential purpose, traditionalized rituals, rules, and roles are instinctively felt to be vital for its continued existence. Everything a person in such a group does, says, or thinks must be done in the service of preserving the group's homeostasis.

It is important to note that this is not the same "survival of the group" that I discuss throughout this book in relation to the childish mind. That's because individuals in these families are not treated as individuated "selves." The family unit is the "self" for these infantile families. For example, we see this in families where one person is designated as the "smart one," another the "pretty one," another the "screwup." The smart one must never say anything stupid, the pretty one must never act ugly, and the screwup must never do anything well. Forcing each person to play a unidimensional behavioral role maintains the homeostasis of the family unit as a single individual.

To act contrary to the needs of the group, even in seemingly minor ways, is not tolerated. Depending on the group, dissidents may be labeled, for example, as ingrates, radicals, or heretics. The homeostatic drive of the infantile mind is coopted by the family to preserve the survival of the group, which is experienced in the same way that an infant experiences its own self-survival.

Childish Emotional Mind

Westover describes an ultimatum from her mother: "The bulk of [the message] was a lecture on loyalty: that families forgive, and that if I could not forgive mine, I would regret it for the rest of

my life. Her mother prayed for the day that Westover could come running "through the back door, shouting, 'I'm home.'"cxlvii

Her mother describes Westover's return as if she were a young girl. The implicit message to Westover was that if you are not loyal to the family, you will be cast out (and die, or at least be dead to us). The herd/tribe/family's survival is more important than the survival of any individual member. There really is no "individual" as a separate, individuated "self." This is the state of a family (or nation) dominated by a childish emotional mind. It is the same mind that leads cults or tribes to "shun" disloyal members. "Shunning" is devastating for the still-attached exile. The physical abandonment of a young child is literal death. Westover had the higher level of consciousness of the intellectual mind available to her. She could feel the real emotional pain of estrangement from her family without "dying."

Adolescent Intellectual (Cognitive) Mind

After completing her Ph.D. and returning home, Westover writes that she came back to her father's house "as if I were a troublesome calf who'd wandered from her herd." cxlviii

She went to see her grandparents. "God had to be behind such a wondrous success, Grandpa said. My parents must have been called by the Lord to do what they have done, to be great healers, to bring souls to God. I smiled and stood to go. He was the same gentle old man I remembered but I was overwhelmed by the distance between us. I hugged him at the door, and gave him a long look. He was eighty-seven. I doubted whether, in the years he had left, I would be able to prove to him that I was not what my father said I was, that I was not a wicked thing." CXLIIX

She wrote her mother that she wanted to see her but was not ready to see her father. Her mother's response was that she could see her and her father, or Westover would never see her mother again. "She has never recanted." cl

Westover provides vivid descriptions of the emotion-wrenching choices she faced as a person who chooses intellectual freedom over emotional family unity, while understanding that the emotional pain is not death. The confrontations and resulting estrangement between Westover and her family recreates patterns of the sometimes-violent schisms between emotionally-charged family/cultural traditions and the heavily rationalized "modernity" of the West's "Age of Enlightenment." This existential conflict between differing levels of consciousness continues in many families, states, and nations to this day.

Grownup Spiritual Mind

The discernment of a spiritual mind cannot be made from reading a memoir. It can best be seen within the context of an ongoing, personal, mutually inspiring relationship. Westover's testimony of herself is that she is "a changed person, a new self," which is one of the characteristics of the awakened spiritual mind.

Religiosity versus Spirituality

Religion is a good thing for good people and a bad thing for bad people. —Reinhold Niebuhr

Twentieth century American theologian Reinhold Niebuhr was criticized for the statement quoted above. But it seems obviously true. The quadrune mind model explains why the world's religions can be, and often are, subverted into destructive forces by our immature, sub-spiritual minds. clii

In his book, *The Book of Miracles*, Kenneth Woodward describes in straightforward statements the progression of humanity's relationship with God. At each stage humanity follows the same developmental sequence culturally as the quadrune mind would describe for a mentally maturing individual. I will show how the quadrune mind's four levels of consciousness fit within various Christian traditions. Furthermore, these distinctions may be applied to the differences found within all world religions. I interpret Woodward's statements through the quadrune mind perspective.

Infantile Behavioral Mind

Imagine... a time when human beings lived in intimacy with God, and so with all other living beings and with one another. —Kenneth Woodward

The infantile mind is associated with the brain stem, which maintains the homeostasis of the baby's body. In an adult who typically functions at the behavioral level of consciousness, homeostasis becomes maintenance of the status quo. This infantile mentality is resistant to change and tends to believe that there is no such thing as "progress," or change for the better. After all, what could be better than the present circumstances that provide a person a sense of safety, security, and stability in an otherwise chaotic world.

In the adult's world, nothing perseveres longer and preserves the status quo better than *institutions*. In Christianity the Eastern Orthodox and Roman Catholic traditions have persisted seemingly unchanged for nearly two thousand years. That is an eternity for an individual. From the quadrune mind model's perspective, the "intimacy" cited in Woodward's statement is interpreted as the undifferentiated sense of a "self" in infancy. Consequently, the timeless

eternity of the institutional church is experienced by the religious member's infantile need to sustain the status quo as a timeless eternal existence for the individual.

Liturgical services are dominated by ritualized speech and behaviors. The behavioral mind depends on habituated rituals to define the meaning of life as well as the method of defending that meaning of life against all powers, worldly and supernatural. Consequently, the church as an institution and the identity of the member is inseparable. This mentality believes that humans were made for the church, not that the church was made for humans.

The continuance of the institution is more important to the religious adherent than *anything*, including the lives of children, women, or homosexuals. Stout defenses have been maintained for egregious acts of sexual abuse against children, humiliating discrimination against women, and claims that homosexuals^{cliv} and human beings of other gender variations are damned. The institution will be protected by coverups and appeals to scripture regardless of the human suffering the agents of the church cause.

Childish Emotional Mind

Imagine, then, that humankind emerged and separated itself from God, and from intimacy with other living beings. —Kenneth Woodward

This statement describes the child's emerging independence from the will of all-powerful parents. The two-year-old can say, "No!" to the all-powerful parents without (we hope) being struck down. In any case, the umbilical cord has been psychologically cut. The child now recognizes that they exist separately from other people and pets. Individuality is developing. The child no longer experiences the world as merely an extension of their own essential nature.

Emotions become the dominant motivator of the child's behaviors as the emotional limbic system becomes more fully integrated. The goal of the child's life is to approach what feels "good" and evade what feels "bad." The world seems to fall apart into two separate and mutually exclusive halves.

The adult who remains in the emotional childish level of consciousness experiences every positive feeling as "good" and every negative feeling as "bad," or "evil." Anything that causes bad feelings must be avoided, and if it can't be avoided, then the source of the bad feelings must be destroyed. On the other hand, anything that makes the childish adult feel good must be conserved, defended, and fought for, even if it also causes great harm or death to other people. Harming other people for the sake of feeling good is perceived as morally right.^{clv}

The adult emotionally divides the world based on their good versus bad feelings about any threat to their group's survival. Threats could be political, religious, ethnic, or anything the

person fears, like secret societies or aliens from across the border or from outer space. This subrational perception of threat explains how otherwise irrational, ill-fitting causes fuse perfectly well within the adult's emotional "us versus them" childish mind.

Consequently, the childish religious-minded person may believe that God wants them to destroy people who do not think, look, dress, vote, have sex, or pray like them. This shows up in churches that pray for their military forces to have politico-military victories by killing other human beings; athletes who credit God for their winning play over another team of human beings, who may have also thanked God if they had made the winning play; or the welcome belief that a deadly disease, like AIDs, is God's punishment of fellow human beings for committing evil sex. The examples are endless.

Adolescent Intellectual (Cognitive) Mind

Imagine further that in their separateness, individuals imagined themselves as autonomous beings, distant not only from God but from their own common humanity. —Kenneth Woodward

This statement perfectly identifies the intellectual adolescent mind that is no longer anchored by habituated religious rituals or encumbered by tribal emotional bonds to provincial groups. The imaginative mind of the adolescent is free to create reality out of nonmaterial thought. Such thought requires that the neocortex is more well-integrated than the emotional limbic system or the behavioral brainstem.

Such abstract thinking produces concepts like alienation, angst, nihilism, anomie, absurdity, and atheism, as suggested in the above quotation from Woodward. But the healthier version of the "Age of Reason" mind can also create ideals such as morality, clvi ethics, fairness, altruism, and equity.

Unitarian Universalism exemplifies an enlightened belief in the individual's imaginative power to take responsibility for their faith journey. For example, UU believes "in the Golden Rule, loving our neighbors as ourselves, working for a better world, searching for truth with an open mind, using reason to help us explore religious ideas, and granting everyone the right to choose their own beliefs." Similarly, Alcoholics Anonymous' Step 3 states that the alcoholic, "Made a decision to turn our will and our lives over to the care of God as we understood Him," clviii suggesting the importance of the enlightened individual in the process of spiritual awakening.

Grownup Spiritual Mind

Imagine, finally, that these autonomous individuals were to rediscover their common humanity, their connections to other living beings—and eventually reunite with God.

—Kenneth Woodward

Spiritual consciousness is a lot less showy than religious fervor. Spiritually mature humans do not use rituals to step out of "ordinary" time. Time spent in the physical world is itself sacred. Spiritually mature humans do not use religion to separate the wheat from the chaff. It is not that there is no difference between the two, but rather that wheat and chaff are spiritually inseparable. Miracles are not ascribed to religious denominations, which separate people, but to a universal spiritual consciousness that is also the potential state of mind shared by all humankind.

Spiritually mature humans understand that differences of belief need not be fatal. It is what we do to other people because of what we believe that is fatal. The spiritually mature human questions, and abandons, beliefs that lead to the harm of other life or the earth, no matter how divinely inspired that belief was believed to be.

To do harm because of religious beliefs means that the person either got God's message wrong or has the wrong God. The God of human consciousness gives no spiritual merit to any action that causes suffering, intentionally or inadvertently. Collateral damage is never an acceptable cost of a good cause.

Spiritual consciousness does not have a sponsored brand. Clx That is, the spiritually conscious human may be an active member of an organized religion, but membership is not readily apparent in their spiritual life. Religious self-serving motivations, such as a belief in a doctrine in order to have eternal life, are inherently anti-spiritual. Clxi Religions offer rewards for the adherent like gifts included in the envelopes of requests for charitable donations. Nonprofits in our capitalist society seem to believe that people need incentives to do good, although research does not always support this assumption. Clxii In any case, rewards cannot be pursued with a spiritual mind from the quadrune mind perspective. Any survival motivation for ourselves or even our loved ones attaches strings onto good actions. Strings are not spiritual. Selfless service, not reward, motivates our true human nature.

Recovering from Trauma

Psychologist Philip Zimbardo identifies the progressive mental stages that victims go through as they recover from a traumatic event like the San Francisco earthquake. The stages of recovery described below came from victims' answers to survey questions asked by psychological researchers. Clari The first four steps of psychological recovery are identical to the quadrune mind's stages of a person's normal mental growth. The mental traits fit the progressive categories of fetal/newborn, infantile, childish, and adolescent. Zimbardo's fifth step is a return to a new "normal" life, with adaptations made for the long-term destruction caused by a disaster. For example, after a flood leaves a small town so changed that some businesses are permanently lost. This step would not necessarily correlate with the Grownup mind.

Fetal/Newborn Somatic (Reflexive) "Mind"

Traumatized people initially experience shock, confusion, and possibly "psychic numbness." They are unable to comprehend what has happened. This recovery period may last from a few moments to several days.

The brain has been hit with an overwhelming burst of sensory overload. The neurons that normally fire together to combine sensations into understandable mental concepts have been temporarily disconnected from each other. Sights, sounds, tastes, and touch are experienced in isolated fragments, which the person is incapable of understanding as a "whole" meaningful experience. The mind has been traumatically regressed to the functional state of a newborn.

Infantile Behavioral Mind

The next higher level of consciousness is expressed as "automatic action." Cognitive self-awareness is largely absent, and the person will have little memory of what they did during this mental state.

This condition of behavior without cognitive self-consciousness is a regression to the mental state of infants. An infant is capable of intentional behavior for survival, but without any understanding as to *why* the behavior serves their survival. This developmental level of consciousness accounts for infant/childhood amnesia, which is why people are unable to remember episodes from their first few years of life. However, even without conscious memories, early life experiences can lead to the development of mental disorders during adulthood. Clxiv

Childish Emotional Mind

In the early aftermath of a disaster, people who have shared the trauma may feel a sense of great accomplishment because of their "communal effort." Without a sense of collaboration, people can lose hope and feel helpless to rebuild their lives.

Developmentally, this level of consciousness in a community of survivors is equivalent to how a young child is emotionally attached to their biological family. The energy it takes to rebuild is shared with the community family. Although this is usually a temporary feeling of "family," emotional bonds among some survivors may last for years, or even a lifetime. As with a young child, a sense of being isolated or neglected can lead to feelings of hopelessness and helplessness, which also may last a lifetime.

Adolescent Intellectual (Cognitive) Mind

Zimbardo describes his fourth stage of recovery as a "letdown." The community's energy to recover and rebuild has been exhausted. He says that the survivors feel the impact of the tragedy emotionally. But what he describes is that the people finally "comprehend" the magnitude of the tragedy in their lives. A growing awareness of the larger world makes the victims conscious that the rest of the country has forgotten their continuing state of emergency.

In the quadrune mind model, this state of awareness precisely fits the adolescent intellectual mind. The emotional lift of community cooperation has given way to a mental awareness of the long future of suffering likely to be experienced by the person. At this intellectual level of consciousness, the subjective, abstract sense of time (chronesthesia) has returned. It is at this point that lawsuits against people who may have contributed to the causes of the disaster may be considered. For example, if shoddy workmanship in building construction by greedy and corrupt contractors and government officials is discovered to have contributed to a building that collapsed and killed many people living or working there.

Grownup Spiritual Mind

The fifth stage described by Zimbardo is "recovery." People have adapted to the changes brought about by the disaster. Presumably, for most people, they will return to the level of psychological functioning that they had before the traumatic event.

Survey questions asked the "subjects" about their thoughts, social behavior, and health. Items regarding spiritual consciousness, as the natural state of the healthy human mind, were not included in the survey questions, whether such questions could have been formulated by the researchers or not.

CHAPTER 4: MISCELLANEOUS SAMPLES OF THE FOUR MINDS

Autocrats and Infantile Narcissism

Although autocrats may seem like the most powerful adults in the world, from the quadrune mind model's perspective, they are actually infants surrounded by children and adolescents.

Infantile Behavioral Mind

The great insight is not that the emperor has no clothes; the great insight is that the emperor is just a very little boy playing dress-up. Infantile narcissism is on full display in the autocrats of the world. Infantile narcissism is not synonymous with narcissism as defined as "selfishness," because the infant has not yet developed a sense of "self." As a result, the infantile mind of

autocrats is neurologically incapable of recognizing others as separate "selves" with their own emotions, thoughts, hopes, and needs.

Infants, and infantile-minded autocrats, don't distinguish internal and external worlds—all objects in their world are extensions of themselves. An experiment conducted by Harlene Hayne and Carolyn Rovee-Collier^{clxv} involved 2- to 6-month-old infants lying in their cribs. A string was tied to the foot of each infant and connected to a five-object mobile hanging above them. Infants were trained to perform a foot kick, which moved the mobile. The infants were highly reinforced by their "power" to "make" the mobile shake because it gave them sensory pleasure (the only type of pleasure comprehendible to an infant) to see the mobile move. Of course, the infants had no conscious understanding of how their foot and the mobile moved together. The infant's body just "knew" that it felt good when the foot kicked, and the mobile moved. In the same way autocrats just "know" that they feel powerful when they kick their foot and armies, bombs, or their followers move. Their infantile mind does not consciously process how they affect other people, or how other people experience their behavior. In fact, autocrats must have helpers interpret for them what their actions mean. This is usually done on an ad hoc basis, because the infantile mind cannot formulate a cohesive, realistic view of how the world works. Each action must be explained again and again, because the explanation is not comprehended and stored in long-term memory.

Similarly, the autocrat's demands are not based on *wanting* others to do their bidding but *needing* others to do so in order to preserve their own homeostasis, which we know is the purpose of life for the infantile mind. The autocrat's demands are not conscious decisions, any more than an infant's cry for mama is a conscious decision. Autocrats are not "coldly calculating" or "maliciously evil," they are simply behaving in a way that will give them a sense of safety. Sadly, the effects of their mindless behaviors can have life and death consequences for thousands of people. These autocrats can have great influence because the certainty of the infantile mind can attract large numbers of childish-minded adults to their "cause" (which we now know is nothing more than feeling powerful for the autocrat).

Childish Emotional Mind

The followers of autocrats are operating from a primarily childish emotional mentality, which is easily manipulated by the survival-oriented language and behavior of the autocrat. The childish mind seeks security for their group in the form of a strong leader who makes them feel like they will be protected from their "enemies," whether by building a wall to keep immigrants out or by making claims that they are a chosen group of people above and beyond all others. Of course, these children acting like adults don't realize that their strong leader is actually even less mature than they. As we know, the childish mind can cling as tightly to the survival of the group as the infantile mind clings to survival of the self, so the followers of autocrats can appear as

single-mindedly dedicated to the autocrat as the autocrat is to their own survival-serving behaviors. Both operate below the level of rationality.

Adolescent Intellectual (Cognitive) Mind

The helpers, or political enablers, of the infantile-minded autocrat are often functioning from an adolescent mentality. They're motivated to work with the autocrat for their own ideological aims, whether that is capitalism, communism, or any other "-ism," which the quadrune mind model tells us is the primary source of purpose for the adolescent-minded individual. Of course, the autocrat's adolescent enablers get a shock when the autocrat, whom they think made absurd promises as a tactical maneuver to gain power, actually acts on those absurd promises. The adolescent-minded enablers discover that the autocrat does not think like an adolescent, as they do, but behaves like the infant that the autocrat is. And as any teenager who has babysat can tell you, it's not so easy to get an infant to do what they want, no matter how smart the adolescent thinks they are. The infant ends up calling the shots with their tantrums.

Grownup Spiritual Mind

No one mentality can resist autocrats alone. There must be many people of high consciousness who are able to collaborate to meet autocracy as constructively as possible, including people who study autocratic power and are prepared to resist it, civil society organizations, media and journalists, public officials, and professional politicians. Clavi Resistance to autocracy looks to be a time when the spiritually-minded Grownup must leave the mountain top for city streets and town halls. It is full engagement with the often ruthless autocratic force without becoming ruthless in opposition that is required. Meditation and internal serenity are helpful for the task but are not enough to serve the larger social needs of the 21st century world. Claviii

Compassionately Correct

In 2014, I was co-presenting to a group consisting mostly of faculty members of a university in southeastern Oklahoma. Lawriii I wasn't aware at the time that 2014 would be a high temperature year for heated arguments between those who were pro- and anti-politically correct language.

One of the men in the group spoke rather resentfully about the repressiveness of the "politically correct" advocates. Other than this issue he was congenial with a fair sense of humor. For example, he proudly claimed a percentage of Neanderthal DNA.

Grownup Spiritual Mind

My spontaneous response was to suggest that we could be *compassionately correct*. div My thinking was that it made more sense to be willingly compassionate, as a life value we hold for

ourselves, versus being "politically" coerced to be "correct" in ways that may not reflect Grownup spiritual values at all. For example, when someone is being "politically correct," they may speak about gender and ethnicity the way they are supposed to but have no emotional connection with the actual people they are talking about. The words may convey respectfulness of differences among people, but the person's heart is not engaged with the humans they are speaking about. That is, the contents of our mind do not determine our level of consciousness, and language can be used to serve the purpose of any of the four minds. clxxi

Disaster Capitalism^{clxxii}

It's not personal... it's strictly business. —The Godfather (Movie)

Infantile Behavioral Mind

The infantile behavioral mind is associated with the "reptilian" brainstem in Paul MacLean's triune brain model. Nothing reflects this utter reptilian-like cold-bloodedness than the destruction of people's lives in horrific ways because, "It's just [good] business." Disaster capitalists make money for themselves by exploiting vulnerable victims of disasters and by creating the conditions for profiting from future disasters.

"Disaster capitalism has taken many forms in different contexts. In New Orleans after Hurricane Katrina in 2005, there was an immediate move to replace public schools with charter schools, and to bulldoze public housing projects to make way for gentrifying townhouses. In Puerto Rico after Hurricane Maria in 2017, the public schools were once again under siege, and there was a push to privatize the electricity grid before the storm had made landfall. In Thailand and Sri Lanka after the 2004 tsunami, valuable beachfront land, previously stewarded by small-scale fishers and farmers, was seized by real estate developers while their rightful occupants were stuck in evacuation camps." Clxxiv

Although the disaster capitalists do not murder people in person, their level of consciousness is the same as the ruthless mob murderers portrayed in the movies. From the quadrune mind perspective, the phrase, "It's not personal, it's just business," means, "I am going to do something horrible to you, but I can do it with no qualms because I don't see you as a human being." I wonder, would they treat someone who is a "human being" in the same way? How would one qualify for humane treatment? It has been said, "To a crooked board a straight board looks crooked." To the reptilian-minded person human beings look like lunch.

Growth Capitalism and Degrowth Economics

Infantile Behavioral Mind, Childish Emotional Mind, and Adolescent Intellectual (Cognitive) Mind

In the Growth Capitalist's Political Personality Quiz, clxxvi growth capitalists are described as "[A] crusader for capitalism and economic prosperity: Growth Capitalists are savvy and business-first industrialists. They feel that economic growth and prosperity should be maximized at all costs. Regulations, policies, and taxes just get in the way of progress." Their devotion to the ideologies of "capitalism" and "progress," both abstract ideals, suggests that growth capitalists are operating from their adolescent intellectual mind.

However, there is much in this webpage that would support an infantile behavioral mind's visceral defense of the status quo, as well. For example, "You are a true American traditionalist, who doesn't see a reason to change something if it seems to be working just fine.... You are a natural defender of the old guard, and often value respect, dedication, and dignity beyond all else when speaking to others.... You believe that environmental health and social equality are not pressing concerns, unless they pose an immediate threat to economic health." Economic health seems equated with infantile-minded survival.

There are also elements of an "us versus them" childish mind. For example, "You believe that business-first policies, moderate regulation, and low taxes will secure American global economic supremacy for years to come." However, the "us" appears to exist in an infantile, Hobbesian world, with no absolute monarch to constrain their individualized selfish aims: "Top Values: As a Growth Capitalist, your values optimize for economic prosperity and growth. Everyone should have the autonomy to fend for themselves and pursue their ambitions without substantial economic regulation.... Self-determination: Individuals need to fight for themselves in order to succeed."

The site acknowledges a "weakness" in the growth capitalist's personality: "Lack of empathy: Your wealth-first mindset makes it difficult to empathize with the disadvantaged." And finally, the capitalist's personality includes the essential definition of greed: "You primarily derive fulfillment out of maximizing your wealth and economic success over time. As someone who always compares themselves to others, you always want more – so it is difficult to ever have enough." Claxviii

Disconcertingly, these characteristics seem to be points of pride for the growth capitalist. This highlights one of the great challenges to Grownups who are trying to enact societal change—attributes of the immature minds are often the attributes most celebrated by societies around the world. This is likely because many more people are operating from immature minds than Grownup minds, meaning most of those with wealth and the power to dictate societal values, like growth capitalists, are in fact infants, children, and adolescents acting like adults. As a result,

the Grownup often finds themselves going against the prevailing current, and the swimming can be effortful.

Grownup Spiritual Mind

The philosophy of degrowth economics looks more consistent with the spiritual values of the Grownup. Broadly, degrowth economics means "shrinking rather than growing economies, to use less of the world's dwindling resources." A competing alternative to growth capitalism is the "green new deal." However, because we know that the content of the mind does not determine the level of consciousness, despite their "progressive" values, there is a significant risk that proponents of each idea will think of themselves primarily as ideological opponents rather than humanitarian collaborators. The Grownup would advocate for the approaches of degrowth economics or the green new deal because they better serve all people, animals, and the environment, not because they are "right," and growth capitalists are "wrong." If these approaches no longer benefitted the world, they would be abandoned and new approaches explored, because a philosophy itself is only of value as far as it reduces suffering and increases healing, when seen from the Grownup mind.

Education

Adolescent Intellectual (Cognitive) Mind

Formal education has become an abstract activity far removed from real life. clxxx A professional experience I had almost 50 years ago, while I was a certified school psychometrist/psychologist, revealed the large difference between the abstractified classroom education and personal life experiences. I was administering an "intelligence" test to an elementary grade level child in a nonurban area of eastern Oklahoma county. He was referred to me because of difficulties performing his school work. One of the test questions was, "Name the four seasons." The "correct" answer was *spring, summer, fall or autumn, and winter.* The boy, who gave earnest effort to his answers said, *deer, turkey, fishing, and quail.* He seemed relieved that he could recall the fourth season. In my report to the school, I wrote that the child probably functioned well in his (real) daily life, but that learning to answer abstractified questions about a relatively alien, hypothetical world might be difficult for him. clxxxi The disconnect between what really mattered in his life and pencil and paper tests might inaccurately appear as low general "intelligence," defined academically. I fear that his school "career" did not go well for him.

Foxhole Mentality

The concept of "foxhole mentality" has been appropriated for purposes far removed from the life-or-death combat arena. Clausii However, foxhole mentality has a specific meaning in the quadrune mind model for veterans who have shared the possibility of death in combat. In the

following sections, I will use the quadrune mind model and "object relations" as possible explanations for combat veterans' reported experiences of intense brotherly love and intense survivor's guilt. clxxxiv

Infantile Behavioral Mind

Brotherly Love. The combat veteran's feelings toward their squad members has often been described as intense brotherly love. For example:

"They also found in combat the closest brotherhood they ever knew. *They found selflessness*. They found they could love the other guy in their foxhole more than themselves. They found that in war, men who loved life would give their lives for them." clxxxv

"Greater love hath no man than this, that a man lay down his life for his friends." —John 15:13.

It is not a coincidence that the military word "infantry" has the same etymological roots as the developmental word "infant." Both derive from Latin meaning "incapable of speech." The baby has yet to learn to speak and infantry squads must sometimes move silently to concealed positions avoiding detection before a battle.

The training for combat, and the willingness to kill another human being, requires that the soldier be trained to react instantly at a behavioral level of consciousness to orders and threats, amid chaos and terror, which a more "conscious" person could not survive. Military training must repeatedly drill combat-training behaviors into habits deeply enough to be carried out in combat without the possibility of a doubting thought or fearful emotion. In the quadrune mind, this level of consciousness is the infantile behavioral mind. And, just as all infant behavior is survival related, everything in combat infantry training is also a life-or-death issue.

In the foxhole, a squad of soldiers facing the threat of an imminent violent death may become "infantile" in their perception of who they are. That is, they subjectively experience their body and the environment in the same way as an infant does. Infants have poorly developed perceptions of where "they" stop and "other people" begin. The sense of self is mushed up against the perception of other people as separate individuals, or "objects," in an unperceivable external world. As with infants and their biological family, the combat veteran's sense of self is organically connected with their brothers in the foxhole.

Consequently, the infantile experience of oneness, of love among squad members, is the primal experience of *love* that a human being can have. It is the original relationship of baby with mama, the source of life and all that is good. It is rare in adulthood to have that kind of union with another adult.

Even though marriage ceremonies may include a reference of two lives becoming one, it is not like the oneness experienced by combat veterans. When veterans return to their spouse, there may always be a sense that a "greater love" is missing. This sense of a "less-than" love can be very difficult for the spouse and the veteran.

Survivor's Guilt. Survivor's Guilt is defined as a particular kind of guilt that develops in people who have survived a *life-threatening situation*. Classification Because foxhole combat stress may cause a regressive and organic fusion of the pre-self with others, it also creates feelings of intense survivor's guilt. One organic squad "organism" is created in the minds of the soldiers in the squad. A separate whole "self" for each soldier no longer exists.

Selflessness is a characteristic of the powerful, sublime union with God experienced by the spiritual mystic. Setting aside the metaphysical implications, including John 15, there is this same "charismatic" lack of "self" in the infant's bond with mama and in the unity of a combat squad. In selflessness, all barriers of self-defenses, of otherness, of isolation, dissolve away. Instead of separate individuals, each squad member is just one organ of a larger organism. This kind of survivor's guilt is not a psychological state, but a biological one: Survival is not experienced as an individual, but as an organ of the one squad body. How can an arm survive without the rest of the body? Or even a heart? Survivor's guilt in this case is not a psychologically "irrational" guilt; survival is viscerally incomprehensible and cannot be defended by the survivor.

"Gut" Reactions clxxxix

Infantile Behavioral Mind

The instantaneous judgements we make of people on the most superficial appearances would not be possible without our most primitive mind. Automatic reactions to "new" people are driven by the habits (biases) of our infantile behavioral mind. The more immediate and certain we are that our physiological or behavioral reaction to a person "feels right," the more certain it is that our reaction has very little do with awareness of the external reality. A more realistic, cognitive evaluation of the present moment requires our higher adolescent intellectual mind to be the dominant level of consciousness. The intellectual mind takes more time and mental energy to conclude what is happening than the conditioned behavioral mind, but it allows us to react with more appropriate behaviors and emotions to the present situation. And it allows us to put away our old biases and bigotries to become more humane.

Irredentism

Infantile Behavioral Mind

Many years ago, I read a short newspaper clip quoting a Chinese general who stated that he would sacrifice a thousand Chinese lives to preserve a foot of Chinese soil. Cxc Chinese irredentism was also clearly observed when Hong Kong was "redeemed" by China. Chinese irredentism continues regarding Taiwan, as well as many other territories and sea lanes. Russian irredentism drives Vladimir Putin's acquisitive aggression in Crimea and the Ukraine.

Irredentism, from the Italian word *irredento* ("unredeemed"), is a territorial claim based on a national, ethnic, or historical basis. Researchers have cited ethnic cohesiveness, national identities, and a unifying sense of history as possible causes of irredentist conflicts between nations. Many explanations have been offered for what appears to be a complex phenomenon, without any general agreement on the cause of irredentist (territorial) wars.^{cxci} It may be helpful to remember that almost all irredentist conflicts are started by authoritarian regimes.

Authoritarian regimes are run by the same-minded people who are authoritarian-style parents: they set rigid rules of conduct without explanation and expect their citizens (children) to obey them or face severe punishment. From the quadrune mind perspective, the language of autocrats who instigate territorial wars reveal an infantile level of object relations. That is, the autocrat's sense of "self" is enmeshed with the identity of their nation, and they *need* the territory of the nation to be "whole," in order for the autocrat to feel "whole." Consequently, territorial integrity is more important than human life.

Irredentism is not foreign to the United States. Consider "manifest destiny," which not only applied to "Providence's" instruction in the 1840s, but also Theodore Roosevelt's presidency. Carcilla Throughout its course, manifest destiny was worth the deaths of any non-European-Americans who might be in the way.

Irredentism and the Real Tragedy of Abraham Lincoln's Assassination

The South's efforts to secede from the Union followed the same political arguments made by the fathers of the American revolution. Lincoln's *Gettysburg Address* dated the birth of the nation to the Declaration of Independence but hinted that a new nation might rise. Lincoln began his presidency with a war for American unity at the expense of justice for the enslaved. Furthermore, preserving the Union was more important than the lives of people who fought for the United States, possibly indicating irredentism on Lincoln's part. In any event, Lincoln ended his presidency as a victor in a war for freedom of the enslaved. By the Second Inaugural Address, Lincoln was able to announce the birth of a reconstructed, mutually healing America. The Second Inaugural Address, which announced the rebirth of a new nation, is one of the most

Grownup-minded documents in political history. This was the Lincoln who was assassinated. cxciv In the post-Reconstruction era, it is the South that "redeems" a united America for itself. That is, the South's cultural value of a caste system is overwhelming the United States' expressed values of equanimity and inclusiveness. We have suffered for it to this day when we are again in a period of reactionary secessionism from an aging, united America born in the Age of Enlightenment. cxcv

Life as a Perpetual Competition Elimination Game

The individual and team competition elimination games that bombard us on television and streaming services engage our infantile and childish minds. They are not nearly as innocuous as they may seem, considering the great deal of personal and societal harm that comes from most people being stuck in their infantile and childish minds. Of course, the owners of media have a financial interest in keeping viewers at these mentalities so they will "get hooked" and "binge watch" these competition shows. The more viewers fear going outside or are emotionally emmeshed in the show, the more they will consume and line the media mogul's pocket with millions and millions of dollars.

Infantile Behavioral Mind

Television channels and streaming services love to sell the drama of "dog eat dog" competition reality television—and it's an easy sell to the infantile mind, which experiences life as "me against the world." The infantile mind thinks that all of life is like these single-winner competition elimination games—a constant need to defeat and survive, every moment of every day. Where cooking shows used to be about learning cooking techniques and maybe having fun, now they are high-stress, time-limited battles to become the sole winner of cooking. Whether the competitors are world-class chefs or, shockingly, children, the infantile mind is the one calling the shots in these competitive environments. (It's worth noting that stressful environments can regress us to a lower mentality^{cxcvi}—is this why every aspect of competing in and watching these shows seems stressful?) In the United States especially, the soundtrack for competition shows often includes tense, anxiety-inducing music and long pauses right at the moment when the victor will learn that they have defeated all the other competitors to be the "only one left standing."

No wonder children and teenagers in the U.S. are experiencing increasing levels of anxiety. Carrier They're being raised in a world with infantile-minded competition reality shows telling them that life is a constant struggle to be the sole survivor. In this context, the reassurance of being a member of a group that will help protect them is gone, much less the opportunity to mature into a Grownup capable of helping others. Where is Mister Rogers when you need him?

Childish Emotional Mind

The childish emotional mind sees the world as "us versus them." This mentality is captured in the equal popularity of team competition elimination games—namely, sports. Just go to any sports bar on game night and watch how emotionally involved the fans are—it's as though their team winning or losing is the *most important thing in the world*. Attending a game in-person provides an even greater dose of childish mind-engaging emotion, with constant calls for cheers and loud music to get spectators "pumped up;" i.e., emotionally emmeshed. The childish mind is incapable of viewing the outcome of "my team's" game with any amount of equanimity.

The vast overevaluation of the childish mind in American society can be easily seen in the extreme wealth awarded superior performers in team athletics. For example, a basketball player making as much as a *million dollars a week* might feel like what they do is that important. Of course, having millions of childish-minded fans who "love" or "hate" the player reinforces this feeling.

Every unmet need in American society, including for natural resources, healthy food, clear air, unpolluted land, clean water, wealth distribution, social opportunity, gender equality, fair labor conditions and wages, access to housing, democratic representation, religious freedom, health care, freedom from crime, treatment for mental illness, and protection from political and gun violence, is viewed as a childish "us versus them" problem to be solved by converting, curing, dominating, shaming, isolating, or eliminating "them."

This same group identity life-or-death mentality leads to conflicts throughout the world, such as that between Israel and Palestine, with extremely tragic results. Even at world levels of destruction, it is still the immature, childish "herd" mind that creates the suffering, sometimes for centuries. The only reason actual children are not seen as dangerously violent is that they do not yet have the resources of bombs, bullets, and missiles that adult children have. And there is still hope that they will grow up well. The only reason we believe that the people in power are more-or-less mature adults, and not just bigoted, fearful, angry, greedy, jealous, hungrily ambitious, damaged children is because we don't know any better, yet. (Although many of the people who work for them or live with them know it, if not always on a conscious level.)

Grownup Spiritual Mind

The shift to a "level of consciousness" problem changes an "us versus them" conflict to be "won or lost" into a shared task of everyone becoming more spiritually mature. —Tom F. Shadid^{cxcix}

The Grownup mind sees the real contest of life as whether or not we can become spiritually conscious of ourselves and each other in time to heal the world. (And of course this is not

actually a contest, as everyone wins when spiritual consciousness is achieved.) This may be less dramatic than a championship playoff basketball game, but the stakes seem to be higher.

Litmus Tests for Friends and Family

Infantile Behavioral Mind

You may have had an experience in which someone had a sudden regressive shift to the reptilian-like, infantile behavioral mind. For example, people seem to be having a good time at a party. The emotional atmosphere is friendly. Suddenly you make an offhand, casual comment (it could be about sex, gender, religion, politics, climate, aliens, or *anything* else) and someone who was playful a moment before, reacts to you with a chilling verbal response or glare. You can almost feel your blood turning cold. Everyone freezes. The comment, which most people may have hardly noticed, was a threat felt viscerally—not intellectually, emotionally, or even physically—to the *life* of the reactor. Reassuring them that you were just joking (you may have been quite serious), or that you are very sorry for hurting their feelings (even though they are having a visceral, not emotional, reaction), or that you can see their point of view (you can't, because there isn't one), will usually be to no avail. Sometimes such a single comment and their reaction to it can end a lifelong friendship or split a family.

You have crossed the line. You have said the "wrong" thing. You have failed their "litmus test;" that is, "a test in which a single factor (such as an attitude, event, or fact) is decisive." You have failed and are no longer a trusted coworker, life-long friend, or beloved son or daughter. You are suddenly "dead" to a person who, moments earlier, may have loved you. They are deeply wounded if you criticize or disagree with them, and they lash back. In psychoanalysis this instantaneous mind regression might be a reaction to a "narcissistic injury." Cci

In the quadrune mind, both litmus tests and narcissistic injuries are representative of the infantile behavioral mind. It is only at this level of consciousness that an adult can react to opinions as a threat to their very existence. It is intolerable for them to be in any relationship with a person who challenges the one thing that holds their world together. The content of the mind may be about religion, politics, ethnicity, or other values, but the level of consciousness of *all* litmus testers is the infantile mind.

The infantile mind can only understand behavior, which is perceived by the adult as either life-sustaining or life-threatening. They cannot reflect upon human emotions or thoughts. This means that emotional bonds with family or friends and logical arguments of open-mindedness will be trumped by a failed litmus test.

Before this split you may have had an inkling that the person you loved, respected, and/or feared had an "issue" that was non-negotiable. They may have expressed an intolerance toward

other people who said or did the wrong thing, but you did not believe this hard-heartedness could ever be directed toward you, or that it represented the "real" person you knew. But you were wrong.

In general, this black-or-white dualistic view of life is consistent with the infantile-minded behaviors of autocrats, drug addicts, or hell and brimstone preachers. cii Infants acting like adults appear in myriad places.

Grownup Spiritual Mind

Of course, the Grownup has no litmus tests for anyone to pass to be counted as a human being worthy of compassion.

Mad Mobs

[T]he influential classes, and those who take upon themselves to be leaders of the people, are fully liable to all the passionate error that has ever characterized the maddest mob.

—Nathaniel Hawthornecciii

Childish Emotional Mind

Nathaniel Hawthorne was right to lay the responsibility of mob violence on the heads of people who have social, financial, and political power. Mob riots are never as spontaneous as they appear. CCIV Neither is it a coincidence that the emotional state of people in a mob resembles the emotional state of fanatic sports fans in an exciting, emotionally-charged win CCV — they posture and celebrate with the same behaviors. In both cases individuals lose their separate identities to become emotionally bonded into one mob identity, as do children who adopt a gang identity.

It is also not coincidental that sports mob rioting is more associated with team sports than, say, golf. Specifically, team sports that are more hyped by the culture as emotionally "important," such as international football (soccer), American football, baseball, ice hockey, and basketball would probably foster violent team (mob) behavior more than team bowling. The childish (herd) mind is not able to distinguish the real-world, external meaning between a sports team's championship and a political team's destruction of a national capitol. Subjectively, the experiences are dominated by the same emotional part of the brain.

Naïve Realism^{ccvii} and Implicit Bias^{ccviii}

Infantile Behavioral Mind

Have you ever had a vehement argument over something you just know is true, but the other person just can't see? Maybe you believe that everyone has a right to their opinion, but facts are facts!ccix What if our bitterest arguments are caused because we treat *our* opinions as

though they *are the* facts, which would be obvious to any right-thinking person who is not an idiot? What if the other guy is thinking the same thing?

Adult confrontations that allow for no consideration of the other person's point of view result from an immature mental state of egocentrism. Infants naturally have an extreme egocentric view of the world. Adults who have not outgrown the infantile level of consciousness also cannot understand that another person could see "reality" differently.ccx

The conflict here is not over adolescent ideological differences. Naïve realism and implicit bias arise from the pre-intellectual infantile mind, in the form of dogma. Facts exist individually and are not organized into schematized ideologies in the infantile mind.

Grownup Spiritual Mind

As unsettling as it may be, the Grownup understands that there is not just one "real world" that every "normal" person, like them, should be able to see. The Grownup realizes that how we see the world is necessarily an idiosyncratic (re)creations made by our brain. No two people will ever see anything in exactly the same way, whether that includes physical objects or abstract values. CCXI The spiritually mature approach to conflicting views of reality is to spend at least as much time and interest in learning how the other person "sees the facts" as in sharing your own point of view. It may lead them to very different conclusions that we still disagree with, but are able to understand. CCXII Of course, this open-mindedness to learn their thinking may lead to the possibility that we are the ones whose mind is "changed."

Even perceptions that most people believe are in the "real" world are actually created by our mind, and may or may not exist at all "out there." For example, the color "pink" does not exist physically for our senses to detect. cxiii It is also well-known that animals possess very different sensory receptors (which would represent "superpowers" for humans) to perceive their real worlds. cxiv Minds are as diverse as the brains from which they emerge, across species and within the human family. This is a good thing for the Grownup; it makes the world less "solid," but more interesting and entertaining.

Punishment and Disciplineccxv

Infantile Behavioral Mind

For the behavioral mind it is only the act of punishment that matters. There is no mental concept beyond the administration of emotional or physical injury to a "mis-behaving" person—adult or child. There are no such things as mitigating circumstances^{ccxvi} for the adult or child. The act of breaking a rule is all that is considered; it is black and white. Easy. Punishment is designed to stop "bad" behavior by "bad" people. Helping them to become "good" is not

relevant or may not even be considered possible. Law and order—that is, securing the safety of the privileged and frightened classes—is the goal.

Grownup Spiritual Mind

For the spiritually-minded Grownup, every person is more important than any rule. To find an equitable (humane) balance between individual behaviors and social order within a society is much more difficult than just knowing "right from wrong."

A distinction is made between punishment and discipline. Punishment is designed to cause suffering in the "offender." Discipline is focused on providing the resources and skills needed for an individual to become more healthily self-disciplined (not self-punishing). ccxviii It takes much greater skill, time, patience, attention, and love to teach discipline than to administer punishment. And doing so requires a nurturing relationship.

Self-Loathing

One of my most refractory psychology clients was a middle-aged woman who was convinced that God believed she was worthless. Nothing in my therapeutic toolbox had any effect on her rock-solid conviction that at her core was something irredeemably rotten. Her power to be unforgiveable was greater than God's power to forgive.

This attitude is shared across humanity, leading us to be contemptuous of the "human" nature in us and in everyone else. CCXIX It justifies many of the dehumanizing things we do to ourselves and other people. No matter how low our expectations, we remain astonished at what idiots people are—even as we look for and expect to see them.

Grownup Spiritual Mind

We are the ones we have been waiting for! —Lisa Sullivan

To change our expectations of human beings we must change our perception of what "human" nature is. It is the central point of the quadrune mind view that human nature is inherently spiritual. The challenge for Grownups is that they share the responsibility (with everyone else) to be healers in the world. Instead of spending their lives criticizing, judging, and feeling superior to others, the Grownup is fully engaged in the messiness of human life as an equal, but without contempt for human life.

We can become the caring healers we have been waiting for.

STEM for Grownups

Science, technology, engineering, and mathematics (STEM) learning is not enough to make an educated human being. There is no letter in the acronym STEM to indicate the presence of wisdom. —Tom F. Shadid^{ccxx}

The push to emphasize science, technology, engineering, and mathematics in American education came in response to the military threat raised by Russia's space program in the 1950s. The appeal to education as a weapon in global power plays has been repeated in the 21st century in response to global economic competition. ccxxi

Adolescent Intellectual (Cognitive) Mind

No society can survive if everything changes but its institutions; no society can stay sane if no one is to innovate except the technologists. —Barbara Ward

The original STEM represents abstract concepts. There is an inherent absence of even a moral, much less spiritual, judgement as to how science, technology, engineering, and mathematics will be used, or consideration of the consequences of their application to real human beings. This STEM is clearly the property (also, an abstract concept) of the adolescent mind. Of course, this STEM could also be used for the improvement of humanity's well-being. CCXXIII

Grownup Spiritual Mind

Nobody made a greater mistake than he who did nothing because he could do only a little.

—Edmund Burke

I propose a Grownup version of STEM: Skill, Time, Energy, and Money. Everyone has some of these four traits available to them. A few people have massive amounts of each, and many people have small amounts. But we all make choices about how to use each of these four resources, which mark the differences between the immature and the Grownup levels of consciousness.

For example, the immature-minded person uses their Skills to develop sophisticated ways to spy on anyone who may be a threat to the state, which is everyone just to be safe, and because they can; Time to scheme how to subvert democracy for partisan advantage over the demographic majorities; Energy to binge on distractions for years at a time; or Money to corrupt other people for the petty, self-serving purpose of continuing their privilege and financial power.

The Grownup typically gives whatever amount of the spiritual version of STEM they have for the well-being of others. Skills may be modest and usually not newsworthy but make real differences in the lives of some people. Time may be a few moments of humanizing eye-to-eye

chatting at the checkout counter (for as long as there is still the option to have real people at checkout counters). Energy is reserved, as much as possible, from daily needs to be available for the joys and sorrows of shared human relationships. Money is used as one way to support the aid of others beyond our immediate influence.

Stop and Grow a Rose Garden

Grownup Spiritual Mind

Ultimate Sacrifice or Ultimate Gift

"Ultimate sacrifice" is usually understood as giving up one's life in service of something worth dying for. The "ultimate" part cannot just be about dying, though. Everyone dies, sometimes in great service for others, without much fanfare by the public. "However, death as "sacrifice" is often made by patriotic people for widely-held, highly idealistic reasons. Idealism is an identifying trait of the adolescent mind. Many adolescents go to war with seemingly high, noble ideals, "ccxxvii such as the "warrior ethos." Dying well as an adolescent patriot may mean to die bravely in combat after killing as many of the "enemy" as possible. On the other hand, for the Grownup, dying well can be the ultimate gift to the living.

Adolescent Intellectual (Cognitive) Mind

Death as a Sacrifice. The adolescent is willing to die for their ideology, but more important to the military and the nation is the adolescent's willingness to kill another human being. The ultimate sacrifice is not death, but a human being's willingness to become less than human in order to bring death to another human. Or, if slain in combat, to have invited another human to be the killer.

This death represents humanity as divided in ways that are worth going to war over. It reinforces nationalistic, ethnic, and religious ideas of victimization and deprivation or

exceptionality and privilege. It is a privilege, indeed, almost Godly, to deem that another human being is worthy of being killed, like an animal.

This is Death as the Great Divider of humanity.

Grownup Spiritual Mind

Death as a Gift. There is another way to view death. In his book, Our Greatest Gift: A Meditation on Dying and Caring, Henri Nouwen describes dying as "perhaps more human than any other human act." He contrasts the feeling of pride in us when we are recognized as being different from other people through our achievements, as a person of distinction. On the other hand, Nouwen says, another kind of joy is a sense of being a sister or brother of all people, as members of one family. Death, in this case, can be our final act of solidarity with each other. Nothing during our lifetime can divide us as much as death unites us in our shared fate. CCXXX

Our attitudes towards death have been socially conditioned as a competitive, divisive force—I may have to fight you to the death, it's either you or me. The Grownup mind allows us to reconceptualize death as a gift, something that unifies us and can encourage us to become more caring and loving in the face of it. The fact that we will all die can be even more reason to work tirelessly to reduce suffering and increase healing for all while we are living.

Nouwen says that the question is not, "How can I exert more power and influence during my lifetime?", but, "How can I be of further service to family and friends after my death?" One gift we can give is to live our lives with others so that they want to continue their memory of us in their life, instead of living as though we had never existed. We can live so that the people we have influenced are people who share our caring for the world, the well-being of all, and the courage to love.

From the Grownup's spiritual mentality, a human's purpose in death is to die well; not as a "sacrifice," but as a gift.

This is Death as the Great Unifier of humanity.

Upstream Actions/Downstream Consequences

We recently had our windows replaced. The two-man crew had called another pair of men for additional help with a large sheet of plate glass over our two-story high entry hall. As they were sizing up their options, I asked one of the men, who had 25 years of experience replacing windows, if this is an unusually difficult setup for them. He said, "Yeah, it looks like when they built the house, they never considered that the windows might one day need to be replaced." They did it successfully with the help of an indoor scaffold. The man said he had only seen window crews resort to scaffolding once before. They had always been able to do the job with

ladders. The outdoor team did use ladders as they handed the glass down. Mike, one of the original two men, who was on a ladder, said, "I'm glad the glass didn't break on me."

It occurred to me that over the years I have seen many repair and remodeling workers meet similar complications after they get under the surface of things. Substandard, jerry-rigged, corner-cut, or thoughtless work upstream—at the time of construction or by a previous repairer—make the downstream work more difficult, expensive, or even dangerous, as it was for the glass replacement men. (Another common upstream complication are the half-truths or whole-lies that salespeople tell to make the sale, unbeknownst to the delivery and installation workers who must then calm disappointed or angry customers.)

Other examples of upstream laziness or cheapness that I've seen lead to downstream problems include 1970s padding that was used under the carpet in a relatively expensive house built in the 1990s; low-quality, brittle window caulking that had to be chipped off one tiny piece at a time by a man who had priced the repair job expecting higher quality, peelable caulking; and ducts that problematically zigged and zagged, causing headaches for the duct cleaners.

Mindless, or careless, of the consequences to others, people metaphorically "upstream" do things in all areas of activity that make life more difficult for the folks who live "downstream."

Upstream: No quality childcare. Inferior schools. Unsafe neighborhoods. Unstable housing. No social or legal support. Limited access to healthy food and healthcare. Poor access to transportation. Discrimination and bias. *Downstream*: Stress parents and families, child abuse and neglect. Lack of opportunity in life due to insufficient education. Living with constant fear from gun violence and the prevalence of gangs. Heart disease, stroke, cancer, diabetes, respiratory conditions, obesity, arthritis, and other chronic diseases. Fewer job opportunities and more pedestrian fatalities. Low self-esteem and chronic stress.

Less metaphorically, another example of immature adult behaviors by upstream folks causing serious problems for downstream folks is taking place along the Colorado River. *Upstream*: "[L]ocal leaders are looking for the next economic development opportunity [after the oil and gas companies leave]. And they may have found their solution—divert more Colorado River water with a new dam and reservoir that will generate more hydropower, irrigate more agriculture and store more water for emergencies.... *Downstream*: "The project in Rangely, Colorado, and ones like it come at a crucial time for the West as the federal government, seven states and 30 tribes that rely on the Colorado River look to use less and find solutions to save the system's integrity."CCXXXXII

Grownup Spiritual Mind

It takes a lot of Grownups to work out solutions to the world's inequities caused by "upstream" people's behaviors on our fellow humans "downstream." At least, we can recognize that such behavior is not just unethical or immoral but obstructs the spiritual development of everyone who lives along the river.

Mike, the window guy, said, "I'm not a 'make it work' guy; I'm a 'do it right the first time' guy." And he was. Mike cared about the quality of his work and how what he did affected the people who lived with the results of his work. It is called integrity by labor. I'm grateful that Mike is not the only worker we have had who is skillful at his craft and respectfully mindful that his skills can make life better for others. It's what a Grownup would do.

You Can't Change the Game by Winning It ccxxxiii

Childish Emotional Mind

The childish mind sees everything in life as a dramatic conflict between "us" and "them." This conflict *must* result in us "winning" or "losing" to them. We deserve to win; they deserve to lose. God wants us to win; God wants them to lose. Because God is on our side, then the conflict must be "Good" against "Evil." With God on our side, if we lose then it must be that "they" used Satanic or witchy superpower against us.

If you win, it does not end the game. You must always be vigilant less you are caught off-guard. For example, look at any progressive *or* conservative battle that was won in the past but later lost, leaving the "players" fighting again to regain their former victory.

Grownup Spiritual Mind

The Grownup recognizes that as long as you play the same win-lose game, no victory is forever. The game goes on as long as there are willing players. For example, the political power game will swing from Left to Right and Right to Left throughout changing times over the decades. Victories that "should" be understood by everyone as representing how the world "ought" to continue will be challenged by "stupid" people who think *their* way represents the world as it "ought" to be.

The Grownup recognizes that the goal of the game is not to "win" but to make the competitors "better" at the game they want to play. For example, the more evenly matched competing basketball teams are, the more likely that both teams will see improvements in their play. CCXXXIV

More to the point of the quadrune mind is that "winning" our favorite conflicts with others does not make the human condition better as much as we think it will. The best outcomes for

everyone are to use conflicts as opportunities for enhanced well-being for people on each side of the dispute and to create better solutions than either party could have come up with alone.

It is only when we play the "mutual responsibility to spiritually grow up" game that outcomes will be worth our time. And be a game that can make us all better human beings where no one must lose.

THE END

If we believe that we already know how "The Story" ends, then we have reached a foregone conclusion about what the story "means" to us. And probably, what it should mean to other people. Religion can provide a narrative for our "foregone conclusion" of the meaning of life that we want, and need, it to have. No further distressful mental exertion is required on our part. Doubts are eliminated. We are 100% certain of how we *should* act, feel, and think in every situation, even if we do not do it. Everything that happens in the world can be understood in light of the ending that we already know. And the ending is guaranteed.

Could Shakespeare be right? Is life merely a stage we all playact on, or was he just being theatrical? Shakespeare must always be taken thoughtfully. After all, he has been credited with inventing the human. CCXXXVII We can extend and refine his idea. We can typecast the world's actors by their levels of consciousness into different kinds of life's plays.

Infants who are acting like adults do not know that there is a story. There is no prologue and no epilogue. There is no character development. They do not move about the stage interacting with various other characters, moving the plot along. There is no plot. *Only they exist*, as an "actor-stage unity," in tableaux. Everything else, including the people on stage and in the audience, are props, which substantiate the actor's vital role as a permanent, unchanging stage fixture. The status quo *is* the play.

Children who are acting like adults are stars of an exciting drama. They are part of an ongoing conflict between their group of actors and another group of actors (sometimes never seen on stage). The beginning of the play sets up who they are and who, or what, the adversary is. There is always an adversary, otherwise there is no drama to the play. The outcome is held in suspense, but they may have an important role in the ultimate success of their side. They might be the heroic conqueror or the heroic martyr or the heroic terrorist. The approval by some members of the audience is vital to them.

Adolescents on stage mistakenly believe they have written the play. The beginning and ending points of "their" play are set based on the ideological point they want the play to make. The story can function quite apart from "real time." The play is expected to turn a fine profit. The inherent distinctions among the actors, stage, and the people in the audience are not functionally clear. Consequently, any potential effects the play may have on the audience are generally considered irrelevant, if considered at all. Perfunctory content warnings are provided.

Grownups do not just take on a role. They also make costumes, props, and scenery. They take their role seriously, but not themselves. They understand that the play is not fully scripted but is largely improvisational. The beginning and ending of their play can be imagined by the Grownup, but its meaning is considered suggestive with room for other interpretations. They take responsibility for the content of their play but do not try to control the audience's reactions. The people in the audience are expected to dynamically interact with the actors on stage.

Grownups know that everyone in the audience is the star of their own play, as well. Plays that may be heroic, tragic, comedic, farcical, or absurd. But always plays that deserve attendance. Shakespeare was partly right. We are all actors, but we are also directors, stagehands, and playwrights. And critics. We have our favorite plays and plays that offend us or make no sense to us. It might be wise for us to be humble in our criticisms. Our own play may be offensive or nonsensical to others, as well.

Spiritually conscious adult human beings know that the end of one story always has in it the beginning of another story. But it is a story that Grownups accept as one they will never know. It may extend their own story, negate it, or make their completed play irrelevant. In any case, they will not be around to ghostwrite the next story. Living well with that understanding is a sign of living "inside" of life as it comes, and goes, instead of being on the "outside" of life trying to force the plot and, therefore, the meaning of the story for everyone.

In the end, the Grownup recognizes that playacting creates real emotions and real meanings for real life: The play's the thing, after all. And the entire universe is our stage.

POSTSCRIPT: A NEW APPRECIATION OF HUMAN NATURE BEGINS

Do you know how far into the future we can predict? 0 seconds. Consider anything unexpected that has happened to you: Meeting an old friend in a distant city or a car wreck. How far into the future were you aware that this would happen? (Recalling a "premonition" after the fact that something would happen does not count. They are usually retroactively "felt" memories.) If most of our days are undramatically repetitive, it does not mean that we predicted it, we just expected it. And we were lucky.

The *Homo sapiens* species has been around for about 300,000 years. During that time, we have been mostly ignorant and confused about what our nature is. According to the quadrune mind model, our true nature *naturally* emerges from the healthy, well-integrated, mature human brain. We have seen it in notable examples across the centuries, such as Gautama Buddha. But these "perfected" people have often been counted as exceptions to human nature, other worldly "spiritual" in a way that someone who is "only human" could never be.

For too long, we have thought that saints "rise above" our inherently "evil" human nature. Saints are designated as exceptional because they are not "bad" like the rest of us. However, from the perspective of the quadrune mind model, this negative view of human nature is wrong, resulting from incorrectly associating the behaviors, feelings, and thoughts of immature adults, not Grownups, with human nature. The healthy adult human brain shows us that the real down-to-earthiness nature of our species is inherently to be spiritual, wise, healing stewards of all life and the earth.

The future of humanity is uncertain. Whether you believe you know the future or not, what you believe is insignificant compared with how you live because of what you believe. Belief in a certain kind of God, Gods, or no God, or belief in evolution or divine creation, does not really matter spiritually. What matters is how you live your life today, and how you plan for the life you want to live tomorrow, if you have the chance.

There is only one kind of mind that a healthy adult brain produces: One that has the capacity to have a sense of responsibility to, and communion with, people never met, all living beings, and the earth. This is the well-integrated brain, when our quadrune minds become fully one in a healthy and mature way. In good times or at the end of the world, our Grownup nature is expressed in the same way: acting to reduce suffering, increase healing, and share the joy of living with all creatures. CCXXXIX Just as a Grownup's brain is well connected internally, so is the Grownup's life well connected with the external world.

However, earth is not sentimental about human beings. If we fail, we fail. Earth goes on. If consciousness is the intrinsic nature of the *universe*, as a panpsychist might say, then it surely

does not serve only the wishes of local *Homo sapiens*. Nevertheless, the whole universe *is* our home *now*, as much as it is for every other natural creature on earth.^{ccxl}

In a bold biological development, we have been given a brain capable of a sublime state of spiritual consciousness unknowable by any previous creature on earth. Just one catch: we cannot achieve it on our own. The 21st century seems to be a critical opportunity for human beings to help each other grow up and be the spiritual beings we really are.

God may have brought the human brain into existence, but we all share the responsibility to bring the human mind into existence. Human nature was not lost in some corrupted paradise of the past. Moral innocence has more to do with immaturity than spiritual purity. Human nature is a shared aspiration we have for each other today. It is through our daily kindnesses that human nature appears.

Where are the Grownups? Will they come home in time to help raise the children? Will we grow up before our play is over? Or perhaps, it is the end of our run on this stage and a new cast of a new play may be in the wings, waiting for their premier. Maybe a better play, maybe not. In any case, a play we cannot imagine. But, so far, our final curtain is still up.

Spiritualty Beyond Rationality

The development of full artificial intelligence could spell the end of the human race.

—Stephen Hawking^{ccxli}

Quadrune mind is a secular model of spiritual consciousness for a post-rational world. ccxlii
—Tom F. Shadid

The Age of Reason is over. René Descartes', "I think, therefore I am," and Immanuel Kant's, "Dare to know," were progressive ideas a few hundred years ago. However, by the time Ayn Rand blessed self-interest as the Highest Good, rationality's days were numbered. CCXIIII That rationality can never again be considered the embodiment of a unique human consciousness (nature) results from the rise of machines that can "think" faster than human beings. And, with social media pumping "knowledge" that is unrelated to reasoning into the minds of billions of people, "daring to know" what is "true" for ourselves, without considering the consequences of our thinking by an adolescent mind that seems to equate abstract opinions with objective facts, is no longer even morally defensible. Nevertheless, the adolescent mind still seeks rationally-based solutions for our existential failures, such as recommending dramatic and radical social and technological changes to prevent societal collapse CCCXIIV or ineffectually trying to preserve the liberal democracies of a diminishing Enlightenment age. CCCXIIV

The 21st century is the first post-rational century in human history (earlier history being prerational and rational^{ccxlvi}). What do we do when we can no longer trust each other to be rational? For example, when we drive on our streets, invest in the stock market, elect our governors, make a mistake on a customer's order, or have an argument with family, friends, or strangers? What is human life like without reason to guide us? Can we learn to live with each other in a radically different way, one that no longer depends upon being "rational."

Life after rationality would be different for each of the four minds of the human brain. For most people, it would probably be regressive, or at least keep them stuck at their current predominant level of consciousness.

For example, without the continuing societal support of a strong adolescent rational culture, people primarily functioning from their infantile behavioral mind may become even more rigidly attached to their superstitious rituals, especially religiously-based rituals that are not necessarily grounded in thoughtful (rational) theological foundations. They may become more adamant proponents of tougher law and order responses to any perceived threat to their safety. They may increasingly engage in behavioral addictions, such as drugs, sex, or gambling. They may actively support more militaristic solutions to domestic instability and give greater support to the death penalty, including for an expanded range of crimes. And they may return to older traditional values, but with a greater degree of isolation.

For childish emotional minded people, loss of the dominant rationally-based culture could lead to a greater susceptibility to emotional demagoguery, whether political, religious, or cultural. They may experience stronger group identification without any sense of their individual self. They may become ever more fearful of anyone who is different in almost any way. They may seek increasingly intense emotional escapes, such as high-stakes sports, as well as more intense auditory, visual, and other sensory entertainment. They may spend more time within fantasies that are completely separated from any external reality. And we could see a dramatic increase in group conflicts domestically and internationally with increasing levels of violence.

The end of rationality really is the end of the world for people with an adolescent rational mind. The adolescent-minded adult may think up increasingly complicated arguments in favor of their favorite ideology. They may try to reinforce the value of morals and ethics for a rationally civil society. Using the power of imagination, they may come up with more rational solutions for the problems of an age in decline. And they may experience increasing levels of alienation, angst, nihilism, anomie, or absurdity as reason continues to decline.

Thus, for the three immature mentalities, the end of the Age of Reason is terrifying. Individuals stuck at these mentalities can still grow up, but it may be even more challenging than it has been up to this point. As we know, the immature minds equate homeostasis (for the infantile

mind) or status quo (for the childish and adolescent minds) with survival. Amplifying currents of change could leave these individuals feeling very insecure, which is a hard place from which to mature. We will need even more Grownups to help parent the many scared adults that the post-rational age will inevitably engender.

Fortunately, this post-rational period, which I will call the Age of the Grownup, is when spiritually mature Grownups will thrive. No longer will Grownups have to justify their spirituality—their universal love, wisdom, sense of awe, and desire to reduce suffering and increase healing for all—in terms understandable to immature minds. For too long, Grownups have been isolated among immature-minded individuals who question their actions, feelings, and thoughts. The infantile mind can only understand Grownup compassionate acts as doing something nice to get something in return. The childish mind can't see Grownup universal love as anything more than love for family. The adolescent mind minimizes Grownup work to reduce suffering and increase healing as mere "morality." But Grownup spirituality is so much greater than this, and our spiritual human nature will finally enjoy its full expression after we move past the need to rationalize it.

The end of the Age of Reason is not a regression of human development, but the naturally evolving opportunity (and necessity) for humans to grow into our next level of consciousness: the spiritual. So far, technology has not been able to surpass human beings in spiritual consciousness.

If we can think more spiritually, and perhaps less rationally, than machines and other animals, then maybe we still have a uniquely meaningful place in life. However, spirituality does not exist isolated within an individual brain. Spirituality exists, and is revealed, in human beings' behavioral, emotional, and intellectual relationships between their mind and the rest of the world. How we move in the world and affect other lives and the earth shows the level of consciousness of our brain.

Some contributors to an integrated spiritual level of consciousness beyond rationality could include Carl Jung (*synchronicity beyond causality*), the human Jesus of Nazareth (*compassion beyond law*), panpsychism (*consciousness beyond subatomic particles*), and plant ecologist Robin Wall Kimmerer's "braiding sweetgrass" (*sharing wisdom with nature beyond scientific knowledge of nature*). CCXIVIII Incidentally, I believe Gautama Buddha is the greatest rationally-based spiritual teacher in history. However, some branches of Buddhism, such as Zen with its koans, have also gone beyond rationality (*paradox beyond logic*). Perhaps most importantly to understanding a spiritual consciousness beyond rationality, from a quadrune mind perspective, is Daniel Siegel's interpersonal, or relational, neurobiology (*integrated mind beyond individual brain*). CCXIVIII

The post-rational Age of the Grownup will be a time when Grownups will become more visible, recognizable, and connected. They will form communities to care for, support, and strengthen each other, providing much needed inspiration and energy to continue the hard work of parenting the world. CCX We may already be seeing this in global spiritual movements and in the popularity of spiritual thinkers and writers. For many participants (although not for all, as we know that content of the mind does not determine level of consciousness), the New Age spiritual movement opened the door to express spirituality beyond religion and experience new ways of connecting to God beyond rationality. The growing idea of spirituality as a relationship to God untethered by religion allows Grownups to more widely express their spiritual natures to a more receptive world.

The Age of the Grownup may look very much like what Eckhart Tolle describes in *A New Earth: Awakening to Your Life's Purpose*. He predicts, "A significant portion of the earth's population will soon recognize, if they haven't already done so, that humanity is now faced with a stark choice: Evolve or die. A still relatively small but rapidly growing percentage of humanity is already experiencing within themselves the breakup of the old egoic mind patterns and the emergence of a new dimension of consciousness." ccl Tolle's understanding of consciousness differs from the quadrune mind perspective, but both predict a similar new age of humanity in which the old ways of thinking (immature minds, in the quadrune mind model) will no longer sustain us as they once did, and a higher level of consciousness (the Grownup mind, per the quadrune mind) will become both necessary for humanity to flourish and more prevalent. To the extent that Tolle and other spiritual (not religious or cult) thinkers and teachers find a receptive audience that can put their teachings into practice, it is in large part because the Age of the Grownup is now dawning.

Although it will take time and work, the Age of the Grownup can provide the healing that scared immature-minded individuals need as the Age of Reason comes to a close. As Grownups gain the recognition and connection that support their work, they will extend their numbers, their reach, and their impact, becoming more effective parenters and healers of the world.

From the quadrune mind perspective, the only thing that will "save" us (from ourselves), and make us not cause harm to the world if we are saved, is a dramatic and radical change of mind from the rational to the spiritual.

APPENDIX A: Essays, with URLs, in Reverse Chronological Order

Essay Categories https://quadrunemind.com/2024/08/15/essay-categories/

Power or Strength: What Lord Acton Got Wrong

https://quadrunemind.com/2024/06/11/power-or-strength-what-lord-acton-got-wrong/

Experiencing a Nonproprietary God https://quadrunemind.com/2024/04/19/experiencing-nonproprietary-god/

80 Aphorisms from the Quadrune Mind Perspective https://quadrunemind.com/2023/03/20/80-aphorisms-from-the-quadrune-mind-perspective/

What Is It Like to be a Human Being? How to Use Humanizing Habits of Mind to Create a Spiritual Consciousness https://quadrunemind.com/2022/07/25/what-is-it-like-to-be-a-human-being/

What Is It Like to Have a Mind? https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

Gautama Buddha or Friedrich Nietzsche: Contented Serenity or Agitated Courage? https://quadrunemind.com/2022/05/22/gautama-buddha-or-friedrich-nietzsche-contented-serenity-or-agitated-courage/

Do Facts Tell the Truth, the Whole Truth, and Nothing but the Truth? Yes or No (Looking for black and white answers in a kaleidoscopic world) https://quadrunemind.com/2022/04/19/do-facts-tell-the-truth-the-whole-truth-and-nothing-but-the-truth-yes-or-no/

Absolute Certainty: Doing, Knowing, and Thinking https://quadrunemind.com/2022/03/18/absolute-certainty-doing-knowing-and-thinking/

Silent Behaviors: The Differences among Automaticity, Solemn Rituals, Spiritual Rituals, and Awe https://quadrunemind.com/2022/02/02/silent-behaviors/

Automaticity: Humans Behaving Like Machines (Including Driving, Meals, Sex, and Work) https://quadrunemind.com/2022/01/05/automaticity-humans-behaving-like-machines/

Sacred Spaciousness in a Physically Tiny Montreal Restaurant https://quadrunemind.com/2021/12/23/sacred-spaciousness-in-a-physically-tiny-montreal-restaurant/

Stampede Greed and Desperate Need (Or, What the Sackler family and the Haitian refugees have in common) https://quadrunemind.com/2021/11/23/stampede-greed-and-desperate-need/

Quadrune Mind and the Triune Brain in Evolution https://quadrunemind.com/2021/09/07/quadrune-mind-and-the-triune-brain-in-evolution/

Dinosaurs, Billionaires, and Mass Extinctions

https://quadrunemind.com/2021/09/01/dinosaurs-billionaires-and-mass-extinctions/

Quadrune Mind: A Secular Spirituality for the 21st Century

https://quadrunemind.com/2021/08/20/quadrune-mind-spirituality-for-the-21st-century/

Green Burials: Recycling Matter and Spirit https://quadrunemind.com/2021/08/12/green-burials-recycling-matter-and-spirit/

How Entertainment and Art become Propaganda through the Loss of Aesthetic Distance https://quadrunemind.com/2021/08/03/how-entertainment-and-art-become-propaganda-through-the-loss-of-aesthetic-distance/

Suffering, Indifference, and a Dead Deer on the Side of the Road https://quadrunemind.com/2021/07/16/suffering-indifference-and-a-dead-deer-on-the-side-of-the-road/

QM and Paul MacLean's Triune Brain Model https://quadrunemind.com/2021/06/28/qm-and-paul-macleans-triune-brain-model/

Jon Stewart Gets The Problem With Our New Mammalian Age https://quadrunemind.com/2021/06/24/jon-stewart-gets-the-problem-with-our-new-mammalian-age/

QM and the Vital Difference between Consciousness and Intelligence https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/

Why Speed, Efficiency, and Convenience are Dehumanizing Values to Live By https://quadrunemind.com/2021/05/18/why-speed-efficiency-and-convenience-are-dehumanizing-values-to-live-by/

QM and the Future of Spiritual Consciousness (Or, Metamorphoses of Mind) https://quadrunemind.com/2021/04/21/qm-and-the-future-of-spiritual-consciousness/

Why We Are Not As Different From Our "Enemy" As We Think https://quadrunemind.com/2021/04/05/why-we-are-not-as-different-from-our-enemy-as-we-think/

QM as a Melioristic Model (We Make the World Better) https://quadrunemind.com/2021/04/02/qm-as-a-melioristic-model/

QM, Phylogenetic Regression, and Extreme Aggression
https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/

Mindful Consumption (A Human-Minded Practice)
https://quadrunemind.com/2021/03/24/mindful-consumption/

Why Religious Fervor and Spiritual Consciousness Are Not The Same (A Comparison of Two Religious Politicians, Josh Hawley and John Lewis, in Light of the Quadrune Mind Model) https://quadrunemind.com/2021/03/19/are-religious-fervor-and-spiritual-conscious-the-same-thing/

QM and the Human Mind of Siddhartha Gautama https://quadrunemind.com/2021/02/05/qm-and-the-human-mind-of-siddhartha-gautama/

Fences, Neighbors, and Zoos https://quadrunemind.com/2021/01/14/fences-neighbors-and-2005/

QM and Moral (But Not Spiritual) Arguments for Killing Other People https://quadrunemind.com/2021/01/05/qm-and-moral-but-not-spiritual-arguments-for-killing-other-people/

QM, Unhealthy Childish Voices, and Healthy Adult Voices (Good but Weak, Strong but Bad, or Good and Strong) https://quadrunemind.com/2020/12/09/qm-unhealthy-childish-voices-and-healthy-adult-voices/

QM and the Four Steps—and Missteps—to New Behavior https://quadrunemind.com/2020/11/06/qm-and-the-four-steps-and-missteps-to-new-behavior/

The Content of Our Mind Does Not Determine the Level of Our Consciousness (Understanding What Is Good, Great, Evil, and Human) https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/

Thoughts On How We Got Here & The Evolution Of Our Brains https://quadrunemind.com/2020/09/15/thoughts-on-how-we-got-here-the-evolution-of-our-brains/

Healing the Dissociated Pre-Human Minds of the Afflicted Human Brain https://quadrunemind.com/2020/09/14/healing-the-dissociated-pre-human-minds-of-the-afflicted-human-brain/

Understanding the Pre-Human Minds: Working In the Hanford Nuclear Complex & Recovering From Trauma https://quadrunemind.com/2020/09/01/understanding-the-pre-human-minds-working-in-the-hartford-nuclear-complex-recovering-from-trauma/

When All Is Politics, We Are Not Human https://quadrunemind.com/2020/08/19/when-all-is-politics-we-are-not-human/

Why Are We on Earth? (Or, Why On Earth Are We?) https://quadrunemind.com/2020/08/10/why-are-we-on-earth/

Why Religion Doesn't Encourage Us to Become Human https://quadrunemind.com/2020/07/08/why-religion-doesnt-encourage-us-to-become-human/

QM, the Strategic Error Made by "Anti-Racists," and the Mind of a Bigot https://quadrunemind.com/2020/07/02/qm-the-strategic-error-made-by-anti-racists-and-the-mind-of-a-bigot/

QM, Unenlightened Power Elites & Mindless Oppressed Masses https://quadrunemind.com/2020/06/12/qm-unenlightened-power-elites-mindless-oppressed-masses-antihumanization-and-equanimity/

QM and the Scary New Mammalian Mind of the 21st Century https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/

Why Meaning is More Important Than Happiness https://quadrunemind.com/2020/05/08/why-meaning-is-more-important-than-happiness/

QM, Tara Westover, and History's Age of Reason https://quadrunemind.com/2020/05/04/qm-tara-westover-and-historys-age-of-enlightenment/

QM, Temple Grandin, and Our Evolutionary Brain https://quadrunemind.com/2020/04/29/qm-temple-grandin-and-our-evolutionary-brain/

QM, Creation, Evolution, and Panpsychism https://quadrunemind.com/2020/04/22/qm-creation-evolution-and-panpsychism/

QM as a Model of Human Consciousness https://quadrunemind.com/2020/04/13/qm-as-a-model-of-human-consciousness/

Why a Drastic Change To Our Way of Life Could Make Us More Human (Or at Least Less Reptilian) https://quadrunemind.com/2020/04/07/why-a-drastic-change-to-our-way-of-life-could-make-us-more-human/

QM, Wisdom, and the PhD Degree https://quadrunemind.com/2020/04/07/qm-wisdom-and-the-phd-degree/

QM and the Infantile Mind of Donald Trump https://quadrunemind.com/2020/03/24/qm-and-the-infantile-mentality-of-donald-trump/

QM and the End of the World https://quadrunemind.com/2020/03/20/qm-and-the-end-of-the-world/

QM and Ugliness as Evil https://quadrunemind.com/2020/03/11/qm-and-ugliness-as-evil/

QM and the Study Guide https://quadrunemind.com/2020/03/10/qm-and-the-study-guide/

QM as a Model of Spirituality https://quadrunemind.com/2020/03/03/the-quadrune-mind-as-a-model-of-spirituality/

APPENDIX B: "How Would You Describe Human Nature?"

I asked a few people in a nonscientific survey to describe *human nature*, their *age*, *gender*, and a *brief self-description*. These responses were transcribed from handwritten notes taken during the interviews and may represent a shorthand version of their full response. The survey was conducted in the Oklahoma City area from September 2023 to November 2023. Surveys responses are presented in the order in which they were conducted. Age is in bold for text orientation within longer responses.

People are born in ignorance and grow into stupidity. —**90**; Male; American, Homo sapiens sapiens. I refuse to include Oklahoman.^{ccli}

A real mish-mash of convoluted thinking and emotions. —**80**; Male; A retired librarian but not a retired skeptic.

Nature is leaves, human is me. -29; Female; I'm resilient and good natured, which makes me chuckle not knowing what human nature is. I'm funny and willing to do what is good no matter the cost. Maybe the word is integrity.

Chaotic. Animalistic. "Some humans ain't human" is from a John Prine song. —77; Male; Misunderstood.

Animalistic, like survival. -37; Female; Nature person, maker, sensitive, giving, animal lover.

Generally, most of the time everybody just wants to live life, enjoy their family, the majority. Then there are ones who just want to cause trouble, maybe because they were troubled, so

they trouble others. But most people just want a normal life. —**61**; Male, only gender I can be; Generally happy, hate it when people are mad at me, try to please people. Hard working. Always try to look out for other people. Good father.

Heavy question for the end of a long day. I don't know. Some of it is conditioned to think about. I don't know. A lot of different things, different rituals. If people are in an emergency, then help each other out. Then there are other things like mob mentality. Similarities in human nature, just humans, how just exist in the world. Different things in different cultures. Humans in tandem with nature. Europeans force their will on nature, create dams where there shouldn't be dams. —53; Female; What you see is what you get. I'm the kind of person who allows other people to be who they need to be. Allow people to be different, life is more interesting. Laid back but perfectionist, not as much as in the past. Still a lot to work on. Definitely a collaborator.

Oh my God. OK. It's difficult because of wars, the types of government. Hate behavior done to groups of people in the name of religion. Pretty dark about human nature because of atrocities. Vacillate between giving up on human nature, don't because of a lot of good people. How do you help the people on the good side of human nature against the people who are more on the negative side of human nature? Human nature has not done well. Good and bad. Bad people do damage to the people on the good side of human nature. Huge concern that we are going backward in treatment of blacks. Never treated Indians well. Progress going backward makes me sad. Concerned a lot about people who get into power. Bent toward criminality, find ways to legally take money and lives of people. Passionate, not really optimistic. Increase in neo-Nazis. I live in a country that had dictator Franco. Near Germany. My heart is broken by the treatment of people. People who do horrible things in the name of Christianity. Jesus would not be happy about the atrocities done in his name. -73; Female; Concerned about the welfare of others. I spent my life trying to help others become the best persons they can become. I'm certainly humanistic. Goal is to take better care of myself. Still care a great deal about others. Always see potential. Always better. I believe in God, always have. See God as a positive energy that connects us all. Sort of Buddhist. Not practicing. Am Episcopalian, not so judgmental. Intellectual, Buddhist kind of philosophy.

Many self-centered and evil. Can be motivated for religious reasons, true altruism. Left to their own devices, use means, violent, to achieve goals, get most of the resources, keep others from getting what they want. Seems universal. Just heard about Catholic priests abused 200,000 children. Makes me sick. Part of me wants to say human nature is inherently good, but too many examples of doing evil. —57; Female; 57-year-old white woman. Daughter. Loves to learn. Does the best to help others. Caring, super involved in church.

Uh, let me think. A combination of behaviors and characteristics and traits that we possess due to nature and nurture. Elements of negative behaviors. Grow up with or see one day, leading to

care for others. —**36**; Female; I am independent. Professional career as an independent arts maker but also identified with lots of other things as well not related with art. Jewish. Family. Faith. Doing good deeds. *Mitzvot*, in Hebrew means "commandment." Like the "10 commandments" everyone knows, but many more than that.

They're stupid. Human nature seems, some destroy everything, like nature. Most people like oil, minerals, they destroy the planet just to get to it. Money, all about the money. Not care about the planet, animals. Human nature goes back to money, how much money can I make. Not even about family anymore. Not care about my children, my neighbor. Instead of destroying things, help preserve things. Human nature did to the buffalo, almost wiped out. Animal species destroyed by human nature. Look what they did to Indians, Palestinians. Germany did to the Jews. Human nature kills things. Sad. —59; Male; Myself? Oh, would say down to earth. Care a lot about things. Care a lot about people, just get frustrated with them. Care about the environment, not destroy things. Treat people nice until they treat me bad. I don't care about race, gender, religion. I'll treat everyone the same. Think I'm a good person because of that. A lot of people hate rich people. I don't hate them. Glad they're making money. Just where they destroy or ruin people to advance their money and destroy the person. Stupid. Having money, owners and executives, millions of dollars. They lay persons off because downsizing. Why have all that money? Just to say all the money I have. Destroy lives.

That's a hard question. I don't know. I think human nature is partially from, what do you call, nature and environment. Have a lot of genetic stuff, but more environment. More about parenting. How raised, and support. You think, if happy environment and interact with nice people, then you're kind. Sometimes one bad experience can scar for life. It's bad today. Lucky grew up when we did. —61; Female; Describe myself? I like my career. Late bloomer. Not find out what to do until 50s. Struggled a lot to get where I am. Happy where I got. Not feel like an overcomer. I should have figured it out sooner.

APPENDIX C: 80 Aphorisms from the Quadrune Mind Perspective

(Reprint from the website, without notes, at https://quadrunemind.com/2023/03/20/80-aphorisms-from-the-quadrune-mind-perspective/. URLs for the hyperlinked aphorisms are listed in respective order below.)

I love aphorisms. Below are aphorisms I have written to help express the values of the quadrune mind model of human nature, which is a secular model of spiritual consciousness. Aphorisms that originally appeared in essays are hyperlinked to their respective post. I have also used aphorisms with the "30 Habits of the Human Mind" to describe characteristics of human consciousness in the "What Is It Like to be a Human Being?" essay. See the Value

Statements on pages 10 and 11 of the <u>Study Guide</u> for notable people's aphorisms that I believe relate to the quadrune mind. And now, some pithy statements of relatively few words:

Adults who function at a childish level of consciousness see the universe as a "good vs. evil" drama, a duality that emerges from the innate biological drives of attraction and withdrawal.

Afflicters always believe that the suffering they cause other people is justified. colin

Although we are often told how uplifting it is to be part of something "bigger" than ourselves, we are rarely advised to make sure that we are part of something that is also *better* than ourselves.

Americans live in a NASCAR® universe where everything in our competitive world must be sponsored, as we speed around in circles as fast as we can in the race course of life—to whose finish line?

Antihumanization occurs when someone takes some action "against" another person's opportunity to become more humane.

Any relationship becomes more humanizing when we use a healthy adult voice.

Billionaires, like dinosaurs in their heyday, have an almost completely unencumbered life of privilege.

<u>Consciousness</u> is the perception of the purpose of life. <u>Intelligence</u> is the ability to successfully fulfill that purpose.

<u>Dehumanization of others may be based on the desires of our God, country, corporation, family, or best friends.</u> Grownups, on the other hand, do not dehumanize anyone.

Dehumanization should never be the price of a paycheck.

Desperate times call for courageous acts. And what could be more courageous than to be nonviolent in a violent world, loving in a hateful world, and decent in a corrupted world?

Don't have an animal mind; have a Grownup human consciousness.

Expanding spiritual consciousness on earth is humanity's responsibility.

Fear makes me feel vulnerable, or even worse, helpless. Anger feels like strength, or even better, power.

God is the force that brought the human brain into existence.

<u>Great intelligence at a lower level of consciousness does not entail great intelligence at a higher</u> level of consciousness.

The great tragedies of humanity are almost always driven, directly or indirectly, by the most petty people of us all; that is, people whose sole purpose in life is self-perpetuation.

How conscious is "artificial" intelligence? The answer, if we ever think we know it, may have some significance on how conscious we believe "natural" intelligence to be. ccliii

The human mind is the only mind that has the capacity to have a sense of responsibility to, and communion with, people never met, all living beings, and the earth. ccliv

The idea of a "soul" represents our mental solution to the body's instinctual need for an eternal homeostasis. cclv

If a young liberal becomes an old conservative, it is not because of the growth of wisdom. Rather, it is the growth of wealth and privilege. Having more becomes the fear of losing more.

If mercy is to be part of this world, it must happen through us.

If we are stuck in an animal-like mind, then we will live life with an animal-like purpose.

The immature-minded person has been socialized to see people as predators, competitors, prey, or one's own. Only "one's own" are seen as "human." CCIVI

The immature-minded person uses disagreements about facts to justify truths that divide humanity; the Grownup-minded person rises above the clutter and noise of individual facts to clearly see a holistic Truth that unites all of humanity.

Immature minds worship immature Gods.

In order to humanize the mind, it must have lifelong "educational" exposure to the humanities, arts, literature, physical and emotional play, a nurturing "village," labor in the real world, and service to the lives of other people.

In stark contrast to the appropriate natures of other creatures on earth, survival is not the prime directive of human beings.

In the spiritual human being, identity and self-gain have been left behind. Non-proprietary service in all things is the only purpose of life for the Grownup.

Indifference is devastatingly cruel. It is always at the root of our dehumanization of people. The destructive effects of indifference may even subtly exceed those of demonizing others. After all,

it requires much less mental energy to ignore people than to demonize them and comes with very little accountability of our own inhumanity.

The insatiable greed of the power elites is funded by the insatiable addictions of the masses.

It is as though the immature minds are saying to look but don't see, listen but don't hear, touch but don't feel, move but don't be the composer of your own actions.

It is difficult to understand what other people need if we don't need it. It is worse if we think we know what other people need but are wrong.

It seems inescapable that for humanity to survive, more of us, elites and masses alike, must burst our bubbles and expose our skin directly to all of the elements of life.

It turns out that if you ask yourself, "What is it like to have a mind?," the answer depends on which mind you have.

It's a small world if you live a large life.

Life isn't fair or unfair; it just happens. However, people can be fair or unfair intentionally.

Life without change is automaticity; change without life is decomposition. cclvii

Many species are going extinct because they are not evolutionarily prepared for the world we have created—and neither are we. The difference is, we know it. And, we can do something about it. It's our responsibility.

Marketers are driving us to distraction with their incessant, ever more aggressive, demands on our attention. They demand that we be more responsive to their brand than to our God, country, or family, although they often sell us their brand as representing our God, country, or family.

Marketing sells us on the idea that we "deserve" better products and services without telling us why.

A mind indifferent to the suffering of others is good for business. It is also good for despots and demagogues. It is not thinkable for a Grownup.

Mindlessness prevents humanity from being humane.

Moralists tend to expect the universe to conform to their moral code. For example, if worthy people do not get what is due them, or unworthy people get more than they deserve, then the righteous moralizer feels responsible to correct the universe's error.

An opinion should be expressed only if you are willing to change it.

Our leaders tell us, sometimes for centuries, that we *must* remember certain events of our history, but for what purpose—to make amends or take revenge? The answer would seem important for our sense of "identity." cclviii

Our proper course of action is to reduce suffering and increase healing, not to inflict further suffering in order to stop suffering.

Our religious, nationalist, political, and sports fanatics are of the same mind (level of consciousness) as *their* religious, nationalist, political, and sports fanatics.

Over the years, our habits of acting, feeling, and thinking can become so deeply entrenched and powerful to us that our "rational" mind must reasonably conclude that our lives are directed by an external power much greater than ourselves. cclix

People have been criticized for underestimating the level of consciousness of animals, but the related, more common, and much more serious error is the vast overvaluation of our own everyday consciousness.^{cclx}

People who lived in ancient times did not know they were living in ancient times—and neither do we.

The person who does not have a moment to regret may not have had a moment to reflect.

A person with a PhD—doctor of philosophy degree—should, before anything else, be a person who teaches the love of wisdom.

Propaganda is enjoyed as entertainment by many people because it makes them feel good.

Propaganda, like pornography and professional wrestling, is designed to destroy a person's aesthetic distance. Consequently, there is not enough mental space to separate internal visceral reactions from external reality.

Quadrune mind is a secular model of spiritual consciousness for a post-rational world. cclxii

The quadrune mind model of human nature is for thoughtful people, who reject both moral relativism and the certainty of self-righteous tyranny, but still want a spiritually meaningful purpose in this lifetime. cclxiii

The real spiritual issue for all of us lies in our level of consciousness, not the contents of our mind.

Religion has been used to comfort the suffering masses. But it is the power elites who must awaken spiritually if the current world is to be healed.

Religion is our evolutionarily new psychological need to attribute to nature a designed intentionality.

Religiosity keeps score; spirituality does not.

The responsibility of a spiritually conscious adult at the end of the world is the same as it always is: to reduce suffering and increase healing as much as possible.

The result of the power elites' control of our mass media is the same for us as Siddhartha's father's control of information was meant to be for Siddhartha: to keep us materially focused and ignorant of our spiritual potential.

<u>Science</u>, technology, engineering, and mathematics (STEM) learning is not enough to make an educated Grownup. There is no letter in the acronym STEM to indicate the presence of wisdom.

Sharing the love to be alive is the point of everything for the Grownup.

The shift to a "level of consciousness" problem changes an "us versus them" conflict to be "won or lost" into a shared task of everyone becoming more spiritually mature.

Spiritual consciousness does not reject religion, but it does reject any spiritual merit for a militarized religion or a religious military.

Spiritually conscious Grownups are bad for Big Business. Apparently, marketers know this as demonstrated by their advertising campaigns.

Technology is the attempt to make our lives better without being better people. cclxiv

Unconstrained stampede greed always has been, and always will be, associated with chronic, wide-spread desperate need.cclxv

We can live like other animals, but that is not who we are.

We cannot dehumanize anyone else unless we are already functioning from a pre-human subbrain ourselves.

We *must* have each other's help and encouragement to be more able, willing, and effective healers in the world. There is no such thing as a self-sufficient Grownup.

We would rather kill a thousand enemies than make one our friend.

What is a person but part crocodile, part horse, part computer, part angel and therein lie all the conflicts of humanity.

What we believe is insignificant compared to how we live because of what we believe.

Wisdom is not dogmatic, hateful, bigoted, defensive, sectarian, or utopian. Wisdom does not crave absolute knowledge. Wisdom does not demand that the heart never be wounded. Wisdom does not fear uncertainty.

Wisdom is the awareness of humanity's purpose in life.

You can live to rule the earth, or you can live to serve the earth. You just can't do both.

You never know what you slept through until you wake up!

URLs for the hyperlinked Aphorisms

Adults who function: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

Afflicters always believe: https://quadrunemind.com/2021/11/23/stampede-greed-and-desperate-need/

Although we are: https://quadrunemind.com/2021/08/03/how-entertainment-and-art-become-propaganda-through-the-loss-of-aesthetic-distance/

Antihumanization occurs: https://quadrunemind.com/2020/06/12/qm-unenlightened-power-lites-mindless-oppressed-masses-antihumanization-and-equanimity/

Any relationship: https://quadrunemind.com/2020/12/09/qm-unhealthy-childish-voices-and-healthy-adult-voices/

Billionaires, like dinosaurs: https://quadrunemind.com/2021/09/01/dinosaurs-billionaires-and-mass-extinctions/

Consciousness is: https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/

Dehumanization of others: https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/

Dehumanization should never: https://quadrunemind.com/2022/01/05/automaticity-humans-behaving-like-machines/

Don't have an animal: https://quadrunemind.com/2022/05/22/gautama-buddha-or-friedrich-nietzsche-contented-serenity-or-agitated-courage/

Expanding spiritual consciousness: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

God is the force: https://quadrunemind.com/2020/04/22/qm-creation-evolution-and-panpsychism/

Great intelligence: https://quadrunemind.com/2021/09/07/quadrune-mind-and-the-triune-brain-in-evolution/

The human mind: https://quadrunemind.com/2022/02/02/silent-behaviors/

If mercy is: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

If we are stuck: https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/

The immature-minded: https://quadrunemind.com/2022/04/19/do-facts-tell-the-truth-the-truth-yes-or-no/

In order to humanize: https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/

In stark contrast: https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/

In the spiritual: https://quadrunemind.com/2022/02/02/silent-behaviors/

It is as though: https://quadrunemind.com/2022/01/05/automaticity-humans-behaving-like-machines/

It seems inescapable: https://quadrunemind.com/2020/06/12/qm-unenlightened-power-elites-mindless-oppressed-masses-antihumanization-and-equanimity/

It turns out: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

A mind indifferent: https://quadrunemind.com/2021/07/16/suffering-indifference-and-a-dead-deer-on-the-side-of-the-road/

Our proper course: https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/#site-header

A person with: https://quadrunemind.com/2020/04/07/qm-wisdom-and-the-phd-degree/

Propaganda is enjoyed: https://quadrunemind.com/2021/08/03/how-entertainment-and-art-become-propaganda-through-the-loss-of-aesthetic-distance/

The real spiritual issue: https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/

The responsibility of: https://quadrunemind.com/2020/03/20/qm-and-the-end-of-the-world/

The result of the: https://quadrunemind.com/2021/07/16/suffering-indifference-and-a-dead-deer-on-the-side-of-the-road/

Science, technology, engineering: https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/

Sharing the love: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

The shift to a: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

We can live: https://quadrunemind.com/2022/07/25/what-is-it-like-to-be-a-human-being/

We cannot dehumanize: https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/

What is a person: https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/

Wisdom is not: https://quadrunemind.com/2022/03/18/absolute-certainty-doing-knowing-and-thinking/

Wisdom is the: https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/

You can live to: https://quadrunemind.com/2021/09/01/dinosaurs-billionaires-and-mass-extinctions/

GLOSSARY

Adolescent intellectual (cognitive) mind: A developmental stage of the brain that becomes neurologically available at about 2 years of age. In the healthy brain this mind becomes dominant during adolescence. In the afflicted brain it may not become the dominant mind. Also referred to as the "new (primate) mammalian mind."

Adult: A person who has legal adult status but is not necessarily a spiritually mature Grownup. They could be an infant acting like an adult, a child acting like an adult, an adolescent acting like an adult, or a Grownup who is a mature adult.

Antihumanization: An action taken against someone that obstructs the person's opportunity to become more humane.

Brain Type: Paul MacLean's terminology referring to regions of the human brain that identify distinct elements of his triune brain model: protoreptilian-like brainstem, paleomammalian-like limbic system, and neomammalian-like neocortex. The quadrune mind model generally uses the related terms of reptilian, old mammalian, and new mammalian for each of the brain types.

Childish emotional mind: A developmental stage of the brain that becomes neurologically available between 15 to 18 months of age. In the healthy brain this mind becomes dominant during childhood. In the afflicted brain it may not become the dominant mind. Also referred to as the "old mammalian (herd) mind."

Fetal/newborn somatic (reflexive) "mind": A developmental stage of the central nervous system that is not included as one of the four minds in the quadrune mind model because it does not support intentional, goal-directed behavior. This "mind" becomes neurologically available at about 8 weeks gestational age/6 weeks conceptional age. This "mind" becomes dominant pre-birth. Also referred to as the "pre-reptilian (somatic) mind."

God: That which brought the human brain into existence. In the quadrune mind model, God is always capitalized and never put in quotation marks out of respect for the concept of God as it is understood by diverse people across world cultures, including polytheistic and nature religions. To lower case or italicize any reference to God is to be rather arbitrary and ethnocentric. Although belief in any God, or a certain God, is not a requirement to become a Grownup, the Grownup would recognize that there is a greater force than themselves at work in the universe.

Grownup: A person who is a spiritually mature human being.

Grownup spiritual mind: A developmental stage of the brain that becomes neurologically available at about 3 years of age. In the healthy brain this mind becomes dominant during adulthood. In the afflicted brain it may not become the dominant mind. In previous quadrune mind writings, we labeled the fourth, spiritual mind as the Human mind with a capital "H," to denote that it is unique to human beings. See footnote ii for a more detailed explanation of this change in language.

Human nature: Behaviors, emotions, and cognitions that appear exclusively, or to a much greater degree, in human beings than in any evolutionary ancestor.

Humane: A person who shows compassion and benevolence toward all people and living beings.

Immature Minds: Any of the minds in an adult that normally develop before the Grownup spiritual mind: fetal/newborn somatic (reflexive) "mind," infantile behavioral mind, childish emotional mind, and the adolescent intellectual (cognitive) mind.

Infantile behavioral mind: A developmental stage of the brain that becomes neurologically available between 2 to 4 months of age. In the healthy brain this mind becomes dominant during infancy. Also referred to as the "reptilian" mind.

Neurospirituality: The earlier name for the quadrune mind model, originally used in 1997.

Parenter: A person who uses healing skills to help an afflicted adult move toward spiritual maturity. A parenter may also help an infant, child, or adolescent reach healthy maturity at each phase of their life.

Pre-human sub-brains: The parts of the central nervous system that are evolutionarily older than the prefrontal cortex: the neocortex, the limbic system, brainstem, cerebellum, and spinal cord. These evolutionarily inherited structures of the brain support the immature minds, which are sequentially dominant during our normal developmental growth, and can support the Grownup mind throughout adulthood when they are integrated in a healthy way.

Quadrune: "Four-in-one," as in the four dissociated minds of the human brain integrated as one mind with a dominant prefrontal cortex in the Grownup.

Sub-brain: Area of the human brain that is associated with a mind other than the Grownup mind, such as the infantile mind of the brainstem, childish mind of the limbic system, or adolescent mind of the neocortex. The prefrontal cortex is associated with the Grownup mind but is not considered a sub-brain when it functions properly as the dominant brain region, which integrates the neurological functions of the whole human brain.

Triune: "Three-in-one" referring to Paul MacLean's three brain types-in-one model of the human brain.

NOTES

¹ I realize that it is unusual to have a "Prologue" in a work of nonfiction. As my childhood memory became more connected to the book, I tried to include it in the "Preface," but it just didn't fit in there or the "Introduction." Structurally, it needed its own section. As Merriam-Webster notes from the saying "The past is prologue," the memory clearly was a prologue to Acting Like Adults: "The saying 'The past is prologue' tells us that, in real life, almost everything can be a prologue to what follows it." https://www.merriam-webster.com/dictionary/prologue. ⁱⁱ The quadrune mind model previously used evolutionary language similar to MacLean's "brain-types" to describe the four minds of the human brain: reptilian, old mammalian, new mammalian, and Human. We initially described our fourth mind, the spiritual mind, as the Human mind with a capital "H," to denote that it is unique to human beings. This is the language that's used in the Study Guide and the quadrune mind essays. However, in further developing the model, we determined that developmental language was more useful in explaining the four minds in action—for example, readers may not associate certain behaviors with reptiles, but can easily see them in infants (and therefore better understand how an affliction in infancy keeps someone acting like an infant, rather than making the leap to seeing the person as acting like a reptile). In addition, we wanted to avoid any idea that individuals functioning from one of the minds we previously called "pre-Human" were somehow "less than human." Therefore, in Acting Like Adults, we have updated the quadrune mind model to use human developmental stages to describe the four minds of the human brain: infantile mind for the reptilian brain-type (brainstem), childish mind for the old mammalian brain-type (limbic system), adolescent mind for the new mammalian braintype (neocortex), and Grownup mind for the spiritual brain-type (prefrontal cortex). We believe this is a significant and beneficial change in helping readers understand the quadrune mind model. However, we also have additional, valuable information on our website that may be of interest to readers, such as more real-world examples and explanations of the four minds. Therefore, we have included many notes to see these online resources. That said, we want to make it clear that these resources do not represent the most current, accurate version of the quadrune mind model, which can be found in this book. We would recommend viewing these online resources with the updated, developmental language in mind. (KS)

^{III} See Farley, P. (2008, Autumn). A theory abandoned but still compelling: In Paul MacLean's triune brain, primitive emotions overruled conscious thoughts. *Yale Medicine*, 43(1), 16-17. "'Paul never traveled with the herd,' said Thomas R. Insel, M.D., director of the National Institute of Mental Health, who worked alongside MacLean for 10 years at the Laboratory of Brain Evolution and Behavior in Poolesville, Md. Insel remembers his colleague as irreverent and uninhibited...

"The theory saw its fullest expression in MacLean's 1990 magnum opus, *The Triune Brain in Evolution*, which was based on wide-ranging anatomical studies of brains in animals as diverse as alligators and monkeys.... The theory's conceptual beauty and intuitive appeal lent it enormous staying power....

"But according to Terrence Deacon, Ph.D., an expert on the evolution of human cognition at the University of California, Berkeley, subsequent research has revealed that MacLean's basic premise... that brain systems were added by accretion over the course of evolution—was mistaken....

"Nonetheless, Deacon said, the force of MacLean's personality gave his ideas a special resonance. 'His death represents the passing of an era, because he was really the model of the move towards understanding the brain in evolutionary terms,' said Deacon. 'A lot of our contemporary advances ride on top of his work.... [W]e don't often give credit to the false starts that really push us along the way."

i^w Gilbert, E. (2015). *Big magic: Creative living beyond fear*. New York: Riverhead Books. Elizabeth Gilbert describes ideas as sentient entities that choose promising human hosts to instantiate them. Gilbert writes as though this is not a metaphorical argument. In fact, thinkers and other creatives have expressed similar notions. For example, "People don't have ideas. Ideas have people," usually attributed to Carl Jung, but probably more in line with the philosophy of psychoanalyst Wilfred Bion. My reading of Bion is limited to Bion, W. (1983). *Attention and interpretation*. Lanham, MD: Rowman & Littlefield. For example, Bion states that the "thought" and the "thinker" exist independently of each other: "In symbiosis the thought and the thinker correspond, and modify each other through the correspondence. The thought proliferates and the thinker develops. In a parasitic relationship between thought and thinker there is a correspondence...." [Pp. 117-118].

[In general, I believe that Bion's psychoanalytic ideas, wherever they may come from, are quite consistent with the quadrune mind model of human nature. And, his book has much insight to offer for our contemporary world,

especially his discussion of "thinkers," "lies," and "truth." Even so, I understand Gilbert much better than I understand Bion].

^v For a business example, but one that seems relevant here, see Genberg, P. (Council post: 2021, June 3). The value of being a generalist. *Forbes Business Council*.

https://www.forbes.com/sites/forbesbusinesscouncil/2021/06/03/the-value-of-being-a-

<u>generalist/?sh=5697bd322fc8</u>. "A generalist is a dabbler, an explorer, a learner — someone with broad knowledge across many topics and expertise in a few....

"Broad experience has its benefits. Generalists have a more diverse collection of knowledge to draw from, so they can see connections and correlations that specialists might miss....

[A similar effect has been shown by novice chess players who have made moves—because they didn't know any better—that have caught masters off guard. The quickly efficient minds of the masters can be "blind" to some innovative moves. The masters have *too much* experience with little room for the unexpected].

"Generalists also tend to have a higher level of situational awareness and can see the bigger picture. Where specialists tend to have a high degree of awareness in their own area, they may not be great at understanding areas outside their fields. They need a generalist, a big-picture thinker, to bring it all together."

[Or, as Mark Twain said, "We're all ignorant, just about different things"].

vi See my essay *QM, Wisdom, and the PhD Degree*. https://quadrunemind.com/2020/04/07/qm-wisdom-and-the-phd-degree/.

[I give a brief description of my deep appreciation of philosophy in this essay. After I resigned my psychology license in 2014, I told Kerri that I was going to look at university courses offered in philosophy that I might take. She said I would be disappointed because the classes now were not like the courses that I took in the 1960s. She was right. The titles of the courses were almost unintelligible to me. I could not see how they related to understanding the human condition.]

vii Brogaard, B. (Posted 2019, November 21). World philosophy day takes philosophy out of the academy: Continuing the tradition of public philosophy. *Psychology Today*. https://www.psychologytoday.com/us/blog/the-superhuman-mind/201911/world-philosophy-day-takes-philosophy-out-the-academy. "[L]ike most academic disciplines, academic philosophy has become increasingly specialized and inaccessible to the general public over the years....

"That wasn't always the case. In Ancient Greece public philosophical debate played a crucial role in educating the youth and bringing social problems to the attention of the critical public, politicians and policy-makers....

"The tradition of public philosophy has been resurrected in various forms throughout the centuries but has recurrently been brought to a halt because of its potential threat to traditional values and policies....

"Regrettably, philosophy today is a far cry from what it once was. Its isolation from the rest of the world makes it look like an excuse for introverted narcissists to perform intellectual mind games in oversized armchairs and earn a living by doing it. This could not be further from the truth. Philosophy is meant to have an impact on society by poking holes in existing ideologies and policies....

"Philosophers can learn a thing or two from scientists who have already taken a big step in this direction. Most scientists have long ago realized that citizen involvement may help make real scientific progress. Amateurs eager to contribute to scientific research are commonly referred to as 'citizen scientists.'"

[The American Philosophical Society awards several medals and prizes for outstanding achievements in areas of specialized interest. Personally, I think it would be a good idea for the American Philosophical Society to establish a "Citizen Philosopher Award" to be presented in recognition of an outstanding contribution to philosophy, the "love of wisdom," as it relates to the lives of the general public. The person should be unaffiliated with any academic philosophy department or professional organization of philosophers. It could be awarded as merited. Such an award would be good for the public and good for the Society. I believe it would be the most important award the Society could grant].

wiii "'Well, do you try to make people think?' I say, 'No. That would be the kiss of death.' What I want to do is to let them know that I'm thinking." —George Carlin. George Carlin's American Dream. HBO. https://www.youtube.com/watch?v=T_L3mDG9r4I.

[George Carlin is my genius rant hero. This book is my thinking about the state of humanity. It's up to you whether or not these ideas are worth keeping in mind].

ix An "angry, hopeful cry for desperately needed help" may underlie populist social demonstrations by the Left or the Right, especially violent ones. However, the help being demanded may be of a very different nature. On the

one hand, demonstrations may be to oppose the systemic discrimination, exploitation, and dehumanization of one group of people by another, while opposing demonstrations may be the demand to have the "right," "freedom," and "liberty" to continue systemic discrimination, exploitation, and dehumanization of one group of people by another. This tension between peoples' hopes and fears underlies all of humanity's conflicts, domestic and international: oppressed people find hope for a better life in changes occurring in their world, and the privileged people find fear in the potential loss of their comfortable status quo and need to change the way they live.

* Kagan, D. (2002, February 3). Saber rattling for Democracy. New York Times.

https://www.nytimes.com/2002/02/03/books/saber-rattling-for-democracy.html. A review of Robert D. Kaplan's Warrior Politics: Why Leadership Demands a Pagan Ethos. "Kaplan, the author of many books of travel and political reportage, rejects the proclaimed differentness of today's world from the past: it is not 'modern' or 'postmodern,' but only a continuation of the 'ancient.' It is a world with which the ancient Chinese, Greek and Roman philosophers could have coped and to which they would have applied their salutary tradition of 'skepticism and constructive realism."

[Kaplan is right that the modern world is not different from the ancient. That is, he confirms the quadrune mind model's view that the dominant immature minds of "ancient" times still dominate the world. However, rather than accepting that observation as proof that human nature *cannot* progress beyond our political history and must be dealt with as it has been, the QM philosophy of spiritual consciousness says we can make the world a better place. See Kerri's essay, *QM* as a Melioristic Model: (We Make the World Better).

https://quadrunemind.com/2021/04/02/qm-as-a-melioristic-model/].

For a recent, scholarly updating of social contract theories of human nature by evolutionary social scientists, see Seabright, P., Stieglitz, J., & Van der Straeten, K. (Published online 2021, January 20). *Evaluating social contract theory in the light of evolutionary social science*.

Cambridge University Press. <a href="https://www.cambridge.org/core/journals/evolutionary-human-sciences/article/evaluating-social-contract-theory-in-the-light-of-evolutionary-social-science/6B44A9CA0EF90B80CDA08EDE2661297B. "We conclude that social contract theorists severely underestimated human behavioural complexity in societies lacking formal institutions. Had these theorists been more informed about the structure and function of social arrangements in small-scale societies, they might have significantly altered their views about the design and enforcement of social contracts."

[The authors compare the definitions of human nature made specifically by Hobbes, Locke, and Rousseau. These definitions can be interestingly understood from the quadrune mind perspective. For example, instead of describing contrasting "human natures," as the philosophers thought they were doing, they are better understood as describing the natures associated with the three developmentally immature minds, which exist "below" our true human nature].

xi Greville, F., Lord Brooke. O wearisome condition of humanity. In A. J. M. Smith (Ed.). (1967). Seven centuries of verse: English & American from the early English lyrics to the present day (3rd. ed.). New York: Charles Scribner's Sons. "If Nature did not take delight in blood, / She would have made more easy ways to good." [P. 96, lines 17-18]. [As people have long observed, "nature" is a battle for survival that can be bloody. However, with the advent of Homo sapiens, it has become the responsibility of humans to find "more easy ways to good." We are the first beings that can place humane stewardship above bloody survival in the service of the well-being of all living things].

xii For example, it's OK to "kill" another human being in a "just" war because it is not really "murder." The quadrune mind model argues that "moral" reasons for killing are never justified spiritually. Moral arguments that we rebut on spiritual grounds include the Religious/Legalistic Argument, the Patriotic Argument, the Sectarian Argument, and the Love Argument. For details, see our essay *QM and Moral (But Not Spiritual) Arguments for Killing Other People*. https://quadrunemind.com/2021/01/05/qm-and-moral-but-not-spiritual-arguments-for-killing-other-people/.

xiii In the quadrune mind secular model of human nature and spirituality, "Grownup," capitalized, refers to the spiritually mature human being. See the Glossary for other terms used technically from the model's perspective.

xiv For details of how I adapted MacLean's triune brain model into the quadrune mind model see, Shadid, T. F. (1997, Last revised 2022, December 14). *Quadrune mind: Neurospirituality and the four minds of the human brain: Study guide*. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F-Shadid-Ph.D..pdf.

^{xv} For nations described as "three-year-old squabbling children," see Greenspan, S. (1989, March 5). Human behavior: When nations act like children. *The Washington Post*, p. C3. Comparing how nations' policies are like

childhood conflicts, Stanley Greenspan offers a more grown-up alternative: "Constructive communication includes maintaining engagement...; increasing interactions between nations, both for leaders and citizens...; using sanctions or interventions only to set limits and not to isolate; always offering respect, fairness, and autonomy to other nations; tolerating distortions and using them as insights; and negotiating differences using accurate information and realistic assessments of the other party.

"It's not easy to change policies that, in part, stem from our earliest stages in our own childhood development. Still, we must attempt to minimize the negative tendencies to disengage when helpless, confused and furious; to isolate or avoid interactions when threatened; to polarize others' suspected intentions into 'all good' or 'all bad' when fearful and disgusted; and to mislead and confuse opponents when trying to win."

[In this article, child psychiatrist Greenspan gives a deep insight into the world of "nations acting like children." However, from the quadrune mind perspective, he is really describing how damaged children, acting like adults, rule the nations to this day—with dire consequences for the world].

xvi Sapolsky, R. (2021, September 5). *Your reptilian brain, explained*. Big Think. https://www.youtube.com/watch?v=xNbNrdX2-zc.

[Robert Sapolsky gives a useful, schematized interpretation of the three-layer brain with perhaps a glib credit to MacLean. Sapolsky has other videos about related areas on his website: *Robert M Sapolsky*: Author 'Behave: The Biology of Humans at Our Best and Worst.' Big Think. https://bigthink.com/people/robert-sapolsky/. Robert M. Sapolsky is an American academic, neuroscientist, and primatologist. He is a professor of biology, neurology, and neurosurgery at Stanford University].

xvii Cacioppo, J. T. (2002). Social neuroscience: Understanding the pieces fosters understanding the whole and vice versa. [Award address]. *American Psychologist*, *57*(11), 819-831. "Recent evidence underscores the complementary nature of social, cognitive, and biological levels of analysis and how research integrating these levels can foster more comprehensive theories of the mechanisms underlying complex behavior and the mind."

xviii See Bowles, D. (n.d.). Wrongfully Accused: The Political Motivations behind Socrates' Execution. McGill University. https://www.mcgill.ca/classics/files/classics/2006-7-03.pdf.

[The social-political contexts of Socrates' execution parallel those of the crucifixion of Jesus. And seem similar to our own times].

xix What Is It Like to Have a Mind? https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/. [In this essay we give examples of how each of the four levels of consciousness of the quadrune mind might be lived in the world. The answer to the question, "What is my nature?" depends on which of these four minds is currently dominant in my life. Compare Socrates' statement: "The unexamined life is not worth living for a human being." I believe that if we live an "unexamined life," it means that we are existing at an immature level of consciousness without self-reflection. We are squandering our potential to live in the true nature of a human. However, self-reflection can feel fatally threatening to people aversive to self-reflection, especially people with material power and privilege.]

** For an example of a scholarly philosophical argument on human nature, see Ramsey, G. (Pub. online 2023, July 12). Human nature. https://www.cambridge.org/core/elements/human-nature/B0D036F3D65695EB842BCF6FB2EEC896. Cambridge University Press.

"Human nature is the pattern of trait clusters within the totality of extant human possible life histories.

"Let's unpack this a bit. One thing you may find puzzling is that it concerns *possible* life histories for *extant* humans. From the discussion above, it is clear why individual and human nature is based on possible life histories. But why actual and not possible humans? Why allow variation in environmental circumstances but not genes? There are two reasons. The first is that this is a concept of *human nature* in the here and now. This is not about the nature of our ancestors or our possible descendants. While it might be interesting to consider the nature of our ancestors one hundred thousand years ago, or our descendants a hundred thousand years hence, their nature is distinct from our nature. Human nature concerns humans at a particular time, not the whole species from its origins until some unknown future.

"The second reason is that if we don't tie 'human' to actual humans, then it is difficult to know where to draw the boundary. Which genetic combinations are permissible in constructing possible humans? Do we include any possibility, despite vanishingly low probabilities? If so, and if we are projecting into the future, then the result might be something not recognizably human. Including these strange creatures under the rubric of human nature would reduce, not increase, our understanding of the nature of our species. Just as our species will evolve in the future, it has evolved in the past. Thus, while it was argued above that an individual is a human if and only if it belongs

to *Homo sapiens*, the 'human' in 'human nature' is better considered to be a time slice of our species. If we want patterns of trait expression to be able to characterize—and perhaps even explain and predict—human behavior, then we should restrict human nature to humans that exist now....

"Want to know our nature? Then observe humans, their behavior, their artifacts. Read science, read fiction, listen to music. Stroll through museums and cast your eyes on sculptures and paintings and photographs. Go to sporting events, dinner parties, business meetings, classes, restaurants, bars. Sit on benches and walk through neighborhoods and go shopping and ride your bike. Eat a meal and have a conversation and get in a fight and have sex. Listen to human nature pulsing and reverberating within and around us, drink it in and ponder our place in the world." [Emphases in the original].

xxi For detailed information, see Marks, C. (2023). Split brains. *Routledge Encyclopedia of Philosophy*. https://www.rep.routledge.com/articles/thematic/split-brains/v-

1#:~:text=He%20concluded%20that%20split%2Dbrain,%2C%20memories%20and%20so%20on. "[T]he relation of various anatomic, neurological and behavioural data to mentalistic descriptions; and the proper account of the mentalistic notions of prime concern – consciousness, mind and person – is, to put it mildly, controversial. We also still lack a detailed understanding of how brain structures are responsible for the psychological distinctions involved, for example, what specific role the *corpus callosum* plays, what a control structure is, and how to count centres of consciousness."

[How to count centers of consciousness is the focus of the quadrune mind model].

^{xxii} Rosen, M. (2023, July 15 & July 29). The fabulous brain of Elyse G.: How one woman missing a chunk of neural tissue inspired a project on the brain's flexibility. *Science News*.

[This article describes atypical brains of people scanned for the Interesting Brain Project. Brain scans of several dozen volunteers reveal dramatically large sections of missing brain tissue associated with speech and language, ability to read and write, and balance and movement. The brain can patch up alternative neural networks to recover from the brain injury within limits. The research stretches the idea of a "normal" brain. The quadrune mind model describes functional levels of consciousness and is not dependent upon a "standard" architecture of the incredibly malleable brain for an explanation of human nature].

***iii Lombrozo, T. (2013, December 2). The truth about the left brain / right brain relationship. *NPR*. https://www.npr.org/sections/13.7/2013/12/02/248089436/the-truth-about-the-left-brain-right-brain-relationship. "I will end with one last fact about hemispheric differences that many people may not be aware of, and that is that lateralization of function changes with normal aging. The kinds of lateralized patterns of brain activity I mentioned earlier when talking about brain mapping studies are more common in young adults. Across many types of tasks and many brain areas, these lateralized patterns tend to switch to bilateral patterns in healthy older adults." [Interview with cognitive neuroscientist, Kara D. Federmeier].

wiv Lee, C. (2017, November 7). Before the left brain was logical, it was male: The idea that some of us have a dominant left brain – and thus excel at logic, math, and factual information – while others are right brained – better at creative and intuitive tasks – is a widely held public belief, but is completely inaccurate. McGill University. https://www.mcgill.ca/oss/article/history/left-brain-was-logical-it-was-male. "No part of a healthy brain, not the left nor the right, restricts anyone from excelling at logical or creative projects. How we divide the brain says more about what we think of each other, rather than how it actually works."

For example, see my essay QM and the Future of Spiritual Consciousness: (Or, Metamorphoses of Mind). https://quadrunemind.com/2021/04/21/qm-and-the-future-of-spiritual-consciousness/.

^{xxvi} For a basic description of brain development, neural connectivity, and health, see Psychology Today staff. (n.d.). How the brain develops. *Psychology Today*. https://www.psychologytoday.com/us/basics/neuroscience/how-the-brain-develops.

xxvii Goff, P. (2019). *Galileo's error: Foundations for a new science of consciousness*. New York: Pantheon Books.

"Panpsychism is the view that consciousness is a fundamental and ubiquitous feature of physical reality....

"In human beings, consciousness is a sophisticated thing.... But there seems nothing incoherent with the idea that consciousness might exist in very simple forms.... Perhaps electrons and quarks.

"[T]here is some empirical support for panpsychism.... But the main attraction of panpsychism is not its ability to account for the data of observation, but its ability to account for the reality of consciousness.... [Pp. 113-115]. [Philip Goff presents a cogent argument for panpsychism].

xxviii Mørch, H. H. (2017). The Integrated Information Theory of Consciousness. *Philosophy Now*. https://philosophynow.org/issues/121/The Integrated Information Theory of Consciousness.

[In principle, the Integrated Information Theory (IIT) can calculate the level of consciousness of any system, including comatose patients, infants, simple animals, plants, robots, and next generation AI. The theory also has implications for Philip Goff's philosophy of panpsychism and David Chalmer's hard problem of consciousness. IIT model states that more integrated informational systems have higher levels of consciousness. When the system is less integrated, a lower state of consciousness would exist].

"This claim has some interesting implications. If some smaller group of neurons within a larger brain area that normally supports consciousness suddenly became significantly more interconnected, and thereby surpassed the Φ of the larger area, then this smaller group would form its own consciousness separate from the larger whole. Or if the Φ of a normally conscious area suddenly dropped below the Φ of all smaller neuron groups at some level, its consciousness would dissolve into multiple lesser consciousnesses belonging to these neuron groups individually. Indeed, this could be what happens temporarily, in deep sleep: we think consciousness entirely disappears, but it might actually just change into a fragmented form (which is no longer recognizable as 'our' consciousness). "One basic fact that we know is that human consciousness depends on the brain, and specifically, on some areas of the cerebrum, such as the posterior cortex. On the other hand, another part of the brain, the cerebellum, is important for motor functions, balance, and so on, but doesn't directly support consciousness." [My emphasis. I believe the emphasized point is precisely what happens in Tara Westover's brain when she goes to college. (I discuss this and other details of her interesting story as seen from the quadrune mind perspective on page 48 in the section entitled, "Tara Westover and History's Age of Reason.") Her rational mind did not have integrated neural circuits to represent the specific schema of a university town. Her state of unintegration for that particular schema led to her panic attack. However, because her brain was otherwise healthy and well-integrated, she was able to recover from her panic attack by integrating schema relating to a university town. Her recovery occurs as her brain learns to integrate the cacophony of noises received by the more integrated prerational mind into meaningful patterns of sounds that are later integrated by the higher rational circuitry of the cerebral cortex. Mørch, however, continues the uni-consciousness belief that we have one consciousness residing in our brain. QM has more explanatory power for the full range of human behaviors with the four-minded model of the brain than any unitary model of human consciousness. One area of the brain supports cognition, intellectual consciousness in the model. Another area of the brain supports behavioral consciousness. QM concludes that these two areas of the human brain support two distinct levels of consciousness.

I believe that with the appropriate approach to neuroscientific research, empirical evidence could build a strong brain "type" model in support of the dynamic quadrune mind. IIT seems to identify the quadrune mind's dominant level of consciousness as that neural system that is the most relatively well-integrated area within a person's brain. Paul MacLean was an excellent neuroscientist, and he established some fundamental "brain types" for his triune brain model, using the theoretical beliefs and neuroscientific technology available in his day. For example, he had a more linear way of thinking about evolution then, for which he has been criticized, but which was the standard professional understanding of that time].

xxix Siegel, D. J. (2021). An introduction to interpersonal neurobiology. *Mind Your Brain*. https://drdansiegel.com/interpersonal-neurobiology/.

[For more about Siegel's ideas, see my essay *QM* and the Future of Spiritual Consciousness: (Or, Metamorphoses of Mind). https://quadrunemind.com/2021/04/21/qm-and-the-future-of-spiritual-consciousness/].

xxx Interpersonal neurobiology. (Last edited 2023, January 27). Wikipedia, the free encyclopedia. https://en.wikipedia.org/wiki/Interpersonal_neurobiology.

xxxi From *QM, Creation, Evolution, and Panpsychism*. https://quadrunemind.com/2020/04/22/qm-creation-evolution-and-panpsychism/.

is the force that created, evolved, or by some other action or inaction, resulted in the existence of the physical human brain and its emergent human consciousness. In the quadrune mind there is no "deeper" level of understanding to account for human nature. Religion has appealed to, and has been mocked for, describing the world as supported by an elephant supported by a turtle. The answer to what supports the turtle is another turtle, or "turtles all the way down." Western "mythos-philosophy" has used logic to argue the "first cause." The first, unnaturally uncaused, cause being God. But, why can't there be an endless regression of unnaturally uncaused Gods usurping the previously uncaused God. Or, cosmology today with scientific arguments that our "big bang" is

the result of a previous universe's "big crunch," ad infinitum. Turtles all the way down, Gods all the way up, and universes all the way back. From turtles to universes the lesson is that infinite regression is not a practical way to understand our world by whichever system is used. I love these arguments recreationally, but not as a way to The Truth of our spiritual lives in physical bodies on a temporal planet. For that, I argue on behalf of the quadrune mind model, which is a secular model of spiritual consciousness. For an early, related essay, see *Thoughts On How We Got Here & The Evolution Of Our Brains*. https://quadrunemind.com/2020/09/15/thoughts-on-how-we-got-here-the-evolution-of-our-brains/.

xxxiii Quadrune Mind: A Secular Spirituality for the 21st Century. https://quadrunemind.com/2021/08/20/quadrune-mind-spirituality-for-the-21st-century/.

[This essay has my most detailed arguments as to how the three immature levels of consciousness act out different religious values: "Reptilian Mind: Behavior over Life," "Old Mammalian Mind: Emotional Bonds over Life," and "New Mammalian Mind: Ideology over Life." And finally, I describe the value expressed by the spiritual level of consciousness: "Human Mind: Service is Life." I use Jean Valjean from *Les Misérables* as a case study for one person's progression from an immature to Grownup level of consciousness and why he is a good example for us.]

xxxiv Narvaez, D. F. (Posted 2021, January 10). Understanding the integrated brain: What good psychotherapy does.

Psychology Today. https://www.psychologytoday.com/us/blog/moral-landscapes/202101/understanding-the-integrated-brain.

[This article takes a different neural architectural approach, but the conclusion supports the connection between a well-integrated brain and the capacity for kindness and compassion over competitive, utilitarian, judgmental relationships with others. In the quadrune mind it is specifically a spiritual consciousness that emerges from a well-integrated brain].

Taylor, S. (2019). The Symptoms of higher consciousness: 18 unmistakable signs of spiritual awakening. Conscious Lifestyle Magazine. https://www.consciouslifestylemag.com/spiritual-awakening-signs-and-symptoms/. "These characteristics of spiritual awakening are uniform. Typically, permanently awakened people experience all of these characteristics and usually at roughly the same degree of intensity. This uniformity is one of the most striking things to emerge from my research into the signs and symptoms of spiritual awakening and emphasizes the validity of seeing wakefulness as a distinct psychological state."

[Level of consciousness from the quadrune mind model's perspective].

"The only significant variation is in terms of the *overall* intensity of wakefulness. The continuum of states of wakefulness (*editors note: wakefulness is a term that refers to the state of being spiritually aware or awake at above average levels*) ranges from less intense to very intense. The intensity of the characteristics of wakefulness obviously varies according to the intensity of a person's overall wakefulness....

"It's also worth noting that many of the characteristics I'm going to highlight are common to temporary spiritual awakening experiences, too."

[The 18 criteria are: 1. Intensified Perception, 2. Increased Presentness / Timelessness, 3. Awareness of "Presence" or an All-Pervading Spiritual Energy, 4. Aliveness, Harmony, and Connectedness, 5. Inner Quietness, 6. Transcendence of Separation / Sense of Connection, 7. Empathy and Compassion, 8. Well-Being, 9. Absence of (or Decreased) Fear of Death, 10. Lack of Group Identity, 11. Wide Perspective: A Universal Outlook, 12. Heightened Sense of Morality, 13. Appreciation and Curiosity, 14. Altruism and Engagement, 15. Enjoyment of Inactivity: The Ability to "Be", 16. Beyond Accumulation and Attachment / Nonmaterialism, 17. Autonomy: Living More Authentically, and 18. Enhanced, More Authentic Relationships. Emphases in the original].

xxxvi Merriam-Webster. (n.d.). 1: neurodiversity. In *Merriam-Webster.com dictionary*. Retrieved October 6, 2024, from https://www.merriam-webster.com/dictionary/neurodiversity.

xxxvii For example: Killops, N. (2023, April 8). 14 insightful quotes about neurodiversity. *Social Impact Guide*. https://socialimpactguide.com/journal/quotes-about-neurodiversity/.

Armstrong, T. (2015, April). The myth of the normal brain: Embracing neurodiversity. Medicine and Society: *AMA Journal of Ethics*. https://journalofethics.ama-assn.org/article/myth-normal-brain-embracing-neurodiversity/2015-04.

Russell, G. (First Online: 2019, November 08). *Critiques of the neurodiversity movement*. Springer Link. https://link.springer.com/chapter/10.1007/978-981-13-8437-0 21. "Abstract: The accounts in this collection have ranged from setting up organizations to personal advocacy for change. So far, though, the book is missing a critique of the movement, so here, Ginny Russell writes to address that balance by outlining some prominent critiques, and the ways these critiques have been underwritten or addressed in this volume." Quoted from *Autistic community*

and the neurodiversity movement: Stories from the frontline. (2020). Springer Link. https://link.springer.com/book/10.1007/978-981-13-8437-0.

MacLean Jr., for several years during the development of my model. He helped direct me to material that was helpful not only for a better understanding of the triune brain model, but also for understanding the humanity of the man behind the model. My family and I were able to meet Paul Maclean Jr. and his wife for lunch in the charming town of Niagara-on-the-Lake, Ontario, Canada. They both fondly recalled the traditional MacLean Sunday family dinners. Their recollections matched well with my imagined view of the humane spirit of MacLean. I have also had a few opportunities to talk with colleagues of MacLean. For example, a person who had worked in MacLean's Laboratory of Brain Evolution and Behavior at the National Institute of Mental Health, said that MacLean lacked the usual "ego" of a research lab chief. When I said to another of his NIMH colleagues that I was a great fan of MacLean's work, she replied, "Yes, he did some very good work, especially early in his career." I believe she was giving much greater value to MacLean's early, "real" psychosomatic related neuroscience philosophical approach to the brain. For me though, it is poetically fitting, and makes me smile, that "MacLean" and "brain" rhyme.

xxxix MacLean, P. D. (1990). The triune brain in evolution: Role in paleocerebral functions. New York: Plenum Press. xi MacLean specifically rejected the more professionally accepted term "homologous" because he believed it connoted a greater functional relationship among the brains of related species than he believed was warranted by his model.

xii For example, see *QM, Phylogenetic Regression, and Extreme Aggression*. https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/.

xiii See Peoples, H. C., Duda, P., and Marlowe, F. W. (2016, May 6). Hunter-Gatherers and the origins of religion. *Human Nature*. https://pmc.ncbi.nlm.nih.gov/articles/PMC4958132/.

"Recent studies of the evolution of religion have revealed the cognitive underpinnings of belief in supernatural agents, the role of ritual in promoting cooperation, and the contribution of morally punishing high gods to the growth and stabilization of human society. The universality of religion across human society points to a deep evolutionary past. However, specific traits of nascent religiosity, and the sequence in which they emerged, have remained unknown. Here we reconstruct the evolution of religious beliefs and behaviors in early modern humans using a global sample of hunter-gatherers and seven traits describing hunter-gatherer religiosity: animism, belief in an afterlife, shamanism, ancestor worship, high gods, and worship of ancestors or high gods who are active in human affairs... Results indicate that the oldest trait of religion, present in the most recent common ancestor of present-day hunter-gatherers, was animism, in agreement with long-standing beliefs about the fundamental role of this trait. Belief in an afterlife emerged, followed by shamanism and ancestor worship. Ancestor spirits or high gods who are active in human affairs were absent in early humans, suggesting a deep history for the egalitarian nature of hunter-gatherer societies. There is a significant positive relationship between most characters investigated, but the trait 'high gods' stands apart, suggesting that belief in a single creator deity can emerge in a society regardless of other aspects of its religion....

"Pleistocene hunter-gatherers would most likely have possessed both the cognitive and communicative skills to share religious beliefs and practices prior to dispersal out of Africa more than 60 kya."

[I use this scholarly article's implied time for the origins of conceptual religion as the beginning of humankind's search for God's nature as separate from humanity's nature. I believe Paul MacLean's triune brain model returns human consciousness (nature) to its rightful place within the evolutionary context of "mind" development on earth

Furthermore, in the quadrune mind model of human nature, along with panpsychism, the essence of the whole universe is one "mind" consisting of varying levels of consciousness. From this view, the "universe's" purpose for human beings is to live our proper level of consciousness within the universe as well as this world. It is only in our "right mind" that we can be at home in this life. See the "Religiosity versus Spirituality" section for detailed descriptions of the maturing relationship between humans and God throughout human history].

xiiii For early comments on the legacy of MacLean's use of his evolutionary neuroethology approach to the brain and related research, see Cory, G. A., Jr., & Gardner, R., Jr. (Eds.). (2002). *The evolutionary neuroethology of Paul MacLean: Convergences and Frontiers*. Westport, CT: Praeger. "MacLean sought to elucidate the overall mind-brain puzzle as a functioning whole. Surely the path to substantive progress must be paved by a synthesis of molecular

and molar perspectives.... Indeed, the larger evolutionary considerations must frame molecular analyses—not *vice versa*...." [P. ix].

[Evolutionary neuroethology is the comparative study of animal behaviors in nature as they relate to the evolution of the brain].

xiiv See my essay *QM and Paul MacLean's Triune Brain Model*. https://quadrunemind.com/2021/06/28/qm-and-paul-macleans-triune-brain-model/.

[I discuss other tripartite models of consciousness by Plato, Sigmund Freud, and Antonio Damasio in this essay. Of all our essays, this one gives the most comprehensive context for the quadrune mind model.]

xlv Modified version of page 5 of the Quadrune Mind Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf

xivi Connectome (book). (Last edited 2023, August 31). \. Wikipedia, the free encyclopedia. https://en.wikipedia.org/wiki/Connectome (book).

xivii Connectome programs. (Last reviewed, 2023, June 23). NIH Blueprint for Neuroscience Research. https://neuroscienceblueprint.nih.gov/human-connectome/connectome-programs.

xiviii For a scholarly research article on the brainstem, the evolutionarily oldest part of the human brain and what MacLean called the "reptilian" brain type in humans, see Baizer, J. S., & Witelson, S. F. (Pub. online 2023, February 16). Comparative analysis of four nuclei in the human brainstem: Individual differences, left-right asymmetry, species differences. National Library of Medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9978016/. "Results: We found significant individual variability in the size and shape of brainstem structures among humans.... In humans there are nuclei... not seen in several other species. In addition, there are brainstem structures that are conserved across species but show major expansion in humans...." [Emphasis added].

xlix For a scholarly review of the functional differences of the prefrontal cortex between humans and other primates, see Levy, R. (2023, November 16). The prefrontal cortex: from monkey to man. *National Library of Medicine*. https://pmc.ncbi.nlm.nih.gov/articles/PMC10907097/.

"[T]he human prefrontal cortex has developed dramatically compared to that of other primates. This increase seems to concern the most anterior part (the frontopolar cortex). In humans, the development of the most anterior prefrontal cortex is associated with three major and interrelated cognitive changes: (i) a greater working memory capacity, allowing for greater integration of past experiences and prospective futures; (ii) a greater capacity to link discontinuous or distant data, whether temporal or semantic; and (iii) a greater capacity for abstraction, allowing humans to classify knowledge in different ways, to engage in analogical reasoning or to acquire abstract values that give rise to our beliefs and morals. Together, these new skills enable us, among other things, to develop highly sophisticated social interactions based on language, enabling us to conceive beliefs and moral judgements and to conceptualize, create and extend our vision of our environment beyond what we can physically grasp. Finally, a model of the transition of prefrontal functions between humans and non-human primates concludes this review....

"[D]iseases damaging large portions of the prefrontal cortex render us apathetic and impulsive, keep us in the present, incapable of abstraction, subjugate us into automatic thoughts or make us respond immediately to the flow of our percepts or push us to satisfy our primary needs rather than control them and develop behaviour based on mental deliberation."

[Like an infant or young child].

¹ Swartz, J. (1982, August). Brain evolution linked to concern for others. *APA Monitor*, p.45. [Now *Monitor on Psychology*].

Ese my essay QM and the Vital Difference between Consciousness and Intelligence. https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/. [In this essay, I use the quadrune mind perspective of consciousness to describe: (1) the area of the Central Nervous System associated with each mind; (2) the dominant life purpose of each mind's level of consciousness; (3) the kind of intelligence that each mind uses to fulfill its purpose of life; and (4) how each mind is expressed in an afflicted adult who is "stuck" at that respective level of consciousness. I use excerpts from the essay in the present discussion on minds and the central nervous system.]

lii Modified version of page 7 of the Quadrune Mind Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

Cunningham, A. (2023, August, 26). Climate disasters put children at risk: Exposure to heat, smoke and more can cause lingering harm. *Science News*. "All children are vulnerable, but certain children are hurt first and worst.... In

the United States, communities of color and communities of low income have disproportionately higher exposure to air pollution as well as to severe heat and extreme weather events. Polluting sources like major highways, bus and truck depots, industrial plants and power plants are disproportionately located in and near these communities....

"Disproportionate exposure... contribute[s] to the disparities in disease rates. In the United States, asthma prevalence and infant mortality in Black children are twice the rates seen in white children....

"[L]ong-term effects of these early harms [include] respiratory conditions.... Reduced intellectual functioning associated with air pollution, and also malnutrition prenatally or in early life, affects the ability to learn. Stress and trauma from shocks of climate change and other adverse events that are experienced at a young age can affect mental health throughout life."

^{liv} Swartz, J. (1982, August). Brain evolution linked to concern for others. *APA Monitor*, p.45. [Now *Monitor on Psychology*]. "The neocortex, necessary for language and speech, reaches its greatest development in humans. With its focus on the material world, MacLean said, it can be likened to a coldly reasoning computer, capable of devising wars and other cruel acts.

"'As if to counterbalance such a terrible genie,' MacLean said, 'nature began to enlarge that part of the neocortex—the prefrontal area—which for the first time in the world brings a sense of concern for the welfare of all living things.'

"The prefrontal cortex is the only part of the neocortex that looks inward, MacLean continued. It establishes strong connections with that part of the limbic system concerned with parental care. There is clinical evidence, he said, that the prefrontal cortex, by looking inward, obtains the gut feeling required for identifying with another individual.

"It is this new development,' he concluded, 'that makes possible the insight needed to plan for others as well as for oneself, and to use our knowledge to alleviate suffering everywhere."

[This article indicates the humane purpose of MacLean's neuroscientific approach to the brain, which also informs the philosophy of the quadrune mind].

Modified version of page 8 of the Quadrune Mind Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

[More recent research may alter some specifics of this list, but there will always be such a list for almost all of us. Because of genetic, and especially epigenetic, causes, some afflictions to our brain may occur before we are born].

Vi For example, Pengelly, M. (2023, November 1). US should place 'no limit' on civilian casualties Israel inflicts, senator says: However, Republican senator Lindsey Graham says, Israel should be 'smart' and try to limit casualties 'the best they can.' The Guardian.

https://www.theguardian.com/us-news/2023/nov/01/lindsey-graham-israel-hamas-war-civilian-casualties.

[This statement is perfectly logical to the mind of a bigot; that is, a person who is not taking such a position toward both people. The statement on its face endorses indiscriminate murder with a weak, self-serving, perfunctory "the best they can"]!

^{lvii} For example, see Desmond, M. (2023, March 9; updated 2023, April 3). Why poverty persists in America: A Pulitzer Prize-winning sociologist offers a new explanation for an intractable problem. *New York Times*. https://www.nytimes.com/2023/03/09/magazine/poverty-by-america-matthew-desmond.html. "The primary reason for our stalled progress on poverty reduction has to do with the fact that we have not confronted the unrelenting exploitation of the poor in the labor, housing and financial markets....

"Poverty isn't simply the condition of not having enough money. It's the condition of not having enough choice and being taken advantage of because of that. When we ignore the role that exploitation plays in trapping people in poverty, we end up designing policy that is weak at best and ineffective at worst....

"In Tommy Orange's novel, *There There*, a man trying to describe the problem of suicides on Native American reservations says: 'Kids are jumping out the windows of burning buildings, falling to their deaths. And we think the problem is that they're jumping.' The poverty debate has suffered from a similar kind of myopia. For the past half-century, we've approached the poverty question by pointing to poor people themselves — posing questions about their work ethic, say, or their welfare benefits — when we should have been focusing on the fire. The question that should serve as a looping incantation, the one we should ask every time we drive past a tent encampment, those tarped American slums smelling of asphalt and bodies, or every time we see someone asleep on the bus, slumped over in work clothes, is simply: *Who benefits?* Not: *Why don't you find a better job?* Or: *Why don't you move?* Or: *Why don't you stop taking out payday loans?* But: *Who is feeding off this?*"

See my essay *Suffering, Indifference, and a Dead Deer on the Side of the Road*. https://quadrunemind.com/2021/07/16/suffering-indifference-and-a-dead-deer-on-the-side-of-the-road/.

lix For example, see Golding, W. (1955). Lord of the flies. New York: Capricorn Books. William Golding has all of the elements of today's world in this book. A group of British boys are stranded on an uninhabited jungle island. During their efforts to survive the boys' behavior devolves into power struggles, paranoia, and murderous savagery. The boys are "rescued" by British naval personnel who are in the midst of a global war of savagery, although technology makes savage intention seem more adult and civilized. One of the boys weeps for their "loss of innocence." The Kenyon Review blurb states, "Evil is inherent in the human mind itself, whatever innocence may cloak it...." These two reactions are exactly wrong but common. Humans are not born in a state of innocence, but in a state of naïveté without a spiritual connotation. Contrary to the Kenyon Review, "evil" exists in every level of consciousness of humanity except in the Grownup mind, the only mind unique to the human mind. "[E]very society is only 20 years away from barbarism. Twenty years is all we have to accomplish the task of civilizing the infants who are born into our midst each year." Quotation is credited to Albert Siegel. The infantile mind, which is developmentally appropriate during infancy, can produce savage behavior in damaged adults who are stuck in the infantile level of consciousness.

For an extended discussion of this crucial difference, see our comparison of two religious politicians (which is usually more than two strikes against the presence of a spiritual consciousness): Why Religious Fervor and Spiritual Consciousness Are Not The Same: (A Comparison of Two Religious Politicians, Josh Hawley and John Lewis, in Light of the Quadrune Mind Model). https://quadrunemind.com/2021/03/19/are-religious-fervor-and-spiritual-conscious-the-same-thing/.

ki This is an aphorism I wrote to describe the four-part complexity of human nature. I use MacLean's language of "crocodile," "horse," and "computer," originally adding "angel" as a term for the spiritually conscious human being. Of course, I referred to succoring angels. Avenging angels, on the other hand, would not reflect the quadrune mind values of spirituality—even when God is the avenger. I have replaced "angel" with "Grownup" to reinforce the idea that it is a "this-world" consciousness that we aspire to. This book uses developmental, rather than evolutionary, language to describe levels of consciousness, although either can be appropriate in different contexts. See the Glossary for definitions of other terms used technically in the quadrune mind model. See Appendix C for a complete list of my aphorisms written from the quadrune mind perspective.

https://medium.com/swlh/all-models-are-wrong-does-not-mean-what-you-think-it-means-610390c40c9c. "[T]here is no such quote to be found in G. Box's bibliography. The closest we get is this statement from his 1987 book with N. R. Draper 'Empirical Model-Building and Response Surfaces' where on page 424 we read the following: 'Remember that all models are wrong; the practical question is how wrong do they have to be to not be useful.' While it can be translated into the often-used long-form 'All models are wrong, but some are useful' with some tolerance, it is still obvious that there remains a significant shift of meaning and focus relative to the original quote."

kiii Henriques, G. (2023, March 23). What Is the Triune Mind?: The three things that people mean by the mind, tied together. *Psychology Today*. https://www.psychologytoday.com/us/blog/theory-of-knowledge/202303/what-is-the-triune-mind.

[Psychology professor, Gregg Henriques, distinguishes three minds from Paul MacLean's triune brain model. I believe the author makes good points about the usefulness of the three-mind approach to psychology. Most critics of the triune brain model, and some supporters, seem to miss MacLean's explicit comments that the triune brain is a three-in-one brain model. It seems many critics have not read MacLean. They make simplistic arguments against a complex model of consciousness, because they have not done their homework; they criticize the "tri-"part while being, or acting, ignorant of the "-une" part of his model].

https://en.wikipedia.org/wiki/Triune_Mind,_Triune_Brain. (Last edited 2023, January 20). Wikipedia, the free encyclopedia.

https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-

Ph.D..pdf.

For more details, see our essay What Is It Like to Have a Mind? https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/.

l use the term "pre-human" to indicate that our levels of consciousness are developmental stages that we can help each other grow through, rather than the more pejorative term "subhuman," which suggests a static, hierarchical caste system.

haviii MacLean makes these analogies. For example, "The neocortex, necessary for language and speech, reaches its greatest development in humans. With its focus on the material world, MacLean said, it can be likened to a coldly reasoning computer, capable of devising wars and other cruel acts."

kix For a scholarly review of human brain development at the "tree" level of examination, see Tierney, A. L., & Nelson, III, C. A. (2013, July 25). Brain development and the role of experience in the early years. *National Library of Medicine*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3722610/.

Lorenz, K. (1963; Eng. trans. 1966). *On aggression*. New York: MJF Books. "In militant enthusiasm, [people] may enjoy the feeling of absolute righteousness even while they commit atrocities."

https://mindmatters.ai/2021/11/neuroscientist-even-viruses-are-intelligent-in-some-sense/.

[The article links the intelligent-appearing behavior of viruses with panpsychism's view of consciousness as an inherent feature of the universe. Still, as a type of human consciousness, the quadrune mind begins at the level of the infantile behavioral mind].

kxiii Cherry, K., & Chaves, C. (med. rev.). (Updated 2023, May 4). Structure and Function of the Central Nervous System. *Verywell Mind*. https://www.verywellmind.com/what-is-the-central-nervous-system-2794981.

bxxiv Stanford Medicine. (n.d.). Newborn senses. Stanford Medicine Children's Health.

https://www.stanfordchildrens.org/en/topic/default?id=newborn-senses-90-

<u>P02631#:~:text=The%20senses%20of%20a%20newborn,senses%20are%20not%20fully%20developed</u>. "The senses of a newborn: Babies are born with all 5 senses—sight, hearing, smell, taste, and touch. Some of the senses are not fully developed."

bxxv See Wyss Institute for Biologically Inspired Engineering at Harvard. (2021, July 15). Thinking without a brain: Studies in brainless slime molds reveal that they use physical cues to decide where to grow. *Science News*. "'People are becoming more interested in Physarum because it doesn't have a brain but it can still perform a lot of the behaviors that we associate with thinking, like solving mazes, learning new things, and predicting events,' said first author Nirosha Murugan, a former member of the Allen Discovery Center who is now an Assistant Professor at Algoma University in Ontario, Canada. 'Figuring out how proto-intelligent life manages to do this type of computation gives us more insight into the underpinnings of animal cognition and behavior, including our own.'" bxxvi See my essay *QM*, *Phylogenetic Regression*, and *Extreme Aggression*.

https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/.

[This essay describes how every organ in a baby's body is involved with the maintenance of homeostasis, and its ongoing necessity for the rest of our lives. Also, see Dr. John S. Torday's argument that, paradoxically, homeostasis is a driving force of evolution].

Torday, J. S. (2015, September). Homeostasis as the mechanism of evolution. *Biology (Basel)*. "[H]ow homeostasis can act simultaneously as both a stabilizing agent and as the determining mechanism for evolutionary change.... "Reducing evolution to homeostasis offers a fundamental mechanistic insight to the origin and causal nature of this process. It is no longer random mutation and Natural Selection, but adaptation of the internal environment of the organism to the external environment of the physical world in service to homeostasis. Ultimately, Selection facilitates the homeostatically-determined change resulting from the interaction between the organism and the environment....

"We now know that the epigenetic 'marks' acquired during the life of the organism are not all eliminated during meiosis, as had previously been thought, and that those marks are heritable and biologically active....

"Perhaps the reason why we go through the life cycle from zygote to zygote is to acquire epigenetically-heritable information from the environment and selectively integrate it into our genome. The 'filtering' mechanisms are those of ontogeny and phylogeny, providing both the short-term and long-term 'histories' of the organism as a means of monitoring the homeostatic relevance of the acquired mutations. Homeostasis is integral to morphogenesis, since the growth factor signaling mechanisms of embryogenesis become homeostatic mechanisms in the offspring. As such, they also can discriminate between adaptive and maladaptive genetic mutations that affect homeostasis, either indirectly through the developmental process, or directly through the regulatory mechanisms of physiology....

"[The] intimate relationship between environmental physiologic stress, homeostasis and remodeling goes all the way back to the inception of life.... The ability to recapitulate this process from one generation to the next, acquiring new 'knowledge' through reproduction and epigenetics allows the system to perpetuate itself indefinitely, or become extinct....

"Allostasis clarifies an inherent ambiguity in the term 'homeostasis' and distinguishes between the systems that are essential for life ("homeostasis") and those that maintain these systems in balance ("allostasis") as environment and life history stage changes....

"If in effect life is a continuum that emanates from the unicellular state, then homeostasis functions at all levels of biology as a fractal, independent of scale. So the properties of allostasis are a higher-level expression of the same homeostatic principles expressed at the cellular, tissue and organ levels....

"[W]e have to see the organism as both its past and its future, not just as it appears in its current condition in order to understand epigenetic inheritance."

bxxvii See my essay Automaticity: Humans Behaving Like Machines: (Including Driving, Meals, Sex, and Work). https://quadrunemind.com/2022/01/05/automaticity-humans-behaving-like-machines/.

bxviii For example, see Harrell, E. (2019, January 23). Neuromarketing: What You Need to Know: A report on the state of the art by Eben Harrell. *Harvard Business Review*. https://hbr.org/2019/01/neuromarketing-what-you-need-to-know#. "Traditionally, marketers are concerned with more than simply measuring consumer preferences; they also try to change them. Neuroscience researchers are beginning to probe whether the brain can be used to influence purchases—an area of study that generates excitement and also ethical concerns....

"[For example, in] 2015 they found that dosing consumers with testosterone increased their preference for luxury brands; the researchers hypothesized that luxury goods represent social markers and that testosterone makes people more sensitive to status....

"Although neural manipulation may strike some as creepy, even dystopian, defenders point out that marketers already use tactics to influence consumers without their knowledge. 'If a man sees an advertisement for a truck with a sexy woman standing in front of it, he will be influenced by the extraneous model, even if he doesn't realize it,' says Michael Platt, whose group recently organized a conference on neuroethics....

"But other forms of manipulation are subtle. [Moran Cerf, a neuroscience and business professor at Northwestern], says his biggest concern is a lack of transparency around what's happening in neuroscience labs at major companies, particularly tech giants such as Facebook, Google, and Amazon. Some companies are already under scrutiny for running experiments without user consent—such as when Facebook manipulated nearly 700,000 users' mood states in 2012 by altering their newsfeeds without informing them."

For more about our self-righteous reactions to people who slow us down, see my essay, *Why Speed, Efficiency, and Convenience are Dehumanizing Values to Live By*. https://quadrunemind.com/2021/05/18/why-speed-efficiency-and-convenience-are-dehumanizing-values-to-live-by/.

[In the essay I contrast lives of speed and efficiency with plodding and futile lives.]

For example, see the "What Is It Like to Have a Reptilian Mind?" section of my essay What Is It Like to Have a Mind? https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/.

The five freedoms and a life worth living are further described in this animal rights website: Waxman, A. (2021, December 20). Food Justice: Five freedoms of animal welfare: What they are & why they aren't enough. *The Humane League*. https://thehumaneleague.org/article/the-five-freedoms-of-animal-welfare.

[Human babies must have the "five freedoms," at a minimum, for a life worth living, as well. Furthermore, this article addresses zoos and factory farms where animals, removed from their natural habitat, cannot live their true

nature. This is also true of human beings in artificial, constrained environments, such as factories, offices, schools, and prisons].

bxxxii For example, see our essay *QM and Ugliness as Evil*. https://quadrunemind.com/2020/03/11/qm-and-ugliness-as-evil/.

For a summary of the evolutionary history of the neocortex, see Dubuc, B. (2012-2022). The evolutionary layers of the human brain. The Brain from Top to Bottom. Montréal, Québec, CA: McGill University. https://thebrain.mcgill.ca/flash/i/i 05/i 05 cr/i 05 cr her/i 05 cr her.html. "A larger cortex obviously contains a larger number of neurons. But what increases the most in mammals is the number of connections between these neurons."

[Emphasis in the original. MacLean's structural model of the brain is criticized, but the functional relevance to the quadrune mind model of human nature remains intact].

bxxiv For a piercing view of an American society run by adolescents and the forces that brought it about, see Bly, R. (1996). *The sibling society*. Reading, MA: Addison-Wesley.

bureaucrats' opposition to her livestock handling reforms, see Grandin, T., & Johnson, C. (2005). *Animals in translation: Using the mysteries of autism to decode animal behavior*. New York: Scribner. Also see my essay, *QM and the Scary New Mammalian Mind of the 21st Century*. https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/.

kxxvi For an excellent resource on this subject, see *Animal Cognition: Investigating the mental capacities of animals*. (2025). Springer Nature. https://www.animalcognition.org/.

kxxxvii Anderson, A. (2014, May). Many Animals Can Think Abstractly: Several species can think conceptually about the things they see. *Scientific American Mind*. https://www.scientificamerican.com/article/many-animals-can-think-abstractly/.

https://janegoodall.ca/our-stories/do-chimpanzees have culture? Jane Goodall Institute Canada. https://janegoodall.ca/our-stories/do-chimpanzees-have-culture/. "Chimpanzees and humans share a surprising number of similarities. For starters, chimpanzees and people share nearly identical genetic DNA. More recently, another similarity has been discovered: the presence of culture in chimpanzees.

"Culture has historically been regarded as a distinguishing feature of what makes humans unique. Culture is defined as 'the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations.' However, scientists have discovered evidence of culture in different animal species. The strongest and most diverse evidence of culture in animals has been found in chimpanzees."

kxxix Quote Investigator®. (2013, August 29). Tracing Quotations. https://quoteinvestigator.com/2013/08/29/get-it-right/. Early examples are cited for the historical development of this phrase include learning spelling, swimming, playing music, and theatrical acting.

Compare, "Maybe we get the endings we deserve. Or maybe the endings we practice." Nayeri, D. (2020). *Everything sad is untrue (a true story)*. Montclair, NJ: Levine Querido. [P. 256].

[Daniel Nayeri inadvertently expresses the quadrune mind model's perspective that habituated behaviors, emotional responses, and thinking become our "destiny"].

xc For signs that you have outgrown someone in your life, see Plata, M. (2018, September 26). 7 Signs you've outgrown someone in your life: Realizing you've changed might be the first step. *Psychology Today*. https://www.psychologytoday.com/us/blog/the-gen-y-psy/201809/7-signs-youve-outgrown-someone-in-your-life. xci See our essay *QM and the Four Steps—and Missteps—to New Behavior*

https://quadrunemind.com/2020/11/06/qm-and-the-four-steps-and-missteps-to-new-behavior/.

[In this essay, we discuss the steps, and missteps, of moving away, specifically, from bigotry. The four steps apply to making any change, but especially ones that affect our sense of identity. The four steps are: *Integrated, Awkward, Phony, and Reintegrated*.]

xcii Alcoholics Anonymous. (2023). *The twelve steps*. Alcoholics Anonymous World Services. https://www.aa.org/the-twelve-steps. It is not until Step 12 that "spiritual awakening" is acknowledged, leading to a continuing re-healing way of life: "Having had a spiritual awakening as the result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs." A lot of work had been done between Step 1 and Step 12.

- ^{xciii} What is enlightenment? Can anyone be enlightened? (2023). *Tricycle: Buddhism for Beginners*. https://tricycle.org/beginners/buddhism/what-is-enlightenment/.
- xciv Marchese, D. (2023, August 11). The 'World's Happiest Man' shares his three rules for life. *New York Times*. https://www.nytimes.com/interactive/2023/08/13/magazine/matthieu-ricard-interview.html.
- xev Modified version of page 9 of the *Quadrune Mind Study Guide*. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf. Reading from top to bottom in each column, the broad areas of interest include: (a) level of consciousness of each mind and the trait that is missing related to the next mental level, (b) approximation of how many years ago the mind evolutionarily appeared in animals and recent human ancestors, (c) some descriptive names of the general brain area involved that supports the respective mind, (d) developmental stage during which the mind comes of age in the healthy brain, (e) the primary goal of the dominant mind, (f) quality of relationships to other people, (g) the highest good for a person at that level of consciousness, (h) the dramatic theme of the person's life at that level of consciousness, (i) samples of functional traits typically found in people living primarily at that particular level of consciousness, and (j) my specific name for the population of people dominated by each mind." This description is from my essay *QM and the Study Guide*. https://quadrunemind.com/2020/03/10/qm-and-the-study-guide/. The table is more suggestive than definitive.
- xcvi Lorenz, K. (1963; Eng. trans. 1966). *On aggression*. New York: MJF Books. "The danger to modern man arises not so much from his power of mastering natural phenomena as from his powerlessness to control sensibly what is happening today in his own society. I maintain that this powerlessness is entirely the consequence of the lack of human insight into the causation of human behavior." [P. 223].
- xcviii Merriam-Webster. (n.d.). 1b: stability. In *Merriam-Webster.com dictionary*. Retrieved July 26, 2024, from https://www.merriam-webster.com/dictionary/stability. "The property of a body that causes it when disturbed from a condition of equilibrium or steady motion to develop forces or moments that restore the original condition." [Human bodies do the same thing to maintain equilibrium, which is the highest good to the infant].

 xcviii Li, P. (2021, October 25; updated 2024, June 17). Enmeshment & how to rebuild boundaries in enmeshed
- family. *Parenting For Brain*. https://www.parentingforbrain.com/enmeshed-family/.

 **cix* For more about the destructive potential of abstract thinking in the afflicted adult, see the essay *QM and the Scary New Mammalian Mind of the 21st Century*. https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/.
- ^c For a model of the increased capacity for ideation across species, which is especially relevant to the quadrune mind perspective, see Greenspan, S. I., & Shanker, S. G. (2006). *The first idea: How symbols, language, and intelligence evolved from our primate ancestors to modern humans*. Cambridge, MA: Da Capo Press.
- ^{ci} Bradley, M. Z. (1982). *The mists of Avalon*. New York: Del Ray Books. "[King Arthur said,] 'It is the first time I have known what real fear was, fear I might die with my work still undone.'
- "'God would not have it so,' Gwenhwyfar said.
- "Arthur patted her hand. 'I told myself that, but a voice within kept saying to me that this was the great sin of pride, fearing that I or any man could not be spared from what God wishes to be done....'" [Pp. 328-329]. [King Arthur's insight in Marion Zimmer Bradley's magnificent novel refers to Arthur's own sense of a purposeful life. He shows maturity when he recognizes that his success or failure does not determine God's success or failure. On the other hand, his certainty that he serves God's wishes is shared with many people who serve their God through healing service or violent genocide. In this example, King Arthur's thinking shows characteristics of the abstracting adolescent mind. This service, as with King Arthur, pairs well with another powerful abstract concept of our life: destiny].
- cii For example, see my essay *Automaticity: Humans Behaving Like Machines*. https://quadru nemind.com/2022/01/05/automaticity-humans-behaving-like-machines/.
- ^{ciii} For some near future possibilities of "human"-software melding, see my essay *QM and the Future of Spiritual Consciousness:* (Or, Metamorphoses of Mind). https://quadrunemind.com/2021/04/21/qm-and-the-future-of-spiritual-consciousness/.
- [As the human mind changes, the concept of human nature also changes. Of course, this has been true during the complete evolutionary history of the Homo genus and Homo sapiens species. Thomas Aquinas expressed this notion in the 13th century: "If our natures were different our duties would be different." Technology or not, our distant descendants' future "human" natures, and duties, will almost certainly be different than they are today in ways that we cannot imagine.]

- civ For example, see our essay *Absolute Certainty: Doing, Knowing, and Thinking*. https://quadrunemind.com/2022/03/18/absolute-certainty-doing-knowing-and-thinking/.
- ^{cv} For example, see our essay *Gautama Buddha or Friedrich Nietzsche: Contented Serenity or Agitated Courage?* https://quadrunemind.com/2022/05/22/gautama-buddha-or-friedrich-nietzsche-contented-serenity-or-agitated-courage/.
- ^{cvi} Greenspan, S. I. (1997). *Developmentally based psychotherapy*. Madison, CT: International Universities Press. [P. 9].
- cvii As with Paul MacLean's magnum opus of 1990, The triune brain in evolution: Role in paleocerebral functions, Greenspan's Developmentally based psychotherapy of 1997 has been followed by significant neuroscientific and psychotherapeutic advances. Nevertheless, I believe that the quadrune mind and its focus on our everyday experiences of consciousness continue to benefit from MacLean's and Greenspan's humanitarian-oriented thinking for many of its foundational insights.
- ^{cviii} From Greenspan, S. I. (1997). *Developmentally based psychotherapy.* Madison, CT: International Universities Press. Stanley Greenspan's developmental levels match well with the quadrune mind levels of consciousness, as follows: 1. Self-regulation; sensory-affective reactivity and processing; behavioral sequencing in response to adaptation to the world; development of specific character types.
- This stage corresponds to the fetal/newborn level Somatic (Reflexive) "Mind" of consciousness in the quadrune mind.
- 2. Foundations for relationships with others and intimacy.
- 3. Boundary-defining, prerepresentational interactions; intentional behaviors; basic sense of reality; partial self-differentiation.

These two stages correspond to the infantile behavioral mind.

- 4. Emergence of a pre-symbolic complex sense of self and "other"; developing behavioral and affective patterns associated with core emotional themes, including pleasure, love, concern for others.
- This stage corresponds to the childish emotional mind.
- 5. Representational elaboration supporting the symbolization of wishes, affects, fantasies; constructing the sense of self and others.
- 6. Representational differentiations underlying reality testing, impulse control, self-observation, and differentiations and integration of an internal self and others.

These two stages correspond to the adolescent intellectual (Cognitive) mind.

- cix Quotation is from Greenspan, S. I. (1997). *Developmentally based psychotherapy*. Madison, CT: International Universities Press, page 382. For detailed clinical examples of how Greenspan's developmentally based psychotherapy approach can be used from a quadrune mind level of consciousness perspective, see our essay *Healing the Dissociated Pre-Human Minds of the Afflicted Human Brain*.
- https://quadrunemind.com/2020/09/14/healing-the-dissociated-pre-human-minds-of-the-afflicted-human-brain/. [In this essay we present two sections of information for each level of consciousness: "Developmental Goals" and "Healing the Mind." See also Greenspan, S. I. (with Benderly, B. L.). (1997) and *The growth of the mind: And the endangered origins of intelligence*. Reading MA: Perseus Books. For more information regarding afflictions to the brain and how Greenspan's model relates to the quadrune mind, see "Afflictions of the Human Brain That May Cause a Dissociation of Minds" page 8, and tabular overviews of "Healthy Developmental Stages of the Human Brain" page 7, and "Healing the Afflicted Brain—Dissociated Minds: A Developmental Based Neurospiritual Model" page 11 of the *Quadrune Mind Study Guide*. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.]
- ^{cx} Developmentally based psychotherapy, p. 311. Emphasis added. I take "experimental" to mean that children cannot independently devise their own experiences in order to gain an "experiential" knowing of empathy. Also, for a thorough expert review of empathy, see Abramson, A. (2021, November). Cultivating empathy: Psychologists' research offers insight into why it's so important to practice the "right" kind of empathy, and how to grow these skills. Monitor on Psychology. https://www.apa.org/monitor/2021/11/feature-cultivating-empathy.
- ^{cxi} Jaynes, J. (1976). The origin of consciousness in the breakdown of the bicameral mind. Boston: Houghton Mifflin. "Consciousness is a much smaller part of our mental life than we are conscious of, because we cannot be conscious of what we are not conscious of... And so consciousness can seem to pervade all mentality when actually it does not." [P. 23].

[Julian Jaynes' statement expresses the quadrune mind's idea of relative levels of (self) consciousness perfectly. However, Jaynes' dualistic view casts the older, non-conscious mentality as a feature of differences between left and right cortical hemispheres, following then current split-brain research; for example, see pages 112-117. His book initiated my interest in the relationship between brain architecture and consciousness. For more about Jaynes' interesting life, see Julian Jaynes. (Last edited 2023, July 14). Wikipedia, the free encyclopedia. https://en.wikipedia.org/wiki/Julian Jaynes#cite note-JJ 2000-1].

cxii See Kaufman, S. B. (2018, November 17). What does it mean to be self-actualized in the 21st century?: New research links self-actualization to optimal creativity, well-being and self-transcendence. *Scientific American*. https://blogs.scientificamerican.com/beautiful-minds/what-does-it-mean-to-be-self-actualized-in-the-21st-century/. Estimates of the percent of people who are "enlightened" or "self-actualized" vary widely. Abraham Maslow estimated that two percent of the population would become self-actualized. At his death Maslow was working on a theory to link self-actualization to self-transcendence and spirituality. A review of Maslow's criteria revealed 10 empirically supported characteristics of the self-transcendent personality: (1) *Continued Freshness of Appreciation*, (2) *Acceptance*, (3) *Authenticity*, (4) *Equanimity*, (5) *Purpose*, (6) *Efficient Perception of Reality*, (7) *Humanitarianism*, (8) *Peak Experiences*, (9) *Good Moral Intuition*, and (10) *Creative Spirit*. "It is clear that Maslow never conceptualized self-actualizing people as selfish or purely individualistic, despite such misrepresentation by some modern commentors. Instead, Maslow increasingly became convinced that *self-actualization is healthy self-realization on the path to self-transcendence*.... Self-actualized people don't sacrifice their potentialities in the service of others; rather, *they use their full powers in the service of others* (important distinction)." [Emphasis in the original].

^{cxiii} Milios, R. (Updated 2024, September 27). Fake it till you make it: Helpful AA saying or dangerous self-deception? American Addiction Centers. https://recovery.org/pro/articles/fake-it-till-you-make-it-helpful-aa-saying-or-dangerous-self-deception/. "When used as a motivational reminder to 'hang in there,' this phrase can help individuals in recovery stay strong during the early days of sobriety. However, some addicts view it as a potential excuse to not fully engage in their sobriety plan....

"Even though belief in the usefulness of the phrase may differ among individuals in recovery, science actually supports a 'fake it till you make it' attitude. Studies show that faking a more positive outlook – pretending to be happy when not ('smiling through the pain') or 'power posing' taking on strong, non-verbal body posture despite not feeling the confidence that the posture would suggest – has the effect of moving us in the direction that we are pretending to experience....

"They further determined that these changes extended beyond mere thinking and feeling, to impact the study participants' physiology and subsequent behavior, producing real-world implications."

[One of the dangers at this step is people who are familiar with you, disbelieving (not wanting, or afraid to believe) that you can really change, and sabotaging your recovery or trying to "call your bluff"].

^{cxiv} This is the "phony stage" of my steps to new behavior model. For details, see the essay "*QM* and the Four Steps—and Missteps—to New Behavior." https://quadrunemind.com/2020/11/06/qm-and-the-four-steps-and-missteps-to-new-behavior/.

^{cxv} For a tabular summary, see "Healing the Afflicted Brain—Dissociated Minds: A Developmentally Based Neurospiritual Model," page 10 of the Quadrune Mind Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

cxvi See my essay *QM, Unhealthy Childish Voices, and Healthy Adult Voices: (Good but Weak, Strong but Bad, or Good and Strong)*. https://quadrunemind.com/2020/12/09/qm-unhealthy-childish-voices-and-healthy-adult-voices/.

[This model is an adaptation of work by my genius, psychiatric mentor, Boyd K. Lester, M.D. The use of the term "adult" predated my adoption of "Grownup" as the label for a fully mature, spiritually conscious adult. Healthy adult language is comparable to "Grownup" language. For example, we used a Transactional Analysis based counseling model for parent effectiveness workshops my wife and I did.]

^{cxvii} Sedgwick, D. (1994). *The wounded healer: Countertransference from a Jungian perspective*. New York: Routledge.

cxviii Merriam-Webster. (n.d.). 2: transference. In *Merriam-Webster.com dictionary*. Retrieved December 13, 2024, from https://www.merriam-webster.com/dictionary/transference.

cxix Merriam-Webster. (n.d.). 1: countertransference. In *Merriam-Webster.com dictionary*. Retrieved December 13, 2024, from https://www.merriam-webster.com/dictionary/countertransference.

```
cxx Sedgwick, D. (1994). The wounded healer: Countertransference from a Jungian perspective. New York: Routledge. [P. 49].

cxxi Sedgwick, D. [P. 56].

cxxii Sedgwick, D. [Pp. 64-65].

cxxiii Sedgwick, D. [P. 70].

cxxiv Sedgwick, D. [Pp. 76, 111-112].

cxxv Sedgwick, D. [P. 77].

cxxvi Sedgwick, D. [P. 88].

cxxvii Sedgwick, D. [P. 117].

cxxvii Sedgwick, D. [P. 119].

cxxvii Sedgwick, D. [P. 119].
```

https://www.zerotothree.org/?utm_source=google&utm_medium=cpc&utm_campaign=grants&utm_content=bra_nding&gclid=EAlalQobChMIj4y68ZCHggMVYA-tBh0mogoJEAAYASAAEgLetvD_BwE. "The first three years of life are the most important for lifelong mental health and well-being. We are experts in translating the science of early childhood development into real impact."

Erennan, D. (2022, March 30). Know when to hold 'em: You can't spoil a baby. *WebMD*.

https://www.webmd.com/parenting/baby/features/infants-attention. "When a child passes the 9-month mark and begins learning the art of persuasion, parents can become more selective in responding to cries, says [Dr. Barbara Howard, assistant professor of pediatrics at Johns Hopkins University in Baltimore]. "The most important thing is not to give in because of an emotional outburst,' she says. 'How many times does it take until the child figures out that the way to get a cookie is to throw a tantrum? About one. They learn really fast.'

"[I]n general, you're not going to spoil a new baby by letting them call the shots for a while. 'Parents are often so achievement-oriented,' Howard says, 'that they're worried they'll make their babies more dependent on them and less able to achieve in our competitive society ... But we need to pay attention to their emotional development, too. Our world has gone overboard on intellect and independence. What we don't have is connectedness and empathy, and it starts from the beginning. The way children develop a sense of kindness towards others is by being dealt with kindly.'"

coxxi See Watson, K. & Browne, D. (Med. rev.). (Updated 2021, November 19). What Is Sensory Overload? *Healthline*. https://www.healthline.com/health/sensory-overload#treatment. "Your brain functions like a beautiful, complicated computer system. Your senses relay information from your environment, and your brain interprets the information and tells you how to react.

"But when there's competing sensory information, your brain can't interpret it all at the same time. For some people, this feels like getting 'stuck'; your brain can't prioritize what sensory information it needs to focus on. "Your brain then sends your body the message that you need to get away from some of the sensory input you're experiencing. Your brain feels trapped by all the input it's getting, and your body starts to panic in a chain reaction." CXXXIII For specific, helpful details, see Setting Limits Parent Resource. (2020, April). Setting limits: Why are limits important and how do I set them appropriately? Boston University Children's Center.

https://www.bu.edu/childrens-center/files/2020/07/Limit-Setting.pdf. Links to Additional Resources are good, especially relevant is "Do not lie to head off a tantrum." in the article, "What NOT to do when your child is having a tantrum: Tips on responding to difficult toddler behavior." https://childmind.org/article/what-not-to-do-when-your-child-is-having-a-tantrum/.

[Lying to manipulate (exploit) adults having tantrums, especially adults with power, is ubiquitous and always self-defeating for everyone].

coxxiii For example, temper tantrums. See Satow, R. (2019, February 5). A Strategy to deal with adult temper tantrums: How do you cope with tantrums of spouses, adult children, or siblings? *Psychology Today*. https://www.psychologytoday.com/us/blog/life-after-50/201902/strategy-deal-adult-temper-tantrums. Details include: Stay calm, Assess potential danger [if nonviolent, then], Show that you understand, Set boundaries [if tantrum continues, then], Give space.

coxxiv Abdullah, S. (1999). Creating a world that works for all. San Francisco: Berrett-Koehler. "It's all well and good to say that we should love The Other, but how do we establish contact with those who want to distance themselves from us, ignore us, or even harm us?... For example, in May of 1998, while in St. Petersburgh, Russia, I was threatened by four skinheads while walking down the street. How could I practice 'Love thy neighbor' when my 'neighbors' were threatening to kill me?... I have had four 'close encounters' with skinheads, two in the United

States and two abroad. In each instance, I was able to apply the techniques I have been discussing and defuse the situation. However, before each incident, I said to myself, 'It could be that you're about to get your ass kicked....' "In the Spirit-driven model, it doesn't matter whether a person is 'successful' in changing the condition. While practical goals are important, the spiritual goal is to awaken the compassion that lies at the root of all change." [Introductory essay by Václav Havel. Quotations are from pages 64-65, 71, and 151. Emphases added. Sharif Abdullah gives powerfully realistic advice on how to live a "spirit-driven" life in a tough world. Awakened compassion is also the state of the Grownup mind].

cxxxv For examples of destructive paths that the adolescent mind might take, see my essay "QM and the Scary New Mammalian Mind of the 21st Century." https://quadrunemind.com/2020/05/22/qm-and-the-scary-new-mammalian-mind-of-the-21st-century/.

[Examples include Abstractification, Individualism, Ideology is more important than people or truth, Nothing personal, it's just business, and Intelligence is not wisdom.]

cxxxi My friend and colleague, Dr. Paul Lehman, has spent his career effectively arguing against the use of the terms "race," "racism," and all other derivatives, as an essential first step to dismantle bigotry based on skin color (or what others would call "race"). His strategic insight is that because human "races" do not exist, "anti-racist" arguments should not be used against what should be named as "ethnic bigotry." Lehman forcefully argues that if "anti-racists" use the term "race" and its derivatives, they are aiding the "racists" cause by legitimizing the debate over "racial" issues. He gives excellent examples of how government documents use "race" language to reinforce the legal dehumanization of Africans at the nation's founding and African-Americans today. For Lehman's thinking, see his blog America's Race Problem. https://americasraceproblem.wordpress.com/.

[I take the title ironically]. Also, see my essay, which was heavily influenced by Lehman, "QM, the Strategic Error Made by "Anti-Racists," and the Mind of a Bigot." https://quadrunemind.com/2020/07/02/qm-the-strategic-error-made-by-anti-racists-and-the-mind-of-a-bigot/.

cxxxvii For example, see Gunner, J. (Sr. Writ.). (Updated 2022, May 16). Examples of abstract nouns: An extensive list. https://www.yourdictionary.com/articles/abstract-noun-examples. An abstract noun refers to something nonphysical that we cannot perceive directly with our senses. Lists of abstract nouns are lengthy. They include topics we talk about all the time: beauty, courage, evil, power, maturity, sanity, anger, pride, crime, government, justice, liberty, life, chaos, death, reason, and truth. In your own mind you may have a concise definition or a clear picture of what you mean with each abstract noun. However, that definition or picture was created in your mind for your mind. None of these things exist "out there" like a table or a body. What we "know" for certain about abstractions reveals much about us and little about the nonphysical reality. Yet, we expect everyone to have the same definition or picture of abstract concepts that we have.

Center. https://www.niskanencenter.org/the-alternative-to-ideology/. Jerry Taylor is a former libertarian who argues against ideological attachments and for moderation: "The first pangs of doubt about my old ideological attachments arose from my loss of faith in the case against climate action. As I began to express doubts about the narratives offered by climate skeptics, I found it impossible to offer an argument that resonated with my libertarian colleagues. But just how, exactly, does an ideological commitment to limited government, free markets, and individual dignity inform an understanding of atmospheric physics or paleoclimate records?...

"The point is that what ideologues fiercely believe about empirical arguments has little to do with their ideological priors. It has to do with the policy implications of those empirical arguments given their ideologically-driven preferences.

"John Rawls once argued, any ideology that does *not* concern itself with the real-world impact of its ideas on society is a thing of madness....

"Wherever we look around the world, when we see inconsequential governments with limited power, as libertarians would prefer, we see "failed states." How much liberty and human dignity can be found there? Very little....

"How much liberty and human dignity can be found in the world where state power breaks down and is overcome by private power? Very little....

"Why, after all, is liberty objectively more important than other considerations that millions of people in this country hold dear, such as the pursuit of social justice, equity, community, virtue ('statecraft as soulcraft,' as George Will once put it), pluralism, material well-being, or any number of concerns that animate people in politics? Ideology is nothing if not the elevation of one particular concern as more important than others....

"Even if you disagree and wish to hold fast to one principled concern above all others, you would still have to confront the fact that your attachment to that primary concern — whatever it is — is largely personal and subjective....

"The problems I've identified in my old world are universal across the ideological spectrum. Ideology corrupts caring, idealistic, educated, and intelligent people ... and turns some of them into monsters. Ideologies breed dogmatic thinking and lazy, decoder-ring policy analysis."

[Emphasis in the original. Taylor makes many incisive points, beyond these excerpts, against all ideologies and argues for alternatives to ideology. Taylor observes that policymaking without an "ideological bible" is "incredibly demanding." Of course, this observation also applies to the demands on people living in a complex world without a religious bible. Many points made in this essay can be understood more deeply when seen through the quadrune mind lens. In any case, the person who could live best without a *revealed bible* is the Grownup].

^{CXXXIX} For example, see *The Great Books of the Western World*: Hutchins, R. M. (Ed. in Chief). (1952). *The great conversation: The substance of a liberal education* (Vol. 1, Ch. V). Chicago: Encyclopædia Britannica. [The excerpts are from 1952]!

"[The Editors] believe that the reduction of the citizen to an object of propaganda, private and public, is one of the greatest dangers to democracy. A prevalent notion is that the great mass of the people cannot understand and cannot form an independent judgment upon any matter; they cannot be educated, in the sense of developing their intellectual powers, but they can be bamboozled. The reiteration of slogans, the distortion of the news, the great storm of propaganda that beats upon the citizen twenty-four hours a day all his life long mean either that democracy must fall a prey to the loudest and most persistent propagandists or that the people must save themselves by strengthening their minds so that they can appraise the issues for themselves.... [P. xiii].

"[John Dewey's] study of occupations as central in education assigns them a place to which they are not entitled.... Is it not a fact that we are now so wrapped up in our own occupations and the special interests of our own occupational groups that we are almost at the pretyrannical stage described by Vico, the stage where everybody is so concerned with his own special interests that nobody looks after the common good.... emphasizing our individuality at the expense of our common humanity? [Pp. 14-15].

"The countries of the West are committed to universal, free, compulsory education.... The West has not accepted the proposition that the democratic ideal demands liberal education for all. In the United States, at least, the prevailing opinion seems to be that the demands of that ideal are met by universal schooling, rather than by universal liberal education. What goes on in school is regarded as of relatively minor importance. The object appears to be to keep the child off the labor market and to detain him in comparatively sanitary surroundings until we are ready to have him go to work.

"The results of universal, free, compulsory education in America can be acceptable only on the theory that the object of the schools is something other than education, that it is, for example, to keep the young from cluttering up homes and factories during a difficult period of their lives, or that it is to bring them together for social or recreational purposes." [Pp. 24-25].

[Keeping children out of factories no longer appears to be a societal goal—again. The archaic gender and cultural language used in the Great Books' editorial statements should not diminish the points, which are relevant for our times, made by Robert M. Hutchins. Definition of "humanely" is from Merriam-Webster. (n.d.). Humane. In *Merriam-Webster.com dictionary*. Retrieved November 3, 2023, from https://www.merriam-webster.com/dictionary/humane.

For related material about John Dewey's philosophy of education, see Hargraves, V. (2021, January 18). Dewey's educational philosophy. *The Education Hub*. https://theeducationhub.org.nz/deweys-educational-philosophy/. Vicki Hargraves concludes, "Dewey's perspective on teaching and learning encourages a teaching as inquiry mindset. His principles for teaching and learning suggest that teachers should cultivate an energetic openness to possibilities alongside a commitment to reflectively learning from experiences, be willing to experience ambiguity and use problems as an opportunity to get deeper into an understanding of self, students, the subject and the context".

^{cxl} Loeb, P. R. (1999). *Soul of a citizen: Living with conviction in a cynical time* (pp. 80-82). New York: St. Martin's Griffin.

cxli For additional detailed context of the bombing, see Atomic bombings of Hiroshima and Nagasaki. (Last edited 2023, July 11.) *Wikipedia, the free encyclopedia*.

https://en.wikipedia.org/wiki/Atomic_bombings_of_Hiroshima_and_Nagasaki#:~:text=Three%20days%20later%2C%20a%20Fat,occurred%20on%20the%20first%20day.

cxlii For an interesting, in-depth update, see Gibson, D. (2023, January 29). 'She knows me least' — 5 years after 'Educated,' Tara Westover's family yearns for reconciliation. Is it possible? *Deseret News*. https://www.deseret.com/indepth/2023/1/29/23575258/what-does-educated-tara-westover-family-think-about-reconciliation-book/.

cxliii See Westover, T. (2018). *Educated: A memoir*. New York: Random House and our essay *QM, Tara Westover, and History's Age of Reason*. https://quadrunemind.com/2020/05/04/qm-tara-westover-and-historys-age-of-enlightenment/.

```
Cxliv Westover, T. (2018). Educated: A memoir. New York: Random House. [Pp. 138, 153-154].

Cxlv Westover, T. [P. 312. Emphasis in the original].

Cxlvi Westover, T. [P. 313. Emphasis in the original].

Cxlvii Westover, T. [P. 322].

Cxlviii Westover, T. [P. 320].

Cxlix Westover, T. [P. 321].

Cl Westover, T. [P. 322].

Cil Westover, T. [P. 322].
```

clii One of the most destructive influences of religion on our spiritual mind today is associated with some Christian interpretations of the biblical book of Revelation. As an antidote to some Christian efforts to provoke Armageddon to bring Jesus back, see Koester, C. R. (2011). Apocalypse: Controversies and Meaning in Western History. https://www.thegreatcourses.com/courses/apocalypse-controversies-and-meaning-in-western-history. Chantilly, VA: The Teaching Company. From the course overview: "Your professor is a preeminent scholar and teacher of the Apocalypse, Professor Craig R. Koester of Luther Seminary in St. Paul, Minnesota. Dr. Koester—who has translated the book of Revelation from its original Greek—draws on years of experience with students, pastors, and lay groups to engage you directly with Revelation, examining its meaning in John's day and how it continues to be meaningful to contemporary readers.

Book of Predictions? Or Work of Literature?

"Professor Koester notes that many of the questions people ask him about the Apocalypse are sparked by sensationalistic interpretations that see it as a book of predictions. Explaining that Revelation follows a literary genre with roots in the apocalyptic writings of the Hebrew prophets, Professor Koester discusses the reasoning behind the futurist perspective and why it is problematic. For example:

- The Antichrist: The word "antichrist" does not appear in Revelation. Instead, it is a term taken from First and Second John in the New Testament, where it refers to those who have left the Christian community, not to any individual tyrant.
- The Rapture: The idea that true Christians will ascend to heaven while others will be left behind to be ruled by the Antichrist occurs nowhere in Revelation. It is a mix of literal and symbolic readings of passages from other books of the Bible.
- **Number of the Beast:** Today's Internet continues a centuries-old search for the name encoded in 666, the number of the beast in Revelation. But the context of John's passage and an ancient puzzle technique give the likely answer: the emperor Nero.
- **Armageddon:** Now understood as a world-destroying conflict, the battle of Armageddon has a different meaning in Revelation. Instead of missiles and tanks, the only weapon is the sword from Christ's mouth, symbolizing the power of his word.

"Throughout these lectures, Professor Koester focuses on what John actually wrote in the Apocalypse, what his situation tells us about his meaning, how that meaning can be applied to our own lives, and how contemporary biblical scholars relate Revelation to the modern world."

cliii Woodward, K. L. (2000). The book of miracles: The meaning of the miracle stories in Christianity, Judaism, Buddhism, Hinduism, Islam. New York: Simon & Schuster. Woodward writes, "This could be the story of the religions of the West. It could also, with important modifications be the story of the religions of India. It might, perhaps, even be the story of the world. In that case, it would be the story of stories, the myth of all myths—and no less true for that."

[The Woodward quotations are from the "Miracles and the Presence of God" section, pages 31-33. This paragraph expresses my argument for the explanatory power of the quadrune mind model. By understanding the model's

levels of consciousness, we can more deeply understand not only the religious history of the world, but also the spiritual development, or lack of spirituality, in our own lives].

cliv For example, that homosexuality is an "abomination" in the sight of God and "unnatural." This bias against homosexuality existing among "natural" animals was so strong that reports of animal homosexuality was not "officially" documented until the 1990s, although it had been seen for 200 years. Species showing homosexual behavior include brown bear, dolphin, wolf, and chimpanzees and bonobos, our closest relatives. For more, see List of mammals displaying homosexual behavior. (Last edited 2023, September 22). Wikipedia, the free encyclopedia. https://en.wikipedia.org/wiki/List of mammals displaying homosexual behavior.

In the 1960s there was a claim made that marijuana was a natural part of God's creation and should be enjoyed. The counterargument was that all of nature had fallen when Adam and Eve sinned, and marijuana was evidence of the Fall. I guess that (circular) argument could be used regarding the place women and homosexuality have in the universe. This may apply to children, as well, justifying physical violence against them to "beat the devil out of them." In any event, the traumatizing treatment against homosexuals, women, and children cannot be justified in the quadrune mind model by how religious persons think from an infantile mentality.

For more about homosexuality in nature, see Yeoman, B. (2023, July 4). Same-sex behavior among animals isn't new. Science is finally catching up.: Once shunned as a subject unfit for science, same-sex behavior among animals—documented in more than 1,500 species—is generating an explosion of new research. *The National Wildlife Federation*. https://www.nwf.org/Magazines/National-Wildlife/2023/Summer/Conservation/Same-Sex-Behavior-Animals

<u>Science#:~:text=More%20common%20than%20recognized,in%20more%20than%201%2C500%20species</u>. "When science carries stigma:

"Moral attitudes have long clouded scientific thinking about same-sex animal behavior. In 1906, naturalist Edmund Selous watched an all-male group of showy shorebirds called ruffs, including one inseparable pair, in the Netherlands. 'They are constantly, so to say, mistaking one another for the female,' he later wrote. 'Perverted sexuality is the real keynote.' A few years later, a researcher in Antarctica witnessed same-sex copulation among Adélie penguins but then coded his findings in Greek letters and didn't publish them.

"More recently, in 1986, butterfly scientist W.J. Tennent witnessed four male Mazarine blues vying for the attentions of another male in Morocco. He published his observations under the title 'A note on the apparent lowering of moral standards in the Lepidoptera' and compared the courtship behavior to what he called the 'horrific sexual offences' that humans commit.

"Since then, attitudes have changed. Universities have grown more diverse, and researchers who identify as LGBTQ+ have become more visible. Today, research on animal homosexuality carries less stigma." [Regarding homosexuality, there is a developing hypothesis that same sex behavior and different sex behavior were both present from the beginning of sexuality. The authors are careful not to apply their findings to human affairs. Nevertheless, this hypothesis places the origins of same sex behavior in nature long before Adam and Eve, at least on an evolutionary account. See Kamath, A., Monk, J., Giglio, E., Lambert, M., & McDonough, C. (2019, November 20). Why is same-sex sexual behavior so common in animals? It's long been considered an evolutionary puzzle, but new research suggests this may be the wrong way to think about it. *Scientific American*.

https://blogs.scientificamerican.com/observations/why-is-same-sex-sexual-behavior-so-common-in-animals/]. ctv For other examples, see the "What Is It Like to Have an Old Mammalian Mind?" section of our essay What Is It Like to Have a Mind? https://quadrunemind.com/2022/06/23/what-is-it-like-to-have-a-mind/.

clvi For example, see Lederach, J. P. (2005). The moral imagination: The art and soul of building peace. New York: Oxford University Press. John Paul Lederach offers four paths to help birth the moral imagination. Following are excerpts: (1) We must move from isolation and attitudes of "dominate or be dominated" toward a capacity to envision and act on the basis that we live in and form part of a web of interdependent relations, which includes our enemy; (2) We must not fall prey to the trap of narrowly defined dualisms; (3) We must live with trust that creativity, divinely embedded in the human spirit, is always within reach; (4) We must expose and break the false promise that places trust in violence as *the* defender and deliverer of security; (5) Accepting vulnerability, we must risk the step into the unknown and unpredictable lands and seek constructive engagement with those people and things we least understand and most fear. [P. 173. Emphasis in the original].

civii What we believe. (2020). *Unitarian Universalist Congregation of Asheville*. https://uuasheville.org/what-we-believe/.

civiii Hannula, L. (Last updated, 2023, September 11). Step 3 of AA: Turning your life over to a higher power. *AlcoholicsAnonymous.com*. https://alcoholicsanonymous.com/step-3-of-aa/

clix For deeply meaningful insights into the complex relationships among God, humanity's responsibilities, and the well-being of earth—and how those insights apply to our lives today, see Koester, C. R. (2016). Reading Biblical Literature: Genesis to Revelation https://www.thegreatcourses.com/courses/reading-biblical-literature-genesis-to-revelation. Chantilly, VA: The Teaching Company. From the course overview: "Adept at explaining each book's meaning and highlighting its literary beauty, Professor [Craig R.] Koester transforms the encounter with these ancient texts into a grand learning experience that's equal parts educational and entertaining. A biblical scholar and noted author, he brings to Reading Biblical Literature the same incisive insights he's brought to his academic work, including commentaries on the books of Hebrews and Revelation, as well as major studies of John's gospel. "While his goal is to uncover and examine the Bible's multiple perspectives, and to present the books of the Old and New Testament as narratives that can be studied the same way one would study any great work of literature, Professor Koester always highlights the spiritual importance these stories have had for people and communities throughout the world. Engaging in a dialogue with these multiple readings and voices brings a greater appreciation of just how intricate, vibrant, and abidingly meaningful the Bible is."

The living relevance of Koester's study of the bible's lessons for us today is especially poignant in Lecture 11. In this lecture Koester compares two philosophies for the wise use of power: ruthless oppression of the people or compassionate service to the people. From the Guidebook: **Lecture 11**: Solomon, a Study in Contradictions. "[1 Kings 1-11] Throughout the story of Solomon in 1 Kings, splendor and oppression go hand in hand. Were all the impressive results of Solomon's monarchy (including his iconic temple) worth the human suffering? Consider this perplexing question as you encounter a king who was both ruthless and wise."

^{clx} See my essay *Experiencing a Nonproprietary God*. https://quadrunemind.com/2024/04/19/experiencing-nonproprietary-god/.

chi An unselfish Grownup intention for an eternal life is seen in the 8th century Indian Buddhist philosopher and monk, Shantideva, whose quotation heads this section. He dedicates his life-everlasting as an unending commitment to lessen suffering in all living beings as long as there is suffering in the world. In Buddhism, this is a radical commitment to service, because enlightenment would mean the cessation of suffering the cycle of death and rebirth. Shantideva is willing to forgo his own escape from suffering to help ease the suffering of others.

I like to call OKC Time and Temperature each day. During the week a brief commercial message plays before the day's forecast. On Sundays a sponsored message from a religious organization is given. The scripture currently quoted in the "Weekly Word" is John 11:25-26: "Jesus said to her, 'I am the resurrection and the life; he who believes in me will still live even if he dies, whoever lives and believes in me will never die. Do you believe this?'"

This message seems intended to attract people for this ministry. In contrast to Shantideva, there appears to be no further purpose for an everlasting life than self-perpetuation. If that is so, then it cannot emerge from a spiritual level of consciousness from the quadrune mind perspective. Survival is *the* goal of the immature minds: infantile biological survival, childish group survival, and adolescent ideological survival. Service, as Shantideva commits to, is *the* purpose of the Grownup spiritual mind.

cixii For example, see Niccum, J. (2020, August 12). Donor incentives don't always equate to more charitable giving, study finds. University of Kansas, School of Business. https://business.ku.edu/news/article/2020/08/12/donor-incentives-dont-always-equate-more-charitable-giving-study-finds.

cixiii Zimbardo, P. G., Weber, A. L., & Johnson, R. L. (2005). *Psychology: Core concepts* (2nd custom ed. for the University of Central Oklahoma, p. 383; Taken from *Psychology: Core concepts*, 4th ed., 2003, Zimbardo, P. G., et al.). Boston, MA: Pearson.

clxiv Anderson, A. (2022, April 28). What is infantile amnesia? (P. Sachdev, med. rev.). *WebMD*. https://www.webmd.com/children/what-is-infantile-

amnesia#:~:text=Studies%20have%20shown%20that%20events,Borderline%20personality%20disorder.

clay See Hayne, H. & Rovee-Collier, C. (1995). The Organization of Reactivated Memory in Infancy. *Child Development*. https://www.jstor.org/stable/1131957?seq=1#metadata_info_tab_contents.

clxvi See Tomini, L., Gibril, S., & Bochev, V. (2023). The resistance playbook: disrupting autocratisation. *The Loop Blog of the European Consortium for Political Research*. https://theloop.ecpr.eu/resistance-playbook-disrupting-autocratisation/.

clxvii See our essay *Gautama Buddha or Friedrich Nietzsche: Contented Serenity or Agitated Courage?* https://quadrunemind.com/2022/05/22/gautama-buddha-or-friedrich-nietzsche-contented-serenity-or-agitated-courage/.

clxviii "Understanding 'Race' in the 21st Century," with Dr. Dorothy Marotte and Dr. Paul R. Lehman, presented to the Ada Public Library sponsored by the Ada Library Friends, Ada, Oklahoma, July 18, 2014.

cixix For example, see Carroll, R. (2014, October 28). Berkeley students bid to ban 'blatant bigot' Bill Maher from commencement ceremony: Students launch petition after HBO host and critic of Islam was asked to give midterm commencement address in December. *The Guardian*. https://www.theguardian.com/us-news/2014/oct/28/berkeley-petition-bill-maher-commencement.

clxx I was not aware until this day that in 2014 there was also a controversy around a similar-sounding alternative. See 'Empathetically Correct' is the new politically correct by Karen Prior. Liberty University. https://digitalcommons.liberty.edu/eml fac pubs/76/.

[There may have been some confusion that "empathetic" meant making people feel safe from their sensitivities, rather than empathy as our shared vicarious sensitivity of their internal world. In addition to empathy, if we have *compassion* for the other person, then we are able to "suffer with" them with a desire for their healing. This is more characteristic of the human mind.

clixxi For more, see our essay *The Content of Our Mind Does Not Determine the Level of Our Consciousness:* (Understanding What Is Good, Great, Evil, and Human). https://quadrunemind.com/2020/10/07/content-does-not-determine-consciousness/.

clxxii The term "disaster capitalism" was coined by social activist Naomi Klein. See *The shock doctrine: The rise of disaster capitalism*. https://tsd.naomiklein.org/shock-doctrine.html.

clixiii For a related literary analysis of the blending of family and business in the Godfather, comparing book and movie, and the value of ethnicity as a source of socioeconomic power, see Ferraro, T. J. (1989). Blood in the marketplace: The business of family in the Godfather narratives. In W. Sollors (Ed.). The invention of ethnicity (pp. 176 – 208) New York: Oxford University Press. "In The Godfather, [Mario] Puzo refashions the gangster genre into a vehicle for reversing the traditional antithesis between ties of blood and the American marketplace. In so doing, he transforms the stock character of the Italian-American outlaw into the representative super(business)man; and he transforms the lingering image of immigrant huddled masses into the first family of American capitalism." [P. 207]. clixxiv Klein, N., & Sproat, Kapua 'ala. (2023, August 23). Why was there no water to fight the fire in Maui?: Big corporations, golf courses and hotels have been taking water from locals for years. Now the fire may result in even more devastating water theft. The Guardian. https://www.theguardian.com/commentisfree/2023/aug/17/hawaiifires-maui-water-rights-disaster-capitalism. "Disaster capitalism has taken many forms in different contexts. In New Orleans after Hurricane Katrina in 2005, there was an immediate move to replace public schools with charter schools, and to bulldoze public housing projects to make way for gentrifying townhouses. In Puerto Rico after Hurricane Maria in 2017, the public schools were once again under siege, and there was a push to privatize the electricity grid before the storm had made landfall. In Thailand and Sri Lanka after the 2004 tsunami, valuable beachfront land, previously stewarded by small-scale fishers and farmers, was seized by real estate developers while their rightful occupants were stuck in evacuation camps."

Also, see Wright, K-A., Kelman, I., & Dodds, R. (2021, July). Tourism development from disaster capitalism. *National Library of Medicine*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7568692/. "Disaster capitalism occurs post-disaster in a disaster-affected location, as distinct from other expropriation and exploitation. The tourism industry is often complicit, helping the reconstruction industry to take land from people under the guise of providing post-disaster aid....

"First, predatory land grab involves private individuals or organizations who either buy the land immediately after a disaster, while those affected are still under duress, or else simply evict people from their land by registering, often fraudulently, land ownership claims. Second, strategic land grab involves the local or national government evicting residents from their land either by decree or under the guise of rehabilitation with the goal of tourism development. Based on these two forms, this research note outlines different situations of tourism development from disaster capitalism and then illustrates how shoddy and inequitable relief and reconstruction, including arbitrary relocation, creates recurring disasters and thus continuing disaster capitalism.

"[P]ost-disaster human actions and inactions sometimes support disaster capitalism, so disaster-affected communities are made to be even more vulnerable through continuing poverty, inequity, and lack of opportunities. This perpetuates vulnerabilities and hence disasters.

"To illustrate with Barbuda, the hurricane wrecked the island, not because of the wind speed or flooding, but because the infrastructure and society were not prepared to deal with known hazards. The disaster was the vulnerabilities preventing people from preparing for the hurricane and its impacts. Then, the disaster continued through excluding Barbudans from post-hurricane work, seeking to take control of their land, and reconstructing the island according to external, money-driven interests rather than helping the disaster-affected people. This latter part of the disaster, driven by the tourism industry and with the most long-term impacts, was not correlated to the hurricane parameters and was not caused by the environmental hazard." [Emphasis added].

clxxv For example, see Allen, J. (2018, Spring). The murder of Luca Brasi: The curiously moving death of a henchman. In *The Godfather: Anatomy of a film*. University of California, Berkeley.

https://theseventies.berkeley.edu/godfather/tag/its-not-personal-its-strictly-business/. "This is the Italian-American Mafia—sleek entrepreneurs, cleverly veiled criminals—and this is where they meet, as businesspeople accustomed to a tableau of luxury."

[This description seems as though it could apply to an American corporate board meeting of wealthy power elites. Additionally, from the quadrune mind view, I believe the movie quotation describes the cold-bloodedness of the "business" mind, especially as it relates to disaster capitalists, better than Puzo's book in which revenge "is personal" because it is about family. It is a family held together by tradition, which may seem more emotionally advanced, but traditions (rituals) preserve long-lived institutions, like family and church, through unexamined behaviors, not relational feelings].

chxxvi Growth Capitalist. (n.d.). Political Personality Quiz. https://www.politicalpersonality.org/match/growth-capitalist/. Further quotations: "Sometimes though, you feel misunderstood and that the vast majority of the population just 'doesn't get it.' People getting left behind is a natural part of a socio-economic spectrum." [Emphasis added. Human nature has nothing to do with this "natural" world. When I first opened this website, I thought it was a satirical column from The Onion. I judge this economics philosophy, not politically or even economically, because I am not qualified to do so. I judge the content of the site spiritually from the quadrune mind perspective].

clxxvii For more about greed, see my essay *Stampede Greed and Desperate Need:* (Or, What the Sackler family and the Haitian refugees have in common). https://quadrunemind.com/2021/11/23/stampede-greed-and-desperate-need/.

change/. "Degrowth broadly means shrinking rather than growing economies, so we use less of the world's energy and resources and put wellbeing ahead of profit."

Benefit Corporations also support a shift in business priorities. See *Benefit Corporations*. (n.d.). B Lab. https://usca.bcorporation.net/benefit-corporation/. "Due to law and culture, directors of traditional for-profit companies must maximize the financial returns to shareholders. This single focus is called shareholder primacy. This inflexible legal framework does not accommodate for-profit entities whose mission and impact is [sic] central to their business model.

"Benefit corporation status allows corporations to opt-out of shareholder primacy and opt-into stakeholder governance. With stakeholder governance, a company is required to take into consideration anyone that is materially affected by that company's decision-making, like workers, customers, local communities, wider society and the environment."

clxxix For a general description, see Holden, E. (2019, February 11). What is the Green New Deal and how would it benefit society? Republicans call it a 'socialist manifesto', environmental groups hail it, and some say it doesn't go far enough. The Guardian. https://www.theguardian.com/us-news/2019/feb/11/green-new-deal-alexandria-ocasio-cortez-ed-markey.

chixx For an informed approach to parenting and educating young children, see The *Natural Child Project*. (1996-2023). The Natural Child Project. https://www.naturalchild.org/. "Celebrating attachment parenting, unschooling, and child advocacy since 1996. Our vision is a world in which all children are treated with dignity, respect, understanding, and compassion. In such a world, every child can grow into adulthood with a generous capacity for love and trust. *Children behave as well as they are treated*." [My emphasis. Their mission statement clearly expresses the quadrune mind model's philosophy that Grownups who can help heal the world will need to be raised with nurtured, unafflicted brains. See more about the related

idea of "unschooling," developed by John Holt]: https://www.johnholtgws.com/the-foundations-of-unschooling]. Farenga, P. (2020). The Foundations of Unschooling. John Holt GWS. "John Holt said louder and more often than most educators then and now that children are far better at learning than we give them credit for....
"John worked in high-powered private schools and he decided that it was fear of failure, fear of appearing stupid, fear of criticism from children and adults, the overall fear many feel in school that inhibits learning and leads children and adults to create what John called the charade of learning in school....

"The good news is, anyone can help their children learn and grow and humans have been doing this since they first appeared on earth. It is only since the mid-nineteenth century that universal compulsory school advocates succeeded in segregating children from the real world and made children learn in special classrooms from special people who control, predict, reward, and punish them for doing what the curriculum demands....

"It's not that teachers are bad people or that schools are intrinsically evil places, it is that we've removed children from the world and placed them into a special world created just for them and we act as if there is no other possible way for children to learn, despite evidence to the contrary."

[The philosophy of childhood learning expressed here is more relevant to the model, and perhaps more accurate than some of the material on the history of education. Of course, the risk here is that conservative political or religious advocates will use arguments to replace liberal "state" educational indoctrination with conservative "nationalist" and/or "religious" educational indoctrination, as they are doing currently. *No indoctrination of any kind* would be the QM model's perspective of raising educated, spiritually conscious Grownups. This statement, necessarily, includes parental indoctrination. There are many ideas in this speech that touch on QM issues, including the democratization of ambition beyond realistic goals; that is, to be dissatisfied with life]. clxxxi Gatto, J. T. (1990, January 31). Why Schools Don't Educate.

https://www.naturalchild.org/articles/guest/john gatto.html. "We seem to have lost our identity. Children and old people are penned up and locked away from the business of the world to a degree without precedent - nobody talks to them anymore and without children and old people mixing in daily life a community has no future and no past, only a continuous present. In fact, the name 'community' hardly applies to the way we interact with each other. We live in networks, not communities, and everyone I know is lonely because of that. In some strange way school is a major actor in this tragedy just as it is a major actor in the widening guilt among social classes. Using school as a sorting mechanism we appear to be on the way to creating a caste system, complete with untouchables who wander through subway trains begging and sleep on the streets.

"I've noticed a fascinating phenomenon in my twenty-five years of teaching - that schools and schooling are increasingly irrelevant to the great enterprises of the planet. No one believes anymore that scientists are trained in science classes or politicians in civics classes or poets in English classes. The truth is that schools don't really teach anything except how to obey orders. This is a great mystery to me because thousands of humane, caring people work in schools as teachers and aides and administrators but the abstract logic of the institution overwhelms their individual contributions."

[Copy of the speech by John Taylor Gatto accepting the New York City Teacher of the Year Award. My emphasis. Gatto calls out the abstracting adolescent mind that dominates the classroom culture].

clxxxii Business seems to like "foxhole mentality" as a motivational topic. For example, see Pashigian, T. (2015, January 16). Leadership: Create foxhole mentality. *Linkedin*. https://www.linkedin.com/pulse/leadership-create-foxhole-mentality-tony-pashigian-bsme-

 $\underline{mba\#:} ``: text=You\%20 need\%20 to\%20 inspire\%20\% E2\%80\%9C fox hole, and\%20 advancing\%20 toward\%2C\%20 the\%20 goal..$

clxxxiii For a good overview of object relations theory and childhood development, see Fritscher, L. (Med. Rev. by Steven Gans). (Updated 2023, October 23). What is object relations theory? *Verywell Mind*. https://www.verywellmind.com/what-is-object-relations-theory-2671995.

clxxxiv I have no military experience. I am using what I know about the quadrune mind model of human nature for this opinion. It is up to the combat veterans to judge whether these speculations have any merit.

clxxxv Quotation is from *Band of Brothers* by Stephen E. Ambrose. (2017). Simon & Schuster.

https://www.simonandschuster.com/books/Band-of-Brothers/Stephen-E-Ambrose/9781501179402. [My emphasis].

clxxxvi For a former army ranger's take on a related issue of how effective military training to kill is, with comments, see Grossman, D. (2007, June 1). Hope on the battlefield: Military leaders know a secret: The vast majority of people are overwhelmingly reluctant to take a human life. *Greater Good Magazine*.

https://greatergood.berkeley.edu/article/item/hope on the battlefield. "[T]he study of killing by military scientists, historians, and psychologists gives us good reason to feel optimistic about human nature, for it reveals that almost all of us are overwhelmingly reluctant to kill a member of our own species, under just about any circumstance. Yet this understanding has also propelled armies to develop sophisticated methods for overcoming our innate aversion to killing, and, as a result, we have seen a sharp increase in the magnitude and frequency of post-traumatic response among combat veterans.... Thus the evidence shows that the vast majority of combatants throughout history, at the moment of truth when they could and should kill the enemy, have found themselves to be 'conscientious objectors'—yet there seems to be a conspiracy of silence on this subject.... Since World War II, a new era has quietly dawned in modern warfare: an era of psychological warfare, conducted not upon the enemy, but upon one's own troops. The triad of methods used to enable men to overcome their innate resistance to killing includes desensitization, classical and operant conditioning, and denial defense mechanisms.... [I]f we do want to build a world in which killing is increasingly rare, more scientists, soldiers, and others must speak up and challenge the popular myth that human beings are 'natural born killers.' Popular culture has done much to perpetuate the myth of easy killing."

clixxxviii For related details of this point, see "The Reptilian Mind" section of our essay *QM, Phylogenetic Regression, and Extreme Aggression*. https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/. "The infant's body fights with every resource at its command to preserve its state of homeostasis. Homeostasis is involved in every organ system of the body and no one organ system of the body acts alone. Furthermore, maintenance of our body's homeostasis is a necessity throughout our lives." clixxxviii Survivor's Guilt. (2023). Focus Marines Foundation. https://focusmarines.org/conditions/survivors-guilt/. [My emphasis].

chxxxix For a summary of how gut bacteria, the enteric nervous system, and the brain interact, see American Heart Association News. (2020, May 28). How bacteria in your gut interact with the mind and body. https://www.heart.org/en/news/2020/05/28/how-bacteria-in-your-gut-interact-with-the-mind-and-body. https://www.heart.org/en/news/2020/05/28/how

cxci Ambrosio, T. (Last updated, 2022, February 27). Irredentism: territorial claim. *Britannica*. https://www.britannica.com/topic/irredentism. "Notable examples of irredentism include Nazi Germany's claims on the Sudetenland of Czechoslovakia; the "Megali Idea" that sought to create a Greater Greece; China's desire to reincorporate the territories lost during periods of historical weakness; Somalia's invasion of Ethiopia during the Ogaden War of 1977–78; the attempt by Hungary to reverse the 1920 Treaty of Trianon and reclaim territories in Slovakia, Romania, and Yugoslavia during World War II; and the conflict between Armenia and Azerbaijan over the Armenian-populated Nagorno-Karabakh region. Somewhat questionable cases include those without a direct ethnic component but rather based solely on historical claims, such as Argentina's invasion of the British-populated Falkland Islands (Islas Malvinas) in 1982 or Serbian claims to Kosovo, which was the birthplace of Serbian nationalism but later was populated overwhelmingly by ethnic Albanians."

cxciiSee What Is Authoritarian Parenting? (WebMD Ed. Contr.), & Sachdev, P. (Med. Rev.) WebMD. https://www.webmd.com/parenting/authoritarian-parenting-what-is-it. "Traits of Authoritarian Parents. Authoritarian parents: Lack warmth, Use criticism instead of positive reinforcement, Have trust issues, Not be willing to negotiate, Set rules without explanation, Make choices for their children, and Lack patience with misbehavior."

[Sound like some nations? These traits are infantile, and they apply to infants acting like adult parents or adult autocrats. People who had authoritarian parents may "need" authoritarian regimes to tell them what to do. Freedom is perceived to be more threatening than autocracy. Authoritarian parents (autocrats) also perceive obedience (a behavior they can understand) to be love (an emotion they cannot imagine)].

cxciii Heidler, D. S, & Heidler, J. T. (Last updated 2023, October 17). Manifest Destiny: United States history.

Britannica. https://www.britannica.com/event/Manifest-Destiny. "Less than a century after breaking from the British Empire, the United States had gone far in creating its own empire by extending sovereignty across the continent to the Pacific, to the 49th parallel on the Canadian border, and to the Rio Grande in the south. Having transformed a group of sparsely settled colonies into a continental power of enormous potential, many Americans thought the achievement so stunning as to be obvious. It was for them proof that God had chosen the United

States to grow and flourish."

^{cxciv} See Wills, G. (1999, September). Lincoln's greatest speech? *The Atlantic Monthly*. "It is clear that Lincoln's inaugural address did not reach the befuddled Vice President who sat behind him as he delivered it, though he was the man who most needed its message. The executive mansion was a darker pace in every way when Lincoln was removed from it, and from us. The Second Inaugural is the towering measure of our loss."

cxcv Roosevelt, K., III. (2020, March 3). The Constitution and Declaration of Independence: A contrary view. *CSPAN3: American History TV*. https://www.c-span.org/video/?469938-1/rethinking-americas-founding-narrative. [Entertaining and fascinating presentation stating that our American values of today are not the values of the founding fathers, but have been *reconstructed*. This position is more humane than, and antithetical to, constitutional originalism].

cxcvi See Yu, R. (2016, February 12). Stress potentiates decision biases: A stress induced deliberation-to-intuition (SIDI) model. *Neurobiol Stress*. https://pmc.ncbi.nlm.nih.gov/articles/PMC5146206/. "When under stress, fast and effortless heuristics may dominate over slow and demanding deliberation in making decisions under uncertainty.... Previous studies have shown that when stressed, individuals tend to make more habitual responses than goal-directed choices, be less likely to adjust their initial judgment, and rely more on gut feelings in social situations. It is possible that stress influences the arbitration between the emotion responses in subcortical regions and deliberative processes in the prefrontal cortex, so that final decisions are based on unexamined innate responses." [In other words, we use one of our quicker infantile or childish minds rather than our time and energy intensive adolescent or Grownup minds. Yu notes that the "switch from an analytic reasoning system" (i.e., the adolescent mind) "to intuitive processes" (i.e., the infantile mind) "is associated with diminished activity in the prefrontal executive control regions and exaggerated activity in subcortical reactive emotion brain areas"].

cxcvii DeAngelis, T. (Created 2022, October 1) Anxiety among kids is on the rise: Wider access to CBT may provide needed solutions: Tailored in-person and app-based interventions for anxiety are allowing psychologists to expand their reach. American Psychological Association. https://www.apa.org/monitor/2022/10/child-anxiety-treatment#:~:text=Even%20before%20the%20Covid%2D19,study%20and%20treat%20these%20disorders.

cxcviii See Wagner, M., Lybarger, T., & McGuiggan, J. (2019). *Mister Rogers' Neighborhood: A visual history*. New York: Clarkson Potter. "His spoken message is simple, but the message of his life is not simple, because the message of his life is goodness in action."—Tom Junod [p. 321].

cxcix See Appendix C for more of my aphorisms written from the quadrune mind perspective.

^{cc} Definition is from Merriam-Webster. https://www.merriam-webster.com/dictionary/. "Litmus Test Has Scientific Origins. It was in the 14th century that scientists discovered that litmus, a mixture of colored organic compounds obtained from lichen, turns red in acid solutions and blue in alkaline solutions and, thus, can be used as an acid-base indicator. Six centuries later, people began using litmus test figuratively. It can now refer to any single factor that establishes the true character of something or causes it to be assigned to one category or another. Often it refers to something (such as an opinion about a political or moral issue) that can be used to make a judgment about whether someone or something is acceptable or not."

[I suppose some Americans may find litmus tests' "red" or "blue" results to be politically fitting. However, "red" and "blue" designations of political parties is a fairly recent development, and has been inconsistently applied. Neither did they exist originally for political purposes, but were related to the advent of color television for a better visual contrast between states. For a good historical perspective, including the *Slate* video at the end of the article, see *The origins of red and blue states*. (n.d.). Taegan Goddard's Electoral Vote Map. https://electoralvotemap.com/the-origins-of-red-and-blue-states/.

^{cci} See McBride, K. (2020, October 25). Understanding narcissistic injury: Narcissists do not forgive or forget. *Psychology Today*. https://www.psychologytoday.com/us/blog/the-legacy-distorted-love/202010/understanding-narcissistic-injury. "As long as you are in agreement with the narcissist, revolve around them, do things their way, and have great adoration for them, you will be fine. But if you take a different highway from them, you will then see their disdain and serious 'get back at you' tactics."

ccii For a Catholic priest's excellent insights into hellfire preaching, see Longenecker, D. (2020, December 11). Gimme some hellfire and brimstone preachers! https://dwightlongenecker.com/gimme-some-hellfire-and-brimstone-preachers/. "[One of the problems I have] is that I get the feeling the people who like it when I preach a strong sermon against sin are feeling good because I'm giving other people hell. They feel good because I'm getting down on the people they are down on. In other words, my preaching against all 'the sinners' boosts their sense of righteousness. 'I thank you Lord that I am not like that tax collector there!'

"Self righteousness, is the implicit sin of all religious people. It's hard to avoid it, and the insidious thing about self righteousness is that when you do preach about it the self righteous people don't see themselves in what you're saying. That's the definition of self righteousness. It's totally invulnerable. It's a hard candy coating shell we have in place."

[From the quadrune mind, this observation by Father Dwight Longenecker is correct because self-righteousness is a symptom of the lack of empathy (ability to take the inner worlds of other people into consideration) by the infantile mind, the same mind that enables bigotry. It must be bigotry to enjoy seeing other people condemned (to hell) as sinners, for example].

cciii Hawthorne, N. (1851/1965). *The house of the seven gables*. New York: Scholastic Book Services. [P. 4].

cciv For more about mob violence as nonspontaneous, high-ranking leadership coordinated actions, see Evans, B.

(2021, September 27). Histories of violence: Mob violence. *Los Angeles Review of Books*.

https://lareviewofbooks.org/article/histories-of-violence-mob-violence/. "However chaotic, disorderly, and heterogeneous it may have appeared, the [mob violence on January 6 of this year at the United States Capitol] was not a spontaneous uprising. Like Hitler's failed putsch at the beer hall in 1923, the attempted insurrection on January 6 was aided by paramilitary organizations coordinating with high-ranking political figures. And like Hitler's coordinated attack, it mobilized crowds of armed men to directly threaten politicians holding office. Both mobs claimed to be enforcing a right to rule that has been unfairly and blatantly violated by their political opponents. "Few if any mobs are truly spontaneous. Thousands of murderous lynch mobs in the US were reactions by whites to attempts by Black Americans to defend their right to political participation, their property, their privacy, their reputations, or simply their lives. Such attacks in Tulsa, East St. Louis, and elsewhere show that seemingly spontaneous eruptions of violence had powerful results, obstructing the paths to political and economic empowerment.

"Mobs are saturated with with [sic] emotion. Rage and fury, offense and indignation, fear and terror — these are emotions that can move people to violence. Their intensity in the moment can easily create an illusion of spontaneity — especially when news coverage does not probe and publicize the surrounding situation.... "The fact that the term 'mob' can function pejoratively creates a paradox. No one is in favor of mob rule, but once a mob is activated, the people in it are intensely energized by a level of righteous confidence that may be reached most readily in a crowd. If you're part of the mob, you feel sure you are doing the right thing. If you're the target of a mob, you feel terrified, because participants in a mob feel so sure that their violence is entirely justified. Hitler illustrated this kind of asymmetry at his trial for the 1923 putsch, when he said, 'I am not a crook, and I do not feel like a criminal. On the contrary! If I stand here before the court accused [of being] a revolutionary, it is precisely because I am against revolution and against crimes. I do not consider myself guilty." [Above bracket in the original]. ccv For example, see Smith, A. (2018, February 5). Here are five American cities which rioted after sporting success and defeat. Metro. https://metro.co.uk/2018/02/05/here-are-five-american-cities-which-rioted-after-sportingsuccess-and-defeat-7289493/. "When Detroit's basketball team the Pistons won the 1990 basketball championship eight people died in the rioting which followed the celebrations. The final game win was quickly followed by gunfire, stabbings and fighting. Police arrested 35 people and that was before fans started looting shops and overturning emergency vehicles. Four people were killed, three children, when a crazed driver mowed down fans celebrating in the city's East Side. Two pedestrians, one a four-year-old boy were killed 'during street celebrations,' a 21-year-old fell off a roof and died and a 19-year-old man was killed when someone fired a gun at revellers.... "However, [Chicago] might have learnt its lesson [from the riots of the 1990s Chicago Bulls championships]. When the city's baseball team The Cubs won their first World Series since 1908 over a million people turned out to be one of the biggest congregations of humans in history, and it passed of [sic] peacefully." ccvi Gangs and Children. (No. 98; 2017, September). American Academy of Child and Adolescent Psychiatry. https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Children-and-Gangs-098.aspx. ccvii Koehler, J. (2021, January 23). Perceiving is believing: How naive realism influences our perception of everything. Psychology Today. https://www.psychologytoday.com/us/blog/beyond-schoolwalls/202101/perceiving-is-believing. "Perception is everything—and it is flawed. Most of us navigate our daily lives believing we see the world as it is. Our brains are perceiving an objective reality, right? Well, not quite. Everything we bring in through our senses is interpreted through the filter of our past experiences.... "Usually, the meaning we apply is functional and adequate—if not fully accurate, but sometimes our inaccurate perceptions create real-world difficulty....

"What happens when we extrapolate our perceptual shortcomings to large-scale human interaction? Too often, humans get stuck believing their view of the world is an objective reality. This, of course, leads to conflict with other humans who disagree, especially those we perceive to be part of an out-group. Naive realism leads us to reason that we see the world objectively—and that others do as well. When we encounter people who disagree with us on important matters, we tend to think they are uninformed, irrational, or biased."

of the world? Naive realism, explained. (2023). The Decision Lab. https://thedecisionlab.com/biases/naive-realism. "If we are unable to see that our perception of the world is clouded by our biases, when someone's perception is different to ours, we believe them to be 'wrong' or 'stupid.' Instead of expanding our knowledge by trying to understand the world through a different perspective, we think of ourselves and our point of view, as being superior. While we are the people who are ignorant, not well-informed, and biased, we end up thinking that the other person that doesn't share our point of view is all of those things.... "While we can point out the influences that impact some else's behavior, we find it difficult to see our own biases.... "Based on [German-American psychologist Kurt] Lewin's work, Swiss developmental psychologist Jean Piaget studied children's perceptions and found that they viewed the world through an egocentric lens. He found that children have trouble separating their beliefs from the beliefs of others — and apparently, we don't grow out of that!"

[My emphasis. The article describes naïve realism as a "top-down" process. From the quadrune mind perspective concrete views of reality that block the reasoning mind to defend our biases is a bottom-up function of the brain. The infantile behavioral mind is dominant over the adolescent intellectual mind, which is otherwise able to take in new information from the environment].

ccix For related descriptions of the differences between "facts," "knowing," and "truth," see my essays *Do Facts Tell the Truth, the Whole Truth, and Nothing but the Truth? Yes or No: (Looking for black and white answers in a kaleidoscopic world).* https://quadrunemind.com/2022/04/19/do-facts-tell-the-truth-the-whole-truth-and-nothing-but-the-truth-yes-or-no/ and Absolute Certainty: Doing, Knowing, and Thinking. https://quadrunemind.com/2022/03/18/absolute-certainty-doing-knowing-and-thinking/.

ccx See Clarke, J. (Gans, S. med. rev.). (Updated 2023, March 15). What does egocentrism mean? Verywell Mind. https://www.verywellmind.com/what-does-it-mean-to-be-egocentric-4164279. "Egocentrism represents a cognitive bias, in that someone would assume that others share the same perspective as they do, unable to imagine that other people would have a perception of their own.... "Egocentric people can find it difficult to connect with others or maintain meaningful relationships for a long period of time. The bias toward self can result in an egocentric person struggling at home, at work, and within their intimate relationships. The primary reason for these struggles is the lack of ability to empathize or imagine someone's perspective other than their own.... "Although it may feel that someone like this is narcissistic, an egocentric person does not necessarily obsess over things like success, beauty, or status. They simply don't consider other people in their decision-making." ccxi Compare MacLean, P. D. (1990). The triune brain in evolution: Role in paleocerebral functions. New York: Plenum Press. "[T]he phenomenology of psychomotor epilepsy reveals that even the least obtrusive feelings generated by limbic activity are tinged with some degree of affect... Something does not exist unless it is imbued with an affective feeling, no matter how slight.... [T]he phenomenology of psychomotor epilepsy suggests that without a co-functioning limbic system, the neocortex lacks not only the requisite neural substrate for a sense of self, of reality, and the memory of ongoing experience, but also a feeling of conviction as to what is true or false. This presents a problem of crucial epistemological significance because there is no evidence that the limbic structures of the temporal lobe are capable of comprehending speech, nor is there any basis for inferring a capacity to communicate in verbal terms. Hence, it would appear that the manufacture of belief in the reality, importance, and truth or falsity of what is conceived depends on a mentality incapable of verbal comprehension and communication... [I]t is one thing to have a primitive, illiterate mind for judging the authenticity of food or a mate, but where do we stand if we must depend on that same mind for belief in our ideas, concepts, and theories?" [Emphasis in the original. Pp. 578-579].

ccxii When I was counseling families and marriages, it became clear that people understood each other more clearly than they were willing to admit. *They feared that understanding meant agreement* to decisions or behaviors they opposed. Even though understanding does not necessarily lead to agreement, it can foster a more agreeable conversation to work together toward better solutions for all.

ccxiii Pang, D. K. F. (2023, May 29). Why pink doesn't exist: Lessons in perception and reality: We don't access reality directly, just the brain's representation. *Psychology Today*.

https://www.psychologytoday.com/us/blog/consciousness-and-beyond/202305/perception-reality-and-why-pink-doesnt-exist.

ccxiv For some examples, see Wnuk, A. (Pub. and rev. 2017, July 31). What can animals sense that we can't? BrainFacts. https://www.brainfacts.org/thinking-sensing-and-behaving/vision/2017/what-can-animals-sense-that-we-cant-071317.

For more details, see Briggs, R. D. (with MacLaughlin, S.). (2023, January 12). Positive parenting: Discipline vs. Punishment: Explaining the difference and guiding caregivers in positive parenting. *Psychology Today*. https://www.psychologytoday.com/us/blog/on-babies/202301/discipline-vs-punishment.

ccxvi For links to how specific populations of disabled adults and children are affected by the criminal justice system, see *Prison Policy Initiative*. (Last updated 2023, October 5).

 $\frac{\text{https://www.prisonpolicy.org/research/disability/\#:}^{\text{::text=People}\%20\text{with}\%20\text{disabilities}\%20\text{are}\%20\text{overrepresent}}{\text{ed,state}\%20\text{prisons}\%20\text{have}\%20\text{a}\%20\text{disability.}}$

ccxvii Regarding children see Carter, M. S. (2023, October 15). Most Oklahoma schools have eliminated paddling — but the state still uses it more than others. *The Oklahoman*.

https://www.oklahoman.com/story/news/politics/government/2023/10/15/oklahoma-schools-paddling-corporal-punishment-option-rural-communities/71128940007/. "A 2022 survey by the Oklahoma State Department of Education showed that 63 state school districts used corporal punishment on more than 400 students who were covered by the Individuals with Disabilities Education Act in 2021-22."

ccxviii It is sometimes heard from parents, teachers, and employers that a child or an adult is always harder on themselves for mistakes or misbehaviors than other people would be on them. Usually, this is seen as a moral strength. However, it is more likely the person has introjected a self-protective attitude of "self-loathing." Not only is this attitude *not* morally healthy, it is also a definite block to any hope of a spiritually mature life full of self-love and capacity to love others. From infancy on, self-love is an essential precursor for love of others. Healthy self-love is revealed, although not necessarily in a public way, as a life of service to other people and the earth.

ccxix Hall, E. T. (1976). *Beyond culture*. Garden City, NY: Doubleday. "Certainly the human species has not begun to tap its potential and half suspecting this deficiency, we blame everyone and everything except the real culprit. "We see evidence of mankind's disparaging itself in folklore, religion, philosophies, institutions, as well as in daily life. It seems that these processes are not within the reach of conscious control but deep within us. Freud was so struck by the capacity by the human race to put itself down that he posited a death instinct.... For him, creativity was a by-product of the necessity for man to repress his human nature. Like us Freud was a product of *his* times This book suggests another alternative.... Man's goal... should be to rediscover that lost, alienated natural self..." [P. 4. Emphasis in the original].

[The quadrune mind model says that instead of our need to "rediscover" our natural self, we have yet to discover it in the first place].

ccxx See Appendix C for more of my aphorisms from the quadrune mind perspective.

ccxxi Powell, A. (2007, October 11). How Sputnik changed U.S. education: Fifty years later, panelists consider a new science education 'surge.' *The Harvard Gazette*. Harvard University.

https://news.harvard.edu/gazette/story/2007/10/how-sputnik-changed-u-s-education/.

ccxxii For a related discussion of this point, see Kerri's essay Jon Stewart Gets The Problem With Our New Mammalian Age. https://quadrunemind.com/2021/06/24/jon-stewart-gets-the-problem-with-our-new-mammalian-age/. ccxxiii For example, see What Is Humane Technology? (2022, April 7). Center for Humane Technology. https://www.humanetech.com/podcast/bonus-what-is-humane-technology. "The real problem of humanity is the following: We have Paleolithic emotions, medieval institutions and godlike technology."—DR. E.O. WILSON, SOCIOBIOLOGIST"

feeding in her back yard. Over a few weeks, she was able to catch the mama cat and her kittens, take them to the Oklahoma Humane Society for spaying and neutering as well as other health services, and shelter them in her house while they recovered. She released all the cats, but one, named Albie, who refused to leave, hiding out behind a dresser. (When he was ready some days later and the opportunity arose, he dashed outside and reunited with his feline mama.) Kerri had received skillful advice by an experienced person, took time from work, used energy at the end of work days, and spent money to pay for her efforts. None of these assets were available in abundance for her. I was impressed with the significant amount of skill, time, energy, and money it took to do even a little good in the world. I am sure that there are multitudes of people who have the heart to do good, but feel too

unqualified, rushed, exhausted, and poor to be of use. We do not make it easy for caring persons to put their compassion into action.

ccxx Hawthorne, N. (1851/1965). *The house of the seven gables*. New York: Scholastic Book Services. Nathaniel Hawthorne describes what happens in untended rose gardens: "Besides the rosebush, [Phæbe] had observed several other species of flowers growing there in a wilderness of neglect, and obstructing one another's development by their uneducated entanglement and confusion." [P. 76].

[As with flowers, it is often the parallel case in human society].

ccxxvi For example, see "Colina, J. (2018, February 20). 10 People who gave their lives for others in 2017. *Aleteia*. Here are examples of the best use of religious institutional resources to enable "spirit persons" to be Healers to those of us who are among the most suffering. *Aleteia* is a magazine of Catholic spirituality, lifestyle, and world news. The story profiles 10 Roman Catholics who "lived, or are living, Jesus' words in depth: 'No one has greater love than he who gives his life for his friends' (John 15:13)." In these examples "friends" included people who are unknown to the individual and outside of their "group," but, as the Grownup mind would dictate, are considered friends simply as a human being.

ccxxvii James, W. (2002). The varieties of religious experience: A study in human nature: Being the Gifford lectures on natural religion delivered at Edinburgh in 1901-1902. New York: Modern Library. "[T]he fact remains that war is a school of strenuous life and heroism; and, being in the line of aboriginal instinct, is the only school that as yet is universally available.... What we now need to discover in the social realm is the moral equivalent of war: something heroic that will speak to men as universally as war does, and yet will be as compatible with their spiritual selves as war has proved to be incompatible." [Pp. 400-401].

["Holy" wars conveniently blend physical heroism and "spiritual" values, as those values are understood by religious worldly warriors. For an excellent essay by William James on this issue, see James, W. (1910/2000). The moral equivalent of war. In J. C. Oates (Ed.) & R. Atwan (Co-Ed.), *The best American essays of the century* (pp. 45-56). Boston: Houghton Mifflin].

ccxxviii For example, see Soldier's creed & army values. (Updated 2023). *Old Dominion University*. https://www.odu.edu/armyrotc/about/creed. Under Integrity tab: "Do what's right, legally and morally." ccxxix Nouwen, H. J. M. (1994). *Our greatest gift: A meditation on dying and caring*. New York: Harper Collins. [Quotation is from page xiv].

ccxxx Nouwen writes powerfully from a Christian perspective. A Buddhist-oriented writer, Stephen Levine, has worked with many people in the end-stage of disease and reaches similar conclusions as Nouwen; see Levine, S. (1987). *Healing into life and death*. New York: Anchor Books.

[He makes the distinction between physical curing and spiritual healing. He describes 16 healing meditation practices, including "A Simple Loving Kindness Meditation," "Meditation on Shared Heart," "Connecting the Heart with the Disheartened," "A Healing Meditation," "A Meditation on Letting Go," and "Healing-Into-Death Meditation"].

ccxxxi See Merck, A. (2018, October 8). The Upstream-Downstream Parable for Health Equity. *Salud America!* https://salud-america.org/the-upstream-downstream-parable-for-health-equity/, and Robezniecks, A. (2021, May 28). 3 key upstream factors that drive health inequities. *AMA*. https://www.ama-assn.org/delivering-care/health-equity/3-key-upstream-factors-drive-health-inequities.

ccxxxii Myskow, W. (2023, September 10). Inside Climate News.

https://insideclimatenews.org/news/10092023/colorado-river-upstream-use-it-before-they-lose-it-2/.

[As the Colorado River declines, some people upstream look to use it before they lose it: As states negotiate future water cuts, some officials are looking to build new dams and reservoirs in the Upper Basin of the overallocated Colorado River to use more water].

council This phrase comes from my early counseling training. I have not been able to find the source. A similarly sounding phrase is, "If you can't win the game, change the rules." The idea is to openly create a game you can have greater enjoyment playing and a better chance of winning. However, this phrase would also apply to cheating. The person who wins a game by cheating is no longer playing the original game with the original rules. The cheater is playing a different game by their own (secret) rules while acting like they are endorsing the original game's legitimacy. For example, players become more adept at the private game of "deception," than the public game of good business. See MacLean, P. D. (1990). The triune brain in evolution: Role in paleocerebral functions. New York:

Plenum Press. "Deceptive behavior is no respecter of animals or persons.... [D]eceit has been exposed at the highest level of government....

"If people have learned through culture that 'honesty is the best policy,' why is it that they are willing to take enormous risks to practice deception? Why do the games that we teach our young place such a premium on deceptive tactics and terminology of deception? How can pupils be expected to come off the playing fields and not use the same principles in competition and struggle for survival in the classroom?" [P. 242]. [Or when they go into business]?

ccxxxiv See Gallwey, W. T. (1974). The inner game of tennis. New York: Random House.

[This approach to sports is a classic Zen approach to competition. Competitors want to be about equal in athletic ability so that each becomes more skillful at their sport through their competition. Rather than adversaries to "beat," they are collaborators for mutual benefit].

ccxxxx Similarly, Charlie Chaplin said, "Life is a tragedy when seen in close-up but a comedy in long shot." I have been unable to identify the source of the director's statement, which I came across many years ago.

coxxxvi For a deep scholarly examination of humanity's freedom to create our past and future and its political consequences, see Gould, R. R. (Fall 2018). Democracy and the vernacular imagination in Vico's plebian philology. History of Humanities, 3(2), 247-277. Online: https://www.journals.uchicago.edu/doi/10.1086/699295. "This essay examines Giambattista Vico's philology as a contribution to democratic legitimacy. I outline three steps in Vico's account of the historical and political development of philological knowledge: first, his merger of philosophy and philology, and the effects of that merger on the relative claims of reason and authority; second, his use of antiquarian knowledge to supersede historicist accounts of change in time and to position the plebian social class as the true arbiters of language; third, his understanding of philological knowledge as an instrument of political change, and a foundational element in the establishment of democracy. In its treatment of the philological imagination as a tool for bringing about political change, Vico's plebian philology is radically democratic and a crucial instrument in the struggle against the elite from antiquity to the present.... In its creativity, philological knowledge contests the Cartesian reduction that, in Vico's view, deprives human beings of the freedom to create their pasts, as well as their futures [Emphasis added].... [Vico] saw that the metaphysical order legitimating class oppression was grounded in power dynamics that had evolved over time. He detected this structural inequality in the etymology of the word man (vir), which originally referred not to any member of the human species but solely to the nobility."

[Emphasis in the original. I believe Gould's essay clearly has many interesting implications in support of the quadrune mind model. The human "freedom" to create *humanizing perspectives* of our pasts and futures becomes our *responsibility* in the quadrune mind model].

For a related view of the people's place in history, see Zinn, H. (1980/1999). A people's history of the United States: 1492-present. New York: HarperCollins. For example, "To emphasize the heroism of Columbus and his successors as navigators, and to deemphasize their genocide, is not a technical necessity but an ideological choice. It serves—unwittingly—to justify what was done.... The treatment of heroes (Columbus) and their victims (the Arawaks)—the quiet acceptance of conquest and murder in the name of progress—is only one aspect of a certain approach to history, in which the past is told from the point of view of governments, conquerors, diplomats, leaders. It is as if they, like Columbus, deserve universal acceptance.... [And] represent the nation as a whole.... It is as if there really is a 'national interest' represented in the Constitution, in territorial expansion, in the laws passed by congress, the decisions of the courts, the development of capitalism, the culture of education and the mass media.... If history is to be creative, to anticipate a possible future without denying the past, it should, I believe, emphasize new possibilities by disclosing those hidden episodes of the past when, even if in brief flashes, people showed their ability to resist, to join together, occasionally to win. I am supposing, or perhaps only hoping, that our future may be found in the past's fugitive moments of compassion rather than in its solid centuries of warfare." [Pp. 9 and 11].

ccxxviii And yet we are awash with hopeful and dire predictions of the future. Predictions can try to warn people to make changes to avert catastrophe, or to exploit people's fears for economic and political power. In any event, predicting the future is *not the future*. Predictions are almost always less certain than the prediction of the future sounds like to us now. The future is always unknown and often surprisingly better and worse than predicted. For an older, but still relevant discussion of "futurology," see Dublin, M. (1991). *Futurehype: The tyranny of prophecy*. New York: Dutton. "[E]ach development does, in fact, partially or wholly negate the possibility of others

occurring—not because it reveals the true nature of things... but because each event in history exclusively occupies the moment in which it occurs.... [P. 239].

"It is often said that we are living in the age of information, but insofar as this is true, it follows that we must also be living in the midst of a great deal of bad information, that is, misinformation, propaganda, nonsense and hype. [I]t misleads us by distorting our regard for both the present and the future. It thereby brings out the worst in us, encouraging us to behave in narrow, selfish and self-defeating ways.... [P. 247].

"[To paraphrase, Tolstoy did not ask], What does the future hold in store for us? but, What shall we do and how shall we live?" [P. 275].

ccxxxix For example, see Rolling Dog Farm: A Special Place Where Disabled Animals Enjoy life.

https://www.rollingdogfarm.org/our-story/. "Our disabled residents are remarkable animals. They are happy, energetic and loving. Many of our visitors can't believe the animals they see romping with each other and running around are blind or cope with some other kind of handicap. There isn't a single animal here who feels sorry for himself or herself. Each and every one of them loves being alive."

[Emphasis added. As with humans, disabled animals need skillful help, love, and appreciation more than pity, sympathy, or empathy in order to thrive].

^{ccxl} Goff, P. (2019). *Galileo's error: Foundations for a new science of consciousness*. New York: Pantheon Books. "Panpsychism offers a way of 're-enchanting' the universe. On the panpsychist view, the universe is *like us*; we *belong* in it. We need not live exclusively in the human realm, ever more diluted by globalization and consumerist capitalism. We can live in nature, in the universe. We can let go of nation and tribe, happy in the knowledge that there is a universe that welcomes us." [P. 217. Emphases in the original].

ccxli Cellan-Jones, R. (2014, December 2). Stephen Hawking warns artificial intelligence could end mankind. *BBC News*. https://www.bbc.com/news/technology-30290540. "In his BBC interview, Prof Hawking also talks of the benefits and dangers of the internet.

"He quotes the director of GCHQ's warning about the net becoming the command centre for terrorists: 'More must be done by the internet companies to counter the threat, but the difficulty is to do this without sacrificing freedom and privacy....'

"But one aspect of his own tech—his computer generated voice—has not changed in the latest update.

"Prof Hawking concedes that it's slightly robotic, but insists he didn't want a more natural voice.

"'It has become my trademark, and I wouldn't change it for a more natural voice with a British accent,' he said.

"'I'm told that children who need a computer voice, want one like mine."

[Interestingly, Hawking uses his artificially created speaking voice to preserve the perception of his unique human identity for himself and to others, rather than using technology to create a more "natural" human-sounding voice. Also, the quadrune mind model does not endorse the use of the term "race" in reference to human beings. See note cxxxvi for details].

ccxlii See Appendix C: 80 Aphorisms from the Quadrune Mind Perspective.

ccxiiii For more about the dangers of a dominating, individualistic adolescent rational mind, see my essay, QM and the Scary New Mammalian Mind of the 21st Century.

ccxliv Carrington, D. (2024, December 28). 'We need dramatic social and technological changes': is societal collapse inevitable?: Academic Danilo Brozović says studies of failed civilisations all point in one direction – today's society needs radical transformation to survive. *The Guardian*.

https://www.theguardian.com/environment/2024/dec/28/we-need-dramatic-social-and-technological-changes-is-societal-collapse-inevitable.

ccxiv Heer, J. (2025, January 30). Why we got Kash Patel and a 'gangster government.' New York Times. https://www.nytimes.com/2025/01/30/opinion/kash-patel-fbi-trump.html. "Several critics have made the accusation over the years that Mr. Trump is a mafia president. But that's more than a convenient metaphor or even an apt account of his personal demeanor. The journalist John Ganz, in his recent book 'When the Clock Broke,' sees mafia government as a symptom of a larger crisis of democracy.

"Mafia politics is what you get when faith in the normal system of liberal democracy breaks down. This lesson can be found in 'The Godfather.' The very first voice heard in the movie is not that of a mobster but an honest, ordinary American turning to a gangster for help: The humble, soft-spoken undertaker Amerigo Bonasera says, 'I believe in America.' But America let him down. When two men beat and attempted to rape his daughter, the justice system let the men who harmed her free with a slap on the wrist. In that situation, what can a man do but turn to Don Corleone, the Godfather, for protection and justice?

"Mr. Trump is a mafia president because America has become a nation of Bonaseras. But America is not alone. The British political scientist Jonathan Hopkin, in his book 'Anti-System Politics,' has given us a far-reaching framework for understanding the wider shift in global politics since 2008. The economic meltdown of that year discredited institutions all over the world, a pivot point deepened by other examples of elite failure both earlier (President George W. Bush's failed global war on terror) and subsequent (the social and economic upheavals of Covid). "Even more galling, thanks to America's system of elite impunity, virtually none of the politicians and bankers responsible for these disasters has ever been held to account. This has made citizens of many democracies deeply cynical and open to an appeal of anti-system politics that promise to shake up the established order, whether by a return to egalitarian economics of class solidarity (as with Bernie Sanders) or a nativist politics of protection (as with Mr. Trump)."

["Class solidarity," as a social class, represents a childish mentality. If "class solidarity" refers to an abstract concept of a class, then it would indicate an adolescent mind as being dominant. "Nativist politics of protection" represents an infantile survival mentality. Another option is to help each other become spiritually mature so that we can move beyond our dependence upon "earthly" power to give us "earthly" justice. Unfortunately for all of us, it is the power elites themselves who most need to act on this belief in order for humanity to heal the earth].

ccxivi For a developmental overview of the pre-rational, rational, and post-rational (spiritual) minds, see Table 4.

ccxivii Kimmerer, R. W. (2013). Braiding Sweetgrass: Indigenous wisdom, scientific knowledge, and the teaching of plants. Minneapolis, MN: Milkweed.

ccxiviii Simon, R., & Siegel, D. (2024). <u>VIDEO: Dan Siegel Explains Why Brain Integration is the Key to Good Mental Health</u>: Here's What a Healthy Mind Looks Like. *Psychotherapy*

Networker. https://www.psychotherapynetworker.org/article/video-dan-siegel-explains-why-brain-integration-keygood-mental-health/.

ccxlix From the quadrune mind model's perspective, "parenting the world" is a more nurturing, humane, and realistic role for human beings than "saving the world." Because human nature is inherently spiritual, humanity—and the world—does not need to be "saved" from some innate evilness. Rather, people, animals, and the environment need the safety, love, and care required for them to reach their full potential, which is what good parents do.

ccl Tolle, E. (2005). A New Earth: Awakening to Your Life's Purpose. New York, NY: Penguin Group (USA) Inc. [P. 21].

ccli My 90-year-old former professor, Donald, recently expressed this spontaneous, earnest opinion of human nature. He has given me permission to cite him. The purpose of the quadrune mind model is for us to help each other replace our "ignorance" with constructive awareness and "stupidity" with compassionate wisdom. In any event, his comment inspired me to conduct my informal, in-person survey of people's descriptions of "human nature," for which I am grateful to him. I thought it might be interesting to compare the answers with the respondent's age, gender identity, and self-description.

^{cclii} For example, see Rose, J. (2021, November 6). The inquiry into border agents on horseback continues. Critics see a 'broken' system. *NPR*. "James Wong, who used to work in internal affairs at CBP, says the Border Patrol sees itself less as a law enforcement agency, and more as a 'paramilitary force.'

"'I've had Border Patrol agents in the past tell me that they will not retreat, and they will not give up one foot of American soil,' Wong said. 'They view these people as the enemy. And to me, that's troubling."

https://www.npr.org/2021/11/06/1052786254/border-patrol-agents-horseback-investigation-haitian-immigrants.

[Ethologist Konrad Lorenz coined the term "militant enthusiasm" to describe what people experience when they "live for, struggle for, and under certain circumstances blindly go to war for" something. Militant enthusiasm sanctifies such actions as ripping babies from the arms of desperate refugees seeking help if those people are seen

as the "enemy." For more, see Lorenz, K. (1963; Eng. trans. 1966). On aggression. New York: MJF Books].

ccliii For related thoughts on this issue, see QM and the Future of Spiritual Consciousness.

https://quadrunemind.com/2021/04/21/qm-and-the-future-of-spiritual-consciousness/.

ccliv Also see page 6 of the Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

cctv See Absolute Certainty: Doing, Knowing, and Thinking https://quadrunemind.com/2022/03/18/absolute-certainty-doing-knowing-and-thinking/; QM, Phylogenetic Regression, and Extreme Aggression https://quadrunemind.com/2021/03/31/qm-phylogenetic-regression-and-extreme-aggression/; and the "Infantile" column of Table 4.

cclvi See page 6 of the Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

cclvii Compare Oscar Wilde's comment, "To live is the rarest thing in the world. Most people exist, that is all." See page 11 of the Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

cclviii For related material, see the opening paragraph of "The End" section of Acting Like Adults book https://quadrunemind.com/wp-content/uploads/2024/12/Acting-Like-Adults-by-Tom-F.-Shadid-Ph.D-7.pdf. Also, see Sen, A. (2006). *Identity and violence: The illusion of destiny*. New York: W. W. Norton. [Whole nations begin their historical memory in a way to define themselves as the victims of other people's unprovoked angry actions, with designed ignorance of the effects of their own earlier acts of exploitation, provocation, and violence. This self-serving biased memory allows people to self-righteously act out terrible destruction against a beastly enemy who deserves the worst. A nation, or religious tradition, ethnicity, etc., that is able to reach further back into history to acknowledge their own culpability in present acts of violence, has a chance to see themselves and others within a more spiritually grownup view. If they truly have no culpability, then not to choose "revenge" would probably require the spiritual consciousness of a Jesus, Gandhi, or John Lewis. Regarding John Lewis, see our essay, Why Religious Fervor and Spiritual Consciousness Are Not The Same (A Comparison of Two Religious Politicians, Josh Hawley and John Lewis, in Light of the Quadrune Mind Model) https://quadrunemind.com/2021/03/19/are-religious-fervor-and-spiritual-conscious-the-same-thing/]. cclix Compare Jaynes, J. (1976). The origin of consciousness in the breakdown of the bicameral mind. Boston: Houghton Mifflin. "Consciousness is a much smaller part of our mental life than we are conscious of, because we cannot be conscious of what we are not conscious of And so, consciousness can seem to pervade all mentality when actually it does not." [P. 23].

[This is the book that first sparked my interest in the relationship between brain structures and mind functions. Nearly 50 years later, Julian Jaynes' very personal work continues to offer rich insights into humanity's paradoxically long struggle to understand human nature].

ccix Compare Fleury, B. E. (2018). The scientific wonder of birds. https://www.thegreatcourses.com/courses/the-scientific-wonder-of-birds. Chantilly, VA: The Teaching Company. From the course overview: "The Remarkable Brainpower of Birds—Contrast avian brain structure with our own and track the intelligence of birds in numerous surprising and revelatory examples. Note how diverse species can distinguish shapes, colors, and numbers; remember 2,000 seed cache locations; start fires to flush out prey; make hooks to catch food; tie slip knots; and, believe it or not, differentiate between artistic styles such as Cubism and Impressionism."

[My Great Courses comment, quoted here, refers especially to Lecture 5, "Bird Brains: Tool Wielders and Snack"]

Stealers.": "Bruce E. Fleury is an immensely pleasurable, witty, and humane advocate of respect for avian intelligence. He describes how their intellectual feats are comparable to those of primates and young human children. Although Fleury recognizes the instinctual basis underlying some very complex behaviors, there are also avian innovations that make it difficult to decide whether we underestimate their intelligence, or overvalue our own. And his love of birds, often told with charming personal stories, is irresistibly contagious. Nevertheless, he does not romanticize the harsh realities of a bird's life."

I have also cited this course in the Dinosaurs, Billionaires, and Mass

Extinctions https://quadrunemind.com/2021/09/01/dinosaurs-billionaires-and-mass-extinctions/ essay. For additional context for this significant issue, see the essay, QM and the Vital Difference between Consciousness and Intelligence. https://quadrunemind.com/2021/06/14/qm-and-the-vital-difference-between-consciousness-and-intelligence/].

cclxi See How Entertainment and Art become Propaganda through the Loss of Aesthetic Distance. https://quadrunemind.com/2021/08/03/how-entertainment-and-art-become-propaganda-through-the-loss-of-aesthetic-distance/.

ccixii Instead of mentally regressing to irrationality, which many people in the 21st century seem to believe is the only alternative to a loss of faith in reason, we can go forward with a spirituality beyond the rational. Some possible elements of what an integrated spiritual level of consciousness beyond rationality looks like might come from Carl Jung (synchronicity beyond causality), the human Jesus of Nazareth (compassion beyond law), panpsychism (consciousness beyond subatomic particles), and plant ecologist Robin Wall Kimmerer's "braiding sweetgrass" (sharing wisdom with nature beyond scientific knowledge of nature). Incidentally, I believe Gautama Buddha to have been the greatest rationally-based spiritual teacher in history. Nevertheless, some branches of Buddhism, such as Zen with its koans, have also gone beyond rationality (paradox beyond logic).

ccixiii See the Study Guide for additional details related to the development of the quadrune mind model.

cclkiv Compare Helmore, E. (2023, May 28). "They're afraid their Als will come for them" Doug Rushkoff on why tech billionaires are in escape mode. *The Guardian*. https://www.theguardian.com/technology/2023/may/28/artificial-intelligence-doug-rushkoff-tech-billionaires-escape-mode. "The only way to rebel is to be human and aware, Rushkoff says. 'Be social, get your feet on the ground, make eye contact, have sex, meet people, breathe the air. The more real-life ballast you have, the less this brittle, ideological, abstracted, social media-mediated universe bears upon your daily existence.""

[If we stay technologically isolated from one another we may all end up as solipsists; i.e., more specifically, we can become stuck in the "extreme egocentrism" of infancy—a major characteristic of the reptilian-like mind]. cclxv See Stampede Greed and Desperate Need for related material.

https://quadrunemind.com/2021/11/23/stampede-greed-and-desperate-need/.

RESOURCES

See footnotes of the essays for content-specific resources. Also, for a list of relevant resources that I have found useful to help understand the model, or are interpreted in interesting ways when seen through the lens of the model, refer to "Resources," pages 12-18 in the Quadrune Mind Study Guide. https://quadrunemind.com/wp-content/uploads/2023/02/Quadrune-Mind-Study-Guide-by-Tom-F.-Shadid-Ph.D..pdf.

BIOGRAPHICAL NOTE

Tom F. Shadid, Ph.D. has an eclectic professional background. During a span of nearly 40 years, he has worked as a certified school psychometrist/psychologist, outpatient alcohol counselor, licensed psychologist, residential dual diagnosis therapist (mental health and substance abuse disorders), and university adjunct instructor.

He did his predoctoral internship at the University of Virginia's Counseling Center in Charlottesville. He earned his Ph.D. in Applied Behavioral Studies in 1989 from Oklahoma State University, Stillwater. Dr. Shadid retired as an Oklahoma Health Service Provider psychologist in 2014. Since 1997, Dr. Shadid has presented the quadrune mind model, or "neurospirituality," to a variety of interested people, including business, general public, religious, professional, and educational groups.

Dr. Shadid and his daughter, Kerri, have written essays regarding the understanding and application of the quadrune mind model in daily life, which are currently accessible at quadrunemind.com.