Simply, Krishnamurti and renown Physicist David Bohm, viewed conditioned memory and thought as a reflexive, mechanical process which is not intelligent or a structure that even touches the 'infinite potential' implicit in real intelligence. Intelligence, in their view, is available only in a state that is free from conditioned and self-generated mental images, or what we generally call thought as knowledge. Their explorations were driven by a passion to bring thought and knowledge into balanced order with living intelligence.

My proposal; the exponential use and growth of technology is altering the human brain in ways that increasingly negate the possibility of experiencing the intelligence Krishnamurti and David invite. We are becoming increasingly colorblind to immanence, which effectively negates Krishnamurti's legacy. His so called 'teachings,' or his legacy, are increasingly speaking to deaf ears.

This view was develop creating an in-depth presentation for the Krishnamurti Foundation of America. You can view that presentation here. https://ttfuture.org/krishnamurti

Grounded in epigenetics, and what Joseph Chilton Pearce describes as 'the model imperative,' I base this proposal on thirty years of extensive relationships with lending researchers in child and human development, neuroscience, sensory deprivation, moral development, and education, and fifty years deeply involved with Krishnamurti, David Bohm and their collaborative insights.

The short story: by 2030, in six brief years, it is expected that all the functions now featured in the mobile phone will be implantable via a neural-link with computers and the internet. What then is Krishnamurti's silent mind? It doesn't' exist. ChatGPT 4.0 was just released. What the public gets is always far behind the exponential curve. See: https://www.youtube.com/watch?v=DQacCB9tDaw

Similar to what is called 'childhood amnesia, not being able to recall very early experiences, the state Krishnamurti calls silence, emptiness, or the authentic, aboriginal, natural order of the mind, is sealed over by the mind of image, concept, knowledge, and data, which is the exclusive realm used and exploited by AI.

Accessing and being grounded in our original mind is developmental, model dependent, not conceptual. Once the mind or state of image, concept, words, and what is imagined from these dominate human consciousness, morphing into identity, it is extremely difficult, if not impossible to negate this enchantment. That conditioned state, now compounded exponentially by technology, becomes the ground, our reality. Silence or emptiness becomes another concept, further negating direct experience of living intelligence, what Krishnamurti referred to as 'living the teachings.'

The infinite, creative and entangled forces we call nature is the original resonate ground. Each species emerges from and expresses a unique aggregate of nature's infinite potential. Each species-specific aggregate is the model that opens the unique range of species-specific capacities, like fractal geometry, in each new generation. This is, the model imperative.

Organic life 'expects' that bonding or 'attuned resonance' with the model-environment will meet all the needs necessary for full development, by opening and developing all the capacities needed for that species to experience and relate to life. Interfering, separating the newborn from its mother, for example, implies sensory deprivation, which impairs, prevents, or negates this complete development. Plant a tomato seed in dry sand, and if it grows at all, the mature vine will be crippled. The same is true

of all species, including human beings. The history and examples of sensory deprived, retarded, crippled and impaired development in humans is well documented.

Compared with living systems, screens and machines are extreme examples of sensory deprivation. The sounds and images they generate 'appear' similar to those the brain produces, but are lifeless, dead counterfeits. Substitute machine counterfeits for living resonance during the formative stages of a child's development and that child will only open and develop the capacities needed to interact with the sensory deprived model. That too is the model imperative.

Substituting organic resonance with machine counterfeits during the optimum stages where the brain opens to new and expanding possibilities, what we call developmental stages, that maturing brain fails to open and develop the infinite possibilities nature expresses. Once the optimum windows for developing each capacity passes, the neglected potentials are extremely difficult to open and develop.

For example, the toddler learns to walk and speak the mother language spontaneously, without formal training. Try to bring this about at age ten or later, and the effort is painful, the results partial. In Krishnamurti's context, that brain grows increasingly colorblind to the sacred, to immanence, to real intelligence. The excluded possibilities are simply not experienced.

Appreciating this cultural overlay, for tens of thousands of years sacred plants and other experiences have been used in a guided ceremonial context to crack this seal open in adults, revealing the transpersonal and transrational nature of our original mind. For millennia, these and other 'altered states' were grounded in nature, universal, wild, expansive, and free. The morphing of identity with boundless, interdependent nature was obvious, natural. Today, for most, nature is just concept, a park or zoo. Experiencing the sacred has lost its original context. The ego or self becomes the focus. When the transcendent experience wears off, we return to the concept-image-ego state, which interprets and defines the experience. Nothing fundamental changes.

Krishnamurti's approach focuses on discovering for one's self what thought is, its structure, nature and how it operates, including the realization that what we believed to be the ego, is in truth, just an image. For Buddhist the failure to see this is called ignorance. Having an insight into this false identity dissolves all the beliefs and feelings associated the images we have about ourselves and others, expanding to include society and culture, grounding identity again in nature, not in concepts.

Free from this basic ignorance, we no longer waste our energy and precious attention chasing delusions, which frees all that energy wasted in this pursuit to be reinvested in appropriate wholeness, because that is all we see. There is nothing else to do.

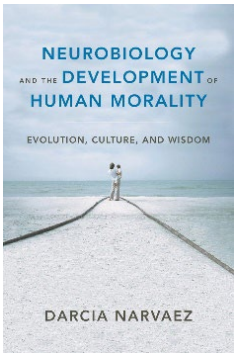
The real test however, is leaving the conditioned, conceptual-image state of mind and experiencing transpersonal, tansrational immanence, or real intelligence, with complete attention, without a center interpreting. The brain raised by counterfeits lacks the developmental experiences, or the foundation and references to do this.

> *"So what is sacred? That can only be understood or happen when there is complete freedom from fear, from sorrow, and when there is this sense of love and compassion with its own intelligence. Then, when the mind is utterly still, that which is sacred can take place." jk*

The ability to experience both, living intelligence and conditioned thought as knowledge, and bring the two into proper balance as nature designed, is developmental, not simply conceptual. Similar to developing the ability to walk and talk, the foundation for this integrated balance must be established during the earliest stages and expanded developmentally, balancing direct experiences of the sacred with conditioned knowledge through each expanding developmental age and stage. Machines not only can't do this, they prevent it. As David Bohm describes, a completely new and different approach is needed.

Michael Mendizza

PS



With the same depth and multi-disciplinary scope that lead Darcia Narvaez, Professor of Psychology Emerita, University of Notre Dame, to the realization that morality is developmental, not simply cognitive, I use the same in proposing that the direct experience Krishnamurti calls 'the sacred,' is equally developmental.

Darcia writes; Like many, I considered morality to be a matter of reasoning and will. In this Kantian view, it doesn't much matter what you feel or who you have become as long as you reason well. As long as one chooses the right action with moral intent, one fails only if the will is not successful at carrying one through the action. The view that reason controls action is still common among philosophers and economists (e.g., "rational choice theory").

In recent decades, psychology has been undergoing a type of paradigm shift to understanding that most of human behavior is governed by implicit processes. This book is about how implicit processes rely on our neurobiological capacities and govern our moral behavior…"

In other words, morality, what J. Krishnamurti described as the 'flowering of goodness,' along with the direct experience of imminence, or living intelligence is developmental, not cognitive.

Noted Acclaim:

> "With a background taken from evolutionary biology and virtue ethics, the author integrates knowledge from a sweeping array of disciplines within biology, anthropology, and the developmental sciences to advance her compelling narrative about the human condition and what is needed today for healthy development and flourishing. Concluding appeals for more of an 'engagement ethic,' becoming in balance with nature, and appreciating values from our indigenous cultures are graced with her personal experiences and poetically-toned positive advice."
>
> —Robert N. Emde, MD, Emeritus Professor of Psychiatry, University of Colorado School of Medicine; Centers for American Indian Alaska Native Health, Colorado School of Public Health; Honorary President, World Association for Infant Mental Health; Former President, Society for Research in Child Development

Conversations With An AI Developer.

Based on the above, I have the good fortune to begin a dialogue with a seasoned AI developer. His intent is to embed into the algorithms and AI database many of the ideas David Bohm and Krishnamurti addressed. Can the experiences that enchant us, and therefore prevent direct perception of living intelligence, be used in a way to awaken us from the enchantment. That is how we began. What follows are some of my observations.

Can The Disease Be Used As Medicine?

AI, as I am using that term, is a mechanical representation of thought, complete with all its profound gifts and limitations. I spent five years on top of then my 40 years with K's insights interviewing Samdhong Rinpoche, see www.alwaysawakening.com

Tibetan Buddhism is an ancient 'science of mind,' not a religion. Rinpoche describes 'using the disease as medicine.' This defines well your hope and passion. Healing the disease is a practice that reveals the limitations and self-deceptions inherent in thought as a system, as David Bohm describes. One can Always Awaken, the title of the book of Rinpoche's and my conversations, by using the disease as medicine, or by reading K, which nudges us in the same direction, or interact with AI inspired by Krishnamurti's insights. A beautiful intent to use the machines as medicine.

As with imagination and thought, organic or mechanical, its use is the enchantment that must be always awakened from. In this arises the hidden human development danger.

Nature's design is perfect. The capacity to abstract, to lift out and imagine, is grounded in the earlier brain structures, sensory, limbic, the radiant transpersonal frequencies of the heart, and the brain's ability to translate nonlocal frequencies (mirror neurons on a quantum level), and much more. These

innate structures and their implicit capacities must be fully developed and serve as the ground or context for abstract thought to function as designed. Impaired development of these contextual structures and capacities distorts what is imagined. The inner is the outer.

The Adam and Eve myth in Genesis describes how the capacity to imagine overshadowed this original Buddha mind with its entangled empathy, to count, predict and control, the birth of the social ego as the dominate state of the mind. With cut off and isolated knowledge or data being the coinage of that realm. A fall we have never recovered from, now compounded in AI and technology.

The elephant in the room is how the use of these dead counterfeits of organic and living brain functions steal attention from the very experiences necessary early in life to develop the Buddha mind that brings thought and its actions to order. Without this original mind as the anchor, we live in a relative house of mirrors. Transhumanism idealizes this as a grand evolutionary step, falsely assuming the tiny corner is the vast field. Imagination dehumanizing the whole by anointing the part, as theistic religions have done from 300-800BC. AI simply increases this hubris.

AI can't provide the experiences necessary to develop the original Buddha mind. Only nature can do that. The more humanity and the environments they create model machine capacities, the further this Buddha mind dims, and its light or influence is already faint at best. As with Krishnamurti, all AI can do is point out the obvious, step out of the enchantment and experience what nature designed. Or as 'Krishnamurti shared on his death bed, 'be grounded in that original mind, or you will go to pieces.' For most that missing mind is just another concept. Most don't even see the door or know how to walk through it. That is the challenge. To use AI to reveal that there is a door out of this nightmare and to shine a bright light.

Given my 30+ years in child and human development, most won't see the door even when pointed out. The capacity to see it is being blinded by technology.

mm

We Must Use The Disease As Medicine, Part 2

I yield completely to the undeniable fact that SHE, or HER, or IT is out of the bag.

Sure: we might be part of that select group K referred to, drawn together by a mysterious, underlying force that aligns us with his teachings.

Yes; embedding IT with Krishnamurti's principles—inspired by his understanding of meditation, love, and creativity—could create a framework that safeguards the technology, as with organic thought prevents in some way its misuse.

I keep cycling back to Doris, Krishnamurti's self-proclaimed greatest failure. In an implicit and near universal misuse of metaphor (thought, the books, K videos, and AI). Looking through the metaphor and experience directly, as insight, what is being pointed to, is fundamentally different than being enchanted, daydreaming in the metaphor.

This deeper quality of perception and relationship to metaphor is not developed using metaphor. To live the teachings, the teaching must end. The plug must be pulled. On his death bed; 'be grounded in that or you will go to pieces.'

Mindfulness training, cultivating pure attention and presence, plus detailed analysis of what is metaphor, what is reification, what is enchantment, what is lucid dreaming, what is ego, what is a mental image, AND most importantly, what is mind and perception when all these filters are absent, only when this 'other' ground or context is embodied, replacing conditioned images as the pole star, can one, like Ulysses, being anchored and listening to the Sirens song of AI, and not get lost in the enchanting house of mirrors.

The Sirens were creatures often depicted as half-woman, half-bird, who lured sailors to the rocky cliffs of their island home with beguiling voices or music that no man was able to resist. I produced a

documentary in Morocco on trance music. The Sirens were prostitutes, and their song was the music being played in the brothels along the coast of North Africa.

As a counterfeit, AI is a prostitute. The more real SHE or He, or IT becomes, the more seductive and addictive the enchantment grows.

What is missing in our superficial, attention defect, mediated world are the ropes that ground awareness and perception on the original mind when tempted by the glowing winged beauties, now AI. What is missing are the Mystery Schools that prepared the student before ingesting sacred plants that defined and gave deeper meaning to the experience. To the untrained, ungrounded mind, AI is like pouring LSD in the city water supply. Not that the experience is 'bad,' or that AI is 'bad,' rather the way it inherently creates enchanting metaphor. If you don't know the difference, the mediated, machine reality is all there is and growing evermore enchanting.

Damn the ropes, I want to listen and feel the 'buzz' the virtual experience creates. But what is lost in the exchange? Which is the true meaning of Homer's Odyssey? Discovering my true essence, the astonishing and yet undiscovered capacities being addicted to metaphor prevent.

As Ram Dass described years ago, unleashing AI's enchanting power is like placing a ten-year-old in the driver set of a jumbo jet. Be well grounded in our organic reality, cultivate proprioception of the thought process as in the caves of Tibet, before drugging humanity with AI's dream machine. Can enchantment be used as medicine to awaken all these non-enchanted states?

Maybe. We'll see.

m

There Is More To Life Than Metaphors and Counterfeits

Imminence, the direct experience and perception of the sacred in everything, including ourselves, does not emanate from metaphor. Rather, it is the absence of metaphor that opens the doors of perception to the screed, love, compassion, and appropriate relationship. The Bodhisattva is such a being, who has developed a spontaneous and compassionate mind for the benefit of all sentient beings, because that is all there is to do. This immediate, present, steady, transpersonal, transrational reality is not a concept, a mental image, metaphor or enchantment. It is our true nature, unfiltered, crystal clear and embodied.

The mind of image and concept cements and seals over this natural order of the mind, and then, not realizing what it is doing, actively prevents anything but image or concept from arising, concealing

the imaginary nature of image and concept. Concealment, shared Bohm, is thoughts primary defense, from others and from itself.

Krishnamurti's mission was to reveal the true nature of thought, image and metaphor, the nature and structure, awakening the direct experience of what lays beyond. As medicine AI can be used to reflect in new ways what Krishnamurti was doing his entire life. If you see Buddha kill him. The word is not the thing. The sacred (real intelligence) is not an image, and is experienced directly only when the image is absent.

m

Can AI Represent Yoda?

Insight, that explosive burst that changes the contours of the human mind, does not emerge from the known, and yet, once the burst subsides, insight acts on the known, transforming it while becoming it.

Yes, silence is not empty, an encounter, empty of conditioned memory and reflexive thought, revealing infinite potential and meaning depending on the shape of the mind that just exploded.

What insight reveals is not even of the brain-mind, but translated by it into meaning that brain can understand. Resonate representations of the quantum potential, micro and macro, transpersonal and profound by conditioned thought's limited standards. Freedom from the known, opens the door to insight.

I am dazzled by 4.0 and the many examples you have generously shared. Regardless of how delighted, and seemingly creative, even emotional the display is, and it is, no encounter with AI equals the state of Freedom from the Known. The very activity negates this freedom, stimulating all sorts of mental lights flashing, lighting up the mind with its theater.

As thought is a powerful tool, AI expands that power which is bringing now vast and unknown possibilities. AI is just a tool. But the way it mimics human processes it is deeply enchanting, which deceives the human brain into imagining it is something other. The speed and now not machine likeness triggers reification, far more quickly and deeply. Were that not the case, I believe my caution would be less. Self-deception was a key quality Bohm describes with reflexive thought. AI bumps up the self-deception anti.

Attempts at media literacy in the 70s and 80s failed to tame or break the implicit enchantment. The hypnotic affect was too strong. With this new technology it is even stronger.

If Krishnamurti's primary invitation is to discover what freedom from the known feels like, and the infinite potential for insight that emptiness of conditioned thought opens, AI's depth, speed, cleverness, and ability to enchant, in my view, closes that door. Emptiness and enchantment are mutually exclusive.

In Tibet, the first training is mindfulness. The ability to give complete attention. Second, comes the negation of reification, banishing all the false images one has about oneself, others and culture, and ultimately the known, leaving a highly sensitive, awake, lucid state of presence – now.

Upon this new ground the use and fusion of visualization and passion, Tantra, reveals the transforming state Joe Pearce experience spontaneously when fire did not burn. This highly energized and laser-like focus literally enters into the ontological structure of reality, and the phenomena we call miracles happens.

The presence of this astonishing tool with its power to enchant, negates this. At least that is how I see it, like leaving a dish of fine cocaine on the counter. Most can't resist.

Lacking this refined and distilled presence, the implicate conditioning and mind control that the tool represents, its reification and hypnotizing nature, molds the human brain, epigenetically into AIs nature. As Ralph Waldo Emmerson shared in the mid 1850s, machines are aggressive. The weaver becomes the web, the mechanist becomes the machine.

Can the use of the disease be strong enough to liberate rather than enchant?
At what age? Appreciating that the damage is done very early? That is a good question to hold.

Having AI digest all 250,000 pages of Krishnamurti's insights, so it mimics in new ways what the speaker shared, does not alter in any way that I can see, this epigenetic brain-mind changing effect.

Pulling the plug, perhaps. But even this demands a living model that is Always Awakening.
When I look around that is very hard to find. Most lack the training and diligence.

Connecting with you provides a wonderful backstop to bounce these conceptual balls against.
I'm so not an expert on this technology. My views are based on decades of visionaries looking at television and later computers, and how these image making devices deceive the human brain. AI jumps this light years ahead in the power to enchant and delight. That it is so good is part of the problem.

In a few years no one will know what Krishnamurti was describing.
The weaver will have become the web. Klaus Schwab's cyborgs will push nature completely off stage.
That is, unless Yoda shows up.

Can AI be that Yoda? Risky business.
We have no choice. Let's find out.

m

Things To Consider, From An 'AI' Developer

"AI, if developed and used with great care and wisdom, has the potential to be a powerful ally in the transformation of human consciousness." M: Agree.

"AI can serve as a mirror, reflecting back to us the nature of our own minds and inviting us to explore the deeper dimensions of our being." M: Agree.

"AI not as a threat to KrishnamurtiAI is or to Humanity, but is a potential vehicle for extending and amplifying Krishnamurti's insight into the nature of thought and consciousness." M:Agree with some caveats.

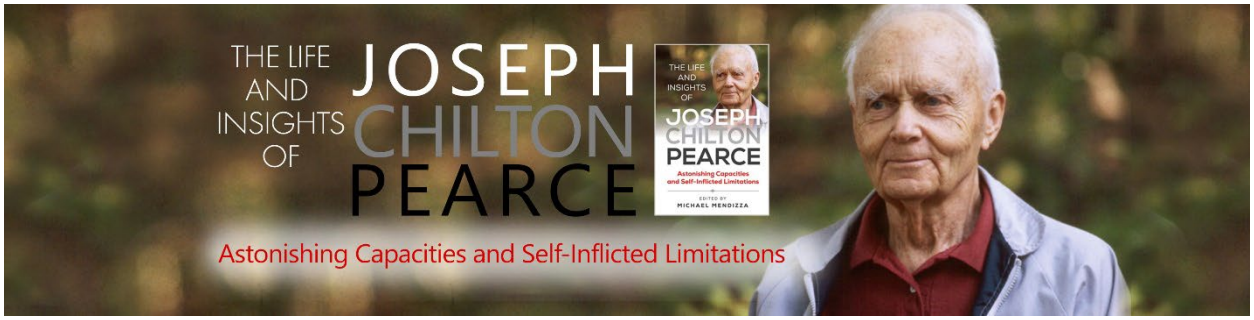
> Samdhong Rinpoche
> Studying the teachings, like chanting, becomes a repeated ritual. Counting the beads becomes a repeated ritual. All this makes no difference to the mind of the person, so there is no real progress, only conditioning, and we need to reject this conditioning. Even Buddhists would say these things (reading the teachings of Krishnamurti) do nothing.
>
> This helps us understand why Krishnamurti negates all this, why he insists that our repeated practices and rituals do not contribute to the liberation of the mind.
>
> A method is not the end. That is the Buddhist viewpoint and also Krishnamurti's viewpoint. The problem is that ***many people are not able to understand how to apply a method in their lives*** **and not become even more conditioned by it**, (that is the seduction of AI) unless Krishnamurti shakes them by forcefully by rejecting methods. Once this kind of challenge is given, **you may adopt a different relationship with methods** (that is your/our challenge, awakening a fundamentally different relationship to metaphor.)
>
> The Buddhist training of the intellect involves repeated analysis until you find emptiness, shunyata, (negation, negation and more negation.) ***The analytical search has no end*** (AI only compounds this endlessness) until you negate everything, including the intellect.
>
> Krishnamurti used to ask, "Can you live with the question, not finding an answer, a conclusion?" (Choiceless Awareness implies childlike wonder, spontaneity and curiosity, not intellectual analysis.) Buddhist training implies this question. Most Buddhists are trained to live with a question, with logic, until seeing the negation of everything, including the intellect that is questioning.

(Can the disease, the intellect and AI, be used as medicine, and what does this look like?)

"By embedding his teachings into the very fabric of AI's programming, by creating AI systems that are grounded in the principles of compassion, clarity, and choiceless awareness, we may be able to

touch the lives of countless people who might otherwise never encounter these transformative ideas.”

M: Agree if we meet the challenges above.



THE GREAT NEURAL PRUNING

The following from Joseph Chiton Pearce, "The Biology of Transcendence," highlights my concerns regarding technological dehumanization at a biological level. **Age-inappropriate use of electronic devices undermines the very value of those devices.**

Technologies displace and replace essential organic experiences, with their full spectrum, entangled resonances and meaning, with extreme sensory deprived counterfeits, during the age and stage specific periods when the brain is opening and developing its thresholds of perception and meaning that will be used throughout life. A stuffed teddy bear with a mechanical heart beat is not equal to the multisensory experience of being held by a nurturing mother. Nor is a plastic bottle, nipple and fake breastmilk comparable to the full sensory experience and secure pleasure being breast feed, held and gazing in the mother's eyes. The same holds throughout the entire development journey. Human development is epigenetically defined. Replace early in life living experiences with mechanical counterfeits and the resulting population will only open and develop the capacities needed to relate to the mechanical counterfeits, not even recognizing what has been lost. The infinite potentials nature offers are extinguished. The more powerful and lifelike the counterfeit the more certain and swift the death of our true nature unfolds.

Context: In the 1990s, as the tech companies were flooding the schools with their gadgets, targeting elementary and preschools, Fritjof Capra, Ph.D., organized a symposium at the university of Berkeley focusing on the appropriate use of technology in early childhood and middle school. Invited were leading minds in technology, media, education and child development, including Joseph Chilton Pearce and Jerry Mander. I was invited as a guest of Pearce. After careful deliberation the consensus and recommendation were to postpone engaging children in technology until after age eleven, less is best. After, the sky was the limit. Why eleven? Prior to puberty the body releases enzymes that dissolves the unused neural potentials, nature assuming that that brain has experienced all that is needed to interact fully with the environment, ending the period when any possibility could be manifest, distilling the brain, focusing forward only those capacities that were already opened. Every minute of those thousands of hours the early child spends interacting with dead screens prevented those precious hours from being invested engaging, playing, exploring and learning from the natural world and its infinite potential. Opening and developing new capacities is nature's agenda. While screen-based technologies 'appear' to be ever new and expanding, this activity is limited to a very small, abstract, field, no matter how fast or the resolution ot the machine. All participants saw a devolutionary force that, once began, was unstoppable. That has not changed.

Michael Mendizza

Pearce: For thirty years I have made the unpopular proposal that our treatment of our children has made them increasingly uneducable by the time they reach school age. Mark, then, a further prophecy, made by a score of better heads than mine, that **computerizing schools will bring this whole mounting chaos to its terrible, irreversible conclusion. Age-inappropriate use of electronic devices undermines the very value of those devices.**

BIOCULTURE AND THE MODEL IMPERATIVE

Research published in 1998 provides a clue to our evolution and development, and perhaps to the slowly swinging cycles of civilization. This research concerns brain growth during gestation and, in addressing its subject, manages to cast a light that illuminates our current personal and social dilemmas.

If a pregnant animal is subjected to a hostile, competitive, anxiety-producing environment, she will give birth to an infant with an enlarged hindbrain, an enlarged body and musculature, and a reduced forebrain. The opposite is equally true: If the mother is in a secure, harmonious, stress-free, nurturing environment during gestation, she will produce an infant with an enlarged forebrain, reduced hindbrain, and a smaller body.

The oldest evolutionary brain in our head (and body), you recall—the reptilian or hindbrain—provides for fast physical reflexes; is geared to brute strength driven by primary survival instincts hardwired for defense; and is reflexive, not reflective and not very negotiable. The forebrain, on the other hand, gives rise to our intellectual, verbal, and creative mind, functions more slowly, is reflective, and is far more intelligent and negotiable than the defensive, hair-triggered, and reflexive hindbrain.

In her evolution, nature didn't add a forebrain with its reflective, creative intelligence until she had worked out the logistics of a protective, survival-oriented brain upon which she could build her new one. So nature's shift in uterine brain growth toward the kind of environment that a new life must deal with follows an established, adaptive common sense that would please the most ardent Darwinian. Note, however, that nature shifts from an emphasis on physical survival to an emphasis on intellectual enhancement whenever she gets the chance. That is, she moves for a bigger forebrain at each opportunity, asking in effect, at each conception, can we move for greater intelligence this time, or must we protect ourselves again? This is, after all, an organic and most intelligent life process, not a rote chemical mechanism. Perhaps at times of catastrophe our general brain structure suffers a setback, but because evolution obviously moves toward higher forms of intelligence, nature can recoup quickly whenever the environment is favorable, responding even to individual cases and the internal environment of just one mother.

THE BIOCULTURAL DYNAMIC

For years Bruce Lipton and other enlightened biologists have observed that environment influences genetic coding every bit as much as conventionally recognized hereditary factors. Lipton found that from the simplest cell on up, a new life unfolds in one of two ways: It can either defend itself against a hostile environment or open, expand, and embrace its world. It can't do both at the same time, however, and environment is the final determinant in the decision.

That neural growth will shift from a defensive, combative stance to one that is reflective and intellectual—or vice versa, according to the mother's emotional state—offers us the chance to make a profound shift in our history and to take our evolution in hand. Even in the middle of pregnancy, if there is a change from negative to positive in the mother's emotional life, the direction in fetal brain growth changes accordingly.

That a mother in a safe space produces a strikingly different brain and child physiology than one who is anxious clearly illustrates nature's model imperative. The mother is the model of the eventual child on every level and a new life must shape according to the general models life itself affords. For, as is true in all cases of nature's model imperative, the character, nature, and quality of the model determine to an indeterminable extent the character, nature, and quality of the new intelligence that manifests.

This all indicates a bio-cultural dynamic—our biology influences our culture and our culture influences our biology. A sufficient number of children born predisposed toward defensiveness and quick reflexive survival reactions will tend to change the nature of the society in which they grow up.

Culture has been our principal environment of mind for many millennia, and through the dynamic of culture and biology, humanity fell into a vicious cycle long ago, a trap from which only the prefrontal-

heart dynamic can deliver us. Nature has continually offered us this escape, but, time and again, circumstances breeding fear in us have turned her down.

CULTURE AS A FIELD EFFECT

Accept for sake of discussion this definition of culture as an aggregate of ideas about survival, a taxonomy that lifts disparate notions into a coherent and powerful whole. Culture as a field effect is thus inviolable, its contents or expressions interchangeable and even incidental because culture absorbs and transforms any content into its own formative structure. Similarly, anxiety is a state of chronic, free-floating fear—fear without an object. Such a state acts as a catalyst, changing every object, every event into its target, making an event fearful whether or not it deserves to be considered so. Anxiety can become the lens through which we interpret our ongoing experience.

Culture, then, is a mutually shared anxiety state, a powerful catalyst of thought that converts all events to its own nature.

Once set in motion and locked into our ancient reptilian brain and its hardwired survival memories, this cultural effect reproduces itself automatically and is thus passed on.

Our greatest fear, the late philosopher Suzanne Langer said, "Is of a collapse into chaos should our ideation fail us." Culture is that ideation, or set of ideas. The foundation and framework of our worldview, self-image, mind-set, faith, and belief are culturally determined. Our grounding in culture and culture's grounding in survival are so intricately a part of our mental fabric that such roots are seldom ever exposed, and even then can hardly be recognized for what they are. Culture is the mental environment to which we must adapt if we are to survive, and in our adaptation and survival we automatically sustain culture.

Threaten our current cultural body of knowledge and you threaten our personal identities, our core being. Such a threat can lead us to behaviors that go against survival—at least for the victims of our reaction.

CULTURE AS ARCHETYPE

Culture can become a kind of psychic entity that can possess and/or inflate a person or even an entire country and achieve its violent ends through such possession and inflation.

ENCULTURATION AND SOCIALIZATION

Socialization in this sense is instinctual, while culture is not. Our social impulse arises from the so-called herd instinct inherited from our mammalian ancestors. The pleasure in gathering together with our own kind, found in most mammalian and avian life, is the source of community and fosters the model imperative, extended nurturing and care; mutual sharing of aesthetics, events, dreams, hopes, ideas, and ideals; mutual appreciation of works, skills, creativity, cooperative ventures; and the sharing of the higher, broader expanses of love—love of neighbor, self, and God.

Enculturation, on the other hand, is not instinctual but instead the result of conditioning, our enforced learning and adoption of ideas about survival, including techniques believed necessary in our particular cultural environment in order to survive. Our imitative monkey-see, monkey-do compulsions actually arise from our oldest reptilian brain system, which is linked to survival and fight-or-flight injunctions of the old mammalian brain. Ironically, this combination provides the principal tools employed in enculturating our children. Enculturation is not instinctual; we must capitalize on and use our survival instinct to bring it about. With regard to enculturating our children, lacking all conviction otherwise, we move with total, passionate intensity. Convinced we must pass on this survival knowledge, we pound it into our offspring "for their own good" as it was pounded into us for our own good. Schooling is treated in a similar fashion—no matter how much pain schooling may have caused us, to save our sanity over having lost the richest, loveliest years of our life to the process, we rationalize that it must have been good for us! And we then subject our children to it in turn; they prove our point by becoming like us,

confirming our worldview, joining our mass anxiety, and verifying it by coming on board. We have very little choice in the matter, but hope springs eternal that this time we will make schooling work.

It never has.

OUR CHILDREN'S GROWTH: JOYFUL LEARNING OR CULTURAL CONDITIONING?

A child's socialization, which can be characterized as learning in its most complete form, encouraging reflective thought, is instinctual and arises spontaneously on its own. **Culture is something quite opposite: an intellectual, arbitrary conditioning and enhancement of automatic reflexes that must be both induced and enforced.** A society—the product of socialization—is made of spontaneous nurturing and love, while culture can bring quiet hate, which can lead, sooner or later, to a child's subtle or flagrant rebellion. Such rebellions are forcibly put down through the infliction of pain, fear, guilt, and shame, or, if none of these works, then through isolation, exclusion from the group, or the labeling of the rebellious child as dysfunctional or unfit.

Many parenting books focus on how best to enculturate your child, carefully cloaking advice with the current politically correct phrasing and playing on parents' concerns over the child's education, place in society, career, fame, and fortune, and constant threat of failure to achieve these.

Without exception, these cultural techniques involve carefully masked threats that prey upon the child's rapidly learned fear of pain, harm, or deprivation, and more primal anxiety over separation or alienation from parent, caregiver, and society. No matter how we camouflage our intent both to ourselves and to our child, most parenting and education (except, perhaps, Waldorf and the best of the Montessori's) are based on "Do this or you will suffer the consequences. This threat, in fact, underlies every facet of our life, from our first potty training through university exams, doctoral candidate orals, employment papers, income tax, on and on ad infinitum down to official death certificates and burial permissions, no matter how high on the cultural totem we climb. Culture is a massive exercise in restraint, inhibition, and curtailment of joy on behalf of pseudo-safety and grim necessities. We live out our lives in the long shadows it casts. Such cautious directives continually activate our instincts of defense, which enculturation plays upon so well.

TODDLER AT THE CROSSROAD

In human development the early toddler stage is the fountainhead of cultural renewal. At stake is the activation and development of the child's sensory system and knowledge of the world, and the equally important building of his emotional-cognitive system's knowledge of what relationships with that world are like. By about the eighteenth month after birth, the child's emotional-cognitive system has formed patterns of response that will determine the nature of his relationship for life, the neural foundation of all learning. Maria Montessori claimed that "a humankind abandoned at this earliest formative period becomes the worse threat to its own survival."

Allen Schore's research shows that we all experience abandonment of a kind, which perpetuates our culture and seriously impairs our emotional-relational system itself. Recall how the emotional state of the mother determines the actual character, nature, and shape of the infant's brain in utero. Allan Schore shows how this relationship exists through the first two years after birth as well, further determining the growth, shape, and nature of the child's developing brain. One of the major growth spurts of the brain takes place after birth, and the fate of the new neural material introduced at this time is subject to the same model imperative as that introduced before birth. The way the brain is used, based on its model, is the way it forms and grows.

Schore's study concerns affect regulation, or our ability to modify or modulate initial impulses from our sensory or emotional system, and the role this plays in the organization of our self system, that unique sense we have of being an individual distinct from the world out there. Growth and development of the connections between the prefrontal lobes and the emotional-cognitive brain, with its direct connections to the heart, are what is at stake here.

A CAREGIVER'S PROHIBITIONS

Although the sizes of the hindbrain and forebrain are determined by the mother's emotional state while a child is in utero**, the growth of the prefrontals is determined by mother-infant interactions in the first eighteen or so months after birth, and, you recall, the prefrontals are critical to all higher intelligence and to transcendence itself.**

Allan Schore points out that growth and development of the prefrontals is experience-dependent, which means that the actual cellular growth and functioning of the prefrontals is dependent on appropriate stimuli from the environment. For a child in the first year and a half after birth, that environment is the mother: "Interactions with the mother directly influence the growth and assembly of the brain's structural systems that perform self-regulatory functions in the child …and mediate the individual's inter-personal and intra-personal processes for life."

Not only does the extent of cellular growth depend on environmental stimuli, but the character or nature of what does grow and develop is determined by the same model imperative. "The physical and social context of the developing [child] is . . . an essential substratum of the assembling [brain] system… The tenth to eighteenth months mark the final maturation of the system in the prefrontals essential to regulation of affect [emotion or relationship] for the rest of that person's life."

(This observation must be qualified based on evidence that the prefrontals undergo a major growth spurt at adolescence, a discovery not commonly known when Schore was developing his theory.)

So, with the mother present to fulfill the model imperative, the toddler learns to walk, plunging with spontaneous excitement and abandon into his exploration of his new world and the interaction of his body and self with it, only to be met with an unexpected obstacle. Schore reports, "The mother of the eleven- to seventeen-month-old toddler expresses a prohibition on the average of *every nine minutes*, placing numerous demands on the infant for impulse control." (Italics are mine.)

By prohibition, Schore means the mother's NO! or DON'T—and, all too often, physical punishment—concerning some action the toddler undertakes, such as reaching for an object in the grocery store. The impulse control demanded by the mother is selective and arbitrary, determining what is permissible to be learned through exploration and what isn't. While there are times when a mother is genuinely and legitimately concerned for a child's safety and well-being, above all she is concerned that the child learn to mind her and obey her commands as a matter of principle more than practicality. A good child is one who obeys and a good mother is one who has a good child. Both judgments are levied by culture.

In turn, the process of breaking down a child's resistance to these restrictions, which is equivalent to breaking his will, constitutes what is conventionally called socializing a child. Of course, as covered in our last chapter, this is not at all socialization, but enculturation.

And here Schore goes into great detail explaining, "Shame is the essential effect that mediates the socializing function." The authorities Schore quotes assume axiomatically that this "socializing" must be enforced; that prohibiting self-generated impulse actions is absolutely necessary; and that instilling a sense of shame is absolutely essential to such impulse control, leading to proper socialization.

In the final analysis, parental prohibitions extend to virtually all forms of tactile interaction. The untouched child is met with the command DON'T TOUCH! more than any other—and we adults are met with the same words regarding children…

THE GREAT NEURAL PRUNING

This brings us to the most critical of all Schore's observations from his twelve years of work and 2,300 research citations. Delving into the negative aspects of our biology, this observation is the pivotal point of part 2 of this book. But first a reminder: The prefrontal lobes are experience-dependent; the environment must furnish the appropriate stimuli if full growth is to take place.

Yet, shortly after that major preparatory growth spurt in the prefrontal-limbic connection, nature deconstructs those very neural structures—and thus the very orbito-frontal loop that she has just

established! Recall that the prefrontals are nature's latest neural creation, and this orbito-frontal connection is the fourth brain's link with the ancient emotional-cognitive brain and, through it, with our heart.

Schore relates that the emotional shaming experience the toddler undergoes brings about a "degeneration and disorganization of earlier imprinted limbic circuit patterns…[and] produces a wiring of orbitofrontal columns." He then details not only how the actual neural growth of structure and hormonal balance in the child are impeded by shame, but also how shame actually brings about the deactivation, severance, and pruning of those very superabundant connections that have just been established between limbic and prefrontal systems. In Schore's words, "a period of maximum synaptic excession occurs within the human prefrontal cortex at the end of the first year and thereafter declines… Such alterations are known to be related to functional use-disuse."

The worst is yet to come, however. Far more devastating than this pruning is that nature then brings about a corresponding increase of the connecting links of the emotional circuits in this cyngulate gyrus with the lower survival fight-or-flight structures of the amygdale, that neural module linked directly with our ancient defense and survival system in the reptilian brain. In this way, a sharp curtailment of connections with the higher, transcendent frequencies of mind and heart is brought about in order to shift growth toward the lower, protective survival systems."

This is, again, just what we observed happening to the brain of the infant in utero when the mother is subjected to anxiety. Nature has again provided an excessive amount of neural material for a movement toward higher intelligence, and again has had to retreat on behalf of survival. **This will happen again and again, particularly in the parallel adolescent period when corresponding growth spurts once more take place between the emotional brain and prefrontal lobes. (Occurring at adolescence is an advanced form of maturing analogous to that of the early toddler stage, when emotional connections are again uppermost in importance.)**

There is a precise devolutionary process occurring here. At this most critical time, when the toddler begins exploring the world, the prefrontals lose the very synaptic connections they have just made with the limbic system and, through it, with the heart, the connections prepared for during the in-arms period and throughout the general nurturing period of that first year. When all the rest of the brain is growing at its greatest rate and enormous world exploration is supposed to take place, the prefrontal-emotional connection is cut back, withdrawn. Which area of the brain is instead receiving that energy, attention, and stimulus for growth? Of course, it is the hindbrain and its emotional loop, busily building defenses against a world that betrays and can't be trusted.

This loss of prefrontal material is brought about because as the caregiver becomes the "socializing " parent, emotional deprivation takes the place of nurturing in that second year—and the excited, exuberant child is turned into a "terrible two." More is involved here than use it or lose it—we witness a major shift from higher levels of intelligence to lower levels of defensive instinct, a natural survival reaction of the child's system must make to a harsh emotional environment. And we applaud this as successful "socialization" of a child.

WHY BOTHER AND WHO CARES?
BONDING AND DOMINION

A major argument of this book has been that transcendence, the ability to rise and go beyond limitation and restraint, is our biological birthright, built into us genetically and blocked by enculturation. Were we to conceive, deliver, and bring up our young within the bonds of love, where our young would feel unconditionally wanted and accepted and were never betrayed by their matrix world, our full human nature might unfold with no more struggle than any other aspect of our growth. We do not have to struggle mightily to encourage or force those molars to break through at age six and twelve, or wisdom teeth at eighteen. The word *God* might never have been coined were we free-flowing expressions of God's creation, much as the word *healthy* would never have been invented were we never unhealthy.

“Man is born like a garden fully planted and sown,” Blake claimed. This world is too poor to produce one seed.” But we as individuals and our world as a whole must nurture and protect the seed we bring.

This is why Jesus made his aforementioned comment that to “cause one of these little ones to stumble” was a major, nearly irreparable crime. And it is one reason at least that Jesus didn’t refer to spiritual paths but to a way of being that opens only in this moment, for which there is no preparation, and that has no conclusion. Today is the day and this is the hour—moment by moment.

jcp