Eden Inverted: On the Wild Self and the Contraction of Consciousness

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Self-Constructing and the Bio-Semeiotic Self

The Primeval State of Man, was Wisdom, Art, and Science.

- William Blake

It is a social science truism that selves are made through socialization. But how was socialization made? The conditions of hunting and gathering through which one line of primates evolved into human beings form the basis of what I term *the wild self*. Those were not stark dog-eat-dog, winner-take-all conditions, the modern myth of nature as a perpetual war propagated by Thomas Hobbes. Rather, the conditions for the evolution of the wild self constituted a life of leisure, of plenty, of what the religions of the book term paradise. This actual paradise, the habitat relations that ground human evolutionary history, was lost in the great transformation of humanity into sedentary living, the turn to settlement and civilization through domestication of plants and animals, and reliance on agriculture.

In my books *Meaning and Modernity* and *Bereft of Reason* I developed the idea from philosopher Charles Peirce that rational mind should be

viewed as immature mind, as involving the newest parts of the human brain.² In 1902 Peirce said:

The Rational mind is the Progressive mind, and as such, by its very capacity for growth, seems more infantile than the Instinctive mind. . . One of the most remarkable distinctions between the Instinctive mind of animals and the Rational mind of man is that animals rarely make mistakes, while the human mind almost invariably blunders at first, and repeatedly, where it is really exercised in the manner that is distinctive of it . . . This is the marvel and admirable in it; and this essentially supposes a generous portion of the capacity for blundering . . .

The conception of the Rational Mind as an Unmatured Instinctive Mind which takes another development precisely because of its childlike character is confirmed, not only by the prolonged childhood of men, but also by the fact that all systems of rational performances have had instinct for their first germ. Not only has instinct been the first germ, but every step in the development of those systems of performances comes from instinct. It is precisely because this Instinct is a weak, uncertain Instinct that it becomes infinitely plastic, and never reaches an ultimate state beyond which it cannot progress. Uncertain tendencies, unstable states of equilibrium are conditions *sine qua non* for the manifestation of Mind.³

By claiming that rationality is immature and that from an evolutionary perspective the older, so-called "primitive" aspects of human nature, such as sentiments, instinctive impulses, dreaming, memory, and imagination—the community of passions—are the most mature, Peirce reversed the major tenets of the modern era. This was remarkable enough for an Ur logician who was also the founder of pragmatism and mathematical logic, but it also seemed to me to open up possibilities for a new understanding of mind and self, unconstrained by modern prejudices. Rationality as unmatured mind requires the community of passions from the older portions of the human brain-mind for its optimal functioning, not a maximizing domination of them, as modern rationalization would have it. And the community of passions are themselves not simply automatic functions, but are practices requiring cultivation.⁴ I began to develop ideas of civilization as dematuration, as infantilization instead of progress.

I was also a student of Lewis Mumford, whose work opened me to a critical view of civilization as a radical transformation to a new way of being, which Mumford termed the *megamachine*, and to the seemingly

suicidal destination of modern life. Mumford's engaging writing was quite different from Peirce's exact formulations and often formidable terminology, but I felt that they were both working out a new kind of mind, one I wanted to explore and inhabit. As my ideas developed at the end of the nineties, I began to see more clearly a new way of framing civilized mind as a contraction of consciousness, and after a talk I gave on "The Cosmic Fantasia of Life" at a conference in Heidelberg in November of 2001, David Lavery asked me if I had read Paul Shepard. I had never heard of Shepard, but promised to look into his work. When I did, a few months later, it was as though a tsunami hit me.

I quickly realized that the new terrain I was exploring had been lived in for some time by Shepard; that he had bodied forth in clarity and from many angles what I was trying somewhat fragmentarily to bring to form. So I began to devour his work, incorporating all I could (and still am). And I found it fed my imagination, and it continues to feed my ideas now. Shepard was able to take the evolutionary account and render an understanding of mind, self, and civilization that included the "soft" dimensions of psyche often excluded by "hard" scientists. This too was biology, history, developmental psychology, his work proclaims. The idea that consciousness and history are intimately bound up with basics of parenting remains one of the still under-explored avenues opened up by Shepard. For someone like me, who went through a graduate program in human development and a post-doc at a psychiatric hospital, imbued with developmental ideas of the self as a bio-social-psychological reality, influenced by George Herbert Mead, Freud and Jung, Baldwin and Piaget and Erickson, with the idea of rationality as understood by Peirce, with Mumford's idea of civilization as the myth of the machine, Shepard voiced a view that resonated with these varied sources while yet offering something completely new. I have been trying to absorb what I can ever since. So let's go with it.

Consider Shepard's words on "The Dance of Neoteny and Ontogeny," from *Nature and Madness*:

The West is a vast testimony to childhood botched to serve its own purposes, where history, masquerading as myth, authorizes men of action and men of thought to alter the world to match their regressive moods of omnipotence and insecurity. The modern West selectively perpetuates these psychopathic elements. In the captivity and enslavement of plants and animals and the humanization of the landscape itself is the diminishment of the Other, against which men must define themselves, a diminishment of schizoid confusion in self-

identity. From the epoch of Judeo-Christian emergence is an abiding hostility to the natural world, characteristically fearful and paranoid. The sixteenth-century fixation on the impurity of the body and the comparative tidiness of the machine are strongly obsessive-compulsive. These all persist and interact in a tapestry of chronic madness in the industrial present, countered by dreams of absolute control and infinite possession.⁵

Shepard drew attention to how the Western mind did not emerge simply as a mental belief system, but as a socializing matrix which reached deep into the basic processes of identity-formation to produce selves congruent with a regressive, infantilized outlook. I take the basis of this process to be found in the neotenous nature of humans, which required greater dependence on the instinctive signs of life constituting the ecological mind. We are, quite simply, "degenerate monkeys," as Peirce put it, evolved with softened instinctive capacities requiring greater socializing attunements over a much longer period of development to achieve maturity.

Walled off from that deeper intelligence through agricultural civilization, we re-attuned to the domesticated signs of life we had created. But these ways of domesticated life were themselves based on selective genetic dematuring of the animals and plants, and on the creation of a new immature landscape. We replaced the wild other, through which we had found human maturity, with a walled-off, domesticated other, which mirrored our neonatal immaturity. We grew to live increasingly from that immaturity, literally relying more on the capacities of the newest parts of our brains, such as rationality, and peopling our view of the Other with mirrored images of our domesticated selves.

And so it is that history, as the story of agricultural civilization, uncritically portrays as progress what I take to be a *contraction of consciousness*: from original participation awareness to spectator consciousness, and later, to spectral ghost in the machine: or from what I term *animate mind* to *anthropocentric mind* to *mechanico-centric mind* (See Figure 1).⁶ Anthropocentric mind represents the transformation of consciousness produced by agriculturally-based civilization, and mechanico-centric mind represents a further transformation, a contraction from human-centered to a machine-centered consciousness, produced by the rise of modern civilization.

My counter argument to this contraction of consciousness, which it is the purpose of this essay to develop, is that a broader picture is here for the taking, and that the further development of reasonableness urgently

requires a renewal of animate mind, attuned to the animate earth that is the source of ecological mind. That broader picture is right here in each of us; the "garden of paradise" of broadened animate mind remains incarnate in the genetic heritage of what Shepard called our Pleistocene, hunter-gatherer bodies, remains retrievable if we can find ways to reactivate it in contemporary context.

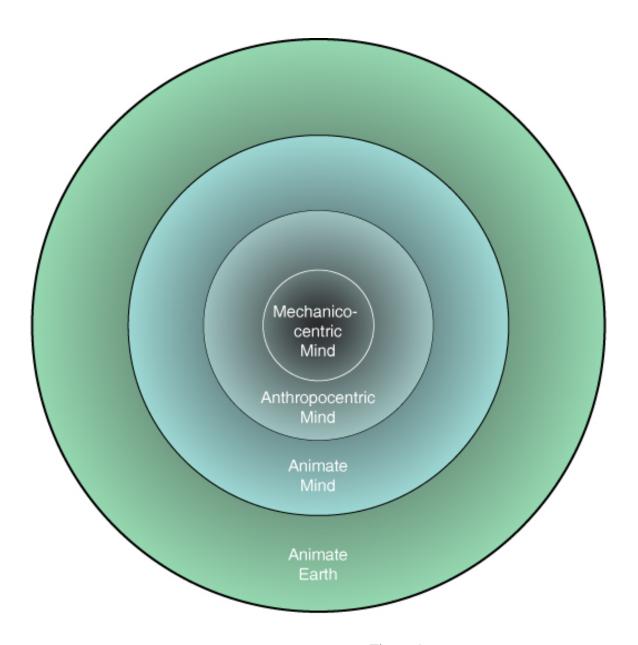


Figure 1

As numerous archaeological studies of early civilizations have shown, humans needed to work much harder in settlement than in foraging and spend longer hours to provide food. Nutrition also suffered (so much that average heights went down four to six inches), spacing between births were halved—suggesting that early socialization was thereby affected, populations exploded—and, in the bureaucratic organization of the city, autonomy was radically reduced except for a tiny elite centred around a king.⁷ All of this indeed constituted "the fall of man," the expulsion from paradise.

But the expulsion was more curious than that. For humanity, the domesticator of the earth, retained a wild body for itself. Paradise was not lost in a dead past and is not to be found in an idealized afterlife, but remains literally embodied as the biosemiotic essence—the communicative and biological sign complex—of the human body itself: the wild self. The wild self may seem to have been eclipsed by civilized life, yet I claim that it remains a keystone of the socialization process and crucial to continued human development.

Many recent accounts of the self view it as a social construction, a function of cultural conventions. Psychologist Kenneth Gergen says in his book, *The Saturated Self*:

Thus, interest in "true identities" and "actual characteristics" of persons can be replaced by concern with the perspectives in which they are constructed. It is in this context that many scholars have become deeply interested in people's commonsense beliefs about themselves and others, and the impact of these beliefs on their actions . . . In all such cases the attention turns from the nature of *real* love, intelligence, aging, child development, and so on to show how it is *constructed* or represented in the culture. For good or ill, it is the individual as socially constructed that finally informs people's patterns of action. And in the end, there is no means of moving past the constructions to locate the real. ⁸

The self is a social construction in this view, constructed by the conventions of its culture. The idea of a real self, by such accounts, is a misnomer, because "the real" is itself a fiction, just another arbitrary convention, a representation. This view, not limited to Gergen or postmodernism, ignores aspects of the self not reducible to a matrix of conventional socialization. It is merely an updated version of what Dennis Wrong in 1960 criticized as "the oversocialized conception of man," a reduction of the many dimensions of the human self to that of

"socialization," and socialization itself considered as an automatic conditioning process, a social matrix.⁹

The problem with such views is not so much the claim that the self consists of representations, but the severely constricted understanding of what representation involves. It ignores the human body itself, that extraordinary organic basis of the self and its sign-making abilities, which remains very much present in human communication and culture.

The human self is an organic sign-complex rooted in socialization processes that include not only cultural values and personal experience, but also biological development and in-tempered capacities of the human genome itself. The roots of the human self remain connected to wildness. This wildness is not the anti-social conception of the unconscious that Freud proposed, or the anti-social conception of nature that Hobbes earlier elaborated, and from which Freud drew. Rather, this wildness within derives from socially in-tempered capacities of the human body, in-tempered forms of reasonableness, of sensing and communicative abilities rooted in our hunter-gatherer and even primate and mammalian past. ¹⁰

Humans are a neotenous species, retaining new-born like characteristics much longer than other species, and for that reason, requiring patterns of socializing that can meet our prolonged developmental needs. For example, mother-infant bonding and separation between 1½ and 3 years of age is a socializing rite of passage not only vital for the development of empathy and autonomy, but occurs in a primate undergoing genuine brain development through the age of two that occurs in utero for other primates and mammals. Our big brains somehow bodied forth from the "omnivorous attention" required for a dematuring primate to tune in, in wonder, to the paradise of edible instinctive intelligence. I take our neoteny as requiring that our immature intelligence attune itself to the mature instinctive intelligence of all-surrounding life, without and within, that provides the signs wherein we find our maturity. Apart from that, we go mad in the long run.

Humans are born with about 25 per cent of final brain size, compared with 45 per cent for chimpanzees and much higher rates for other mammals. Our brainiacal bodies required an early exit strategy to get born, one which meant that we degenerate monkeys are born "prematurely" and need intense early child socialization to complete the brain-building that other mammals and primates do in utero.

So human mother-infant bonding and separation is literally brain-building, and in this sense is more profoundly biosocial than in other primates, precisely because we are a "degenerate monkey" prematurely born with a less developed but late-blooming brain. This demonstrates not our distance from nature in human culture, but how our social life can be real, in nurturing our unfinished brains.

The developmental phase of bonding and separation involves genuinely biological nature and socializing nurture, and without "good enough" mothering, to use D. W. Winnicott's term, basic brain and self capacities, especially for empathic relation, can be diminished or disabled for life, even though intellectual capacities may remain unaffected. "Good enough mothering" is that which is good enough to meet the needs of the child, neither abandoning them nor smothering them, but meeting them in structuring gaze and holding and empathy, and in tolerating the emergent separation of the child, of its NO!

It is important to note that hunter-gatherer societies typically have births spaced by about four years, encompassing this crucial period, where birth spacing in agricultural societies contracts to roughly every two years, right in the middle of the bonding and separation phase of the previous child. Hunter-gatherer infants typically sleep with their mothers, are constantly carried by them, and are breast fed for at least two years, usually "on request." They live in an immediate habitat of touch and nourishment, in "the milk of human kindness," the "motherly Eden," which is also our evolutionary heritage. Consider that newborns placed in orphanages in the United States and Europe a century ago had a viability rate at age two of close to zero. They almost all died, not from lack of material nutrition, but from simple lack of touch. 13

That wild self through whom we evolved, participant in its environment, must also construct a "membrane" that can sort, filter out, and selectively attend to inpouring information. Its awareness demands whole body involvement in the moment, not mere mental ratiocination or habituated cultural convention. From the perspective of the huntergatherer body, the rational "cognitive" conceptions of self, or the "social construction" self, or the behavioural or neuro-informational self of the social and biological sciences are all the diminished constructions of a creature that lost its body and became not much more than a talking head. The modern self indeed tends toward this more diminished, idealized conception and its particular kind of membrane, forgetting the ways it foraged and listened and nurtured and danced its way into being.¹⁴

Songs of Paradise

The Universe as an argument is necessarily a great work of art, a great poem—for every fine argument is a poem and a symphony—just as every true poem is a sound argument. But let us compare it rather with a painting—with an impressionist seashore piece—then every Quality in a Premiss is one of the elementary colored particles of the Painting; they are all meant to go together to make up the intended Quality that belongs to the whole as whole. That total effect is beyond our ken; but we can appreciate in some measure the resultant Quality of parts of the whole—which Qualities result from the combinations of elementary Qualities that belong to the premisses. (Charles Peirce) 15

How can you say there is no God when you hear the birds singing these beautiful songs you didn't make?

— Little Richard

The human body-mind formed in the living landscape. And one might say that it deformed in the domesticated landscape and cityscape. We did not body forth into becoming humans from some clever modern psychologist's isolate conception of "pattern recognition," but from something more simple and profound: namely, from a deep and reverential attunement to the profusion of communicative signs of instinctive intelligence in which proto-humans; that is, increasingly dematured hominids, found themselves immersed. We foraged the ecological genius which bodied forth signs in squirrel shelters and food provisioning, in bear and seal predatory interplay, in all varieties of predator and prey behaviours, in the nutritional, medicinal, and aesthetic qualities of plants. We not only hunted and gathered the living animal and plant creatures, but the instinctive intelligence they embodied, all freely available to a learning creature in the total signifying environment of life.

In this sense we attuned to the spirit of things, to that aspect of species and ecological intelligence, and learned to find that maturity from which our physiologically prolonged neoteny distanced us. Becoming a mature human required being a child of the earth, ever-attuned to its voices, learning to listen to and voice the primal songs of paradise. Tracking, hunting, gathering all require what Ortega y Gasset termed "omnivorous attention," not only to the outer environment, but to the

felt inner environment as well, dreamed, played, danced, ruminated upon, and enacted in ritual.

We evolved in ritual reverence at all-surrounding life, and that ritual reverence was both a way to "walk in Beauty," as the Native American expression has it, and a beautiful way to be practical as well. !Nqate Xqamxebe, a !Xo San hunter of the Kalahari Desert Bushmen, who is featured in the documentary *The Great Dance: A Hunter's Story* (2000), tells it this way:

When you track an animal—you must become the animal. Tracking is like dancing, because your body is happy—you can feel it in the dance and then you know that the hunting will be good. When you are doing these things you are talking with God.

As Paul Shepard has noted, it is the traditional hunter, the huntergatherer, who most empathizes with and reveres the prey, seeing it as a gift and appreciating its sacrifice and understanding that *the sacred game*—a play on the prey itself, as well as oneself as a predator and potential prey—is the drama of the community of life, not man apart from it. All anthropological evidence points to the centrality of ritual in traditional hunter-gatherer peoples, both living and those found in the archaeological record. We did not simply hammer our way to humankind so much as drummed, danced, and sang our way, in sacred ritual life. In this sense, we are possessed of such auto-suggestive hypnotic abilities as dreams are made on.

Bones and stones were useful, to be sure, in human evolution, but the soft stuff of ritual communication, of empathic participation in the clan-based groove, was a much more crucial ingredient in making us. Archaeologists have finally begun to catch on to this, though still overly attached to boney-stony materialist conceptions of human evolution. Human signification, born of our bodies, is the most crucial tool in human evolution. And it evolved immersed in passionate, ritualizing participation with its environment, as *animate mind*.

In his book, *The Singing Neanderthal: The Origins of Music, Language, Mind and Body*, Steven Mithen argues that an evolutionary precursor to language and music was a form of communication he calls Hmmmm (standing for Holistic, multi-modal, manipulative, and musical). This proto-language combined elements of language and music, and Mithen makes a distinction between language as a means of communicating about the world and music as a means of manipulating the emotions. As human social complexity increased in late evolutionary history,

language separated off from Hmmmm for anatomically modern humans (but not for Neanderthals), leaving music as the emotional vehicle of religious communication "with the gods."

Though trying to account for a practical adaptive value of music as means of emotional communication, this account unnecessarily dichotomizes music from language, and undervalues the place of aesthetic experience in human evolution. Why assume that music first developed from practical uses, and then emerged as an emotional means of social interaction with the "supernatural," a kind of practical emotional manipulation of social life? Why even assume that music is a human invention instead of a human discovery not limited to humans?

Mithen's view, like many evolutionary accounts, seems to me to be predicated on a subnatural theory of nature, that of modern scientific materialism. Modern materialism makes signs, the lifeblood of science, to be ultimately unreal "additives" to nature, in this sense literally supernatural. Yet its super-natural, nominalist view of signs, as Peirce argued, would make science impossible, for signs comprise the very medium of science itself. Modern materialism is not so much wrong, in this sense, as fatally entrapped in a sub-natural theory of nature, epitomized in Newton's abstraction of precise aspects of reality taken as the full reality, a problem that persists in post-Newtonian views as well. Similarly, it is often said that Darwin freed evolutionary ideas from anthropomorphism. But from my perspective he provided a partial account of evolution consistent with contracted mechanico-centric mind.

This conception of a "supernatural" realm of extra-practical human conduct in evolutionary context reflects the bias of modern materialism, incapable of conceiving either the irreducible reality of signs or of aesthetic experience as real elements of nature. The first human listeners, singers, and speakers were fully immersed in the natural realm, properly understood in this context as human attunement to, and participation in, an ongoing perfusion of living signs. This is not a mere ideological additive to reality, "religion," as modern materialism falsely and scientistically idealizes it, and as the religions of the book themselves do. It is felt participation in ecological mind.

It is a modern prejudice to assume practical referential communication as primary, and as divorceable from the aesthetic utterance of wonder. Ecological mind involves all the elements of Darwinian evolution, but more too, it involves a spontaneous ecological intelligence bodying forth: it involves Beauty evolving. It involves what William James

termed "the much at once," and which philosopher Bruce Wilshire has shown to be so crucial to the bodily experience of music and human conduct more generally. 17

Peirce's idea that nature involves general habit-taking, also characterized as semeiosis, and that this quasi-mind or mind can determine brains to its laws, as a form of evolutionary entelechy, is at odds with currently accepted models of brain and biology. One might call it an *intelligent sign* argument (as opposed to intelligent design), scientifically framed: semeiosis or sign-action as a modality of being of the universe. And it is in this sense that Peirce could describe the universe, as cited in the epigraph of this section, as an argument, a poem, and a symphony. He distinguished an argument as "any process of thought reasonably tending to produce a definite belief" from argumentation as "an argument proceeding upon definitely formulated premisses," that is, as requiring self-control. Hence "The universe as an argument is necessarily a great work of art, a great poem . . ." as Peirce put it in what I cited, is allowing the universe to be cosmic *poiesis*, selfcreating, whose ultimate entelechy, as I imagine it, is the intrinsically admirable being we call Beauty. Truth, as the goal of science considered as argumentation, gives itself to Beauty in this sense, as argument, as *poiesis*, as song of paradise, where the end of inquiry coalesces into the intrinsically admirable.

If mind is considered as general habit-taking, in Peirce's sense, one can also consider ways in which mind implements nervous systems rather than the reverse. What happens when you consider brain an organ of mind? For starters, it seems to me, the activities through which humans evolved provide the grammar to which neuronal development is selected; brain, then, is an internalization and incorporation of the experienced environment and its objective relations. The expression "to be in thought," then appears literally true, and a corrective to the idea that thought is in us, shut up within our bony skull cap. Think then, where we were as we evolved into language and thought. Think what we sensed, felt, heard, and practiced; think what we learned from it. Think how we began to re-present these signs in ritual life, and you will be thinking the forest of symbols, the origins of representation and animate mind.

In Peirce's view, relation is real. Science itself is a life, the life of inquiry, which animates its avatars, scientists comprising the community of inquiry. Consider that test tubes and telescopes can do this, can act as animate signs that body scientists into being! Similarly tracks can body trackers into being, capable of practicing an art and

science of inference far more sophisticated than contemporary forensic science.

Ashish Roy, a local environmentalist and lawyer concerned with aboriginal people of the Andaman and Nicobar Islands, said of them after many avoided the great tsunami, which devastated the region at the end of 2004: "They can smell the wind. They can gauge the depth of the sea with the sound of their oars. They have a sixth sense, which we don't possess." Similarly the great masters of traditional navigation in the Pacific found their way across vast distances feeling the waves in a medley of senses: smelling, touching, tasting currents, seeing and hearing. When the night is cloudy, one must feel the waves, feeling all the bumpings of the waves, empathically becoming the waves, for in those bumpings and the total sensorium are the tracks of various winds, and in the winds are directional links parallel to those provided by the stars, and ultimately signs, for us watery primates, of the living earth we seek. Animate mind is, in this sense, the internalization and incorporation of animate earth.

Institutions mind human selves into being. The institutions of hunter-gatherer life, deeply rooted in empathic relation, bodied anatomically modern humans into being. Intelligence, in this sense, is far more than a happy spiralling progress of human mind and reason. It involves orders of intelligence deeper and more mature than human reason, of instinctive, emotional, dreaming, and spontaneous forms of reasonableness tempered into the human primate and mammalian body and sprung from the biosphere in which we evolved. We are inhabited, you might say, by beings of bodily wisdom.

We evolved into humankind immersed in the all-surrounding symphony of life, attuning to it in wonder. Many contemporary biologically-based views would reduce this process to "practical" materialist interpretations, committing, in my view, the fallacy of misplaced concreteness. Psychologist Stephen Pinker, for example, has criticized "blank slate" social constructionist views for ignoring biology. Yet he takes his own blank slate approach to human capacities, treating them both solely as functions of evolutionary survival and largely invented by humans. Art is then reduced to by-product or function, and music is nothing more than, as he put it, "a pleasure technology, like drugs, erotica, or fine cuisine—a way to purify and concentrate pleasurable stimuli and deliver them to our senses . . ." Music, in Pinker's blinkered view, is a passive commodity, a technology invented to deliver pleasure stimuli to an apparatus-like creature bound by a pleasure-pain sensory matrix, and incapable of real aesthetic awareness.

But guess what, dear reader, the music was already there, alive and sounding in the eco-semeiosis of the living environment before we were. The birds and other critters didn't need us around to hear them. but as we emerged, they gave us the audio map, like radar, tuned to perfection with precision. Their concentric rings of sound emanating out from a perceived disturbance provided everything we needed to listen to in order to become aware of everything that was happening for kilometres around, of who was moving where, and how, here and now. These signs were audio maps provided by the community of life which extended our senses and subtilized our minds, letting us know where predators and prey were, as well as other features of the unseen habitat. And it was beautiful: it was truly music, this sonorous where and how, here and now. ¹⁹ And the ecological musics we tuned into literally tuned our audio capacities over evolutionary time, providing aspects of an ecological grammar to be internalized physiologically and later linguistically.

But we were no mere spectators of this concert, we were in concert with it, active participants required to play our part: to be still, all listening, if we did not want to be announced suddenly to other predators in birdsong as, say, "'Big critter' (nice meal) over by the stream walking loudly."

You might say that the song, plus the various other critters attuned to it, taught us to walk softly, unheard, within the song but not denoted by it, to walk softly and, later, to carry a big stick. We learned to walk in Beauty within the concentric circles of bird and insect song which indicated all movement: to walk in Beauty involved moving without giving one's movement and location away, as master trackers such as Tom Brown Jr. demonstrate today. ²⁰

And some of our first music, in my view, was likely birdsong and other animal imitations, which are both good to play with and good to hunt with. *Recombinant mimetics*, as I like to call it, rooted in mammalian REM dreaming and play traits, and manifest in our dreaming, singing, and drumming, and in dancing the ways of the Others—the non-human life-world, bodied us forth into being.

Our wild reverence for music was practical, to be sure, but it is more accurate to say that the practical was an offshoot of our participation in the song of paradise, rather than the reverse. Even there though, our practical uses of communication were ingredient in our larger participation in paradise, which the hunter-gatherer's environment

literally was, or, in modern terms, our participation in aesthetic consciousness, or what I prefer to term *animate mind*.

If this all sounds foreign to the modern mind, or "nostalgic," it is because the modern mind alienated itself from the fantastic reality through which we emerged, which is biopoiesis, and has shrunken itself to a spectral view of things, to a ghost shut-up in the machine mentality. Biopoiesis bodies forth from nature in the songs and gestures of paradise. Music, and not only sounds, was a propellant of the human aesthetic sense and of human music. We didn't invent music; we only tuned into it and made what we could our own: art emanates from the cosmic fantasia of life.

Thoreau wrote that in the: "distinct trail of a fox . . . I know which way a mind wended . . . for the swiftest step leaves yet a lasting trace."21 That trail could be considered an act of creation, embodying in the minutest details the living being of the fox, gravitized, as well as a direct recording of mind, more accurate to an experienced tracker than an MRI. Each track is a kind of living landscape portrait, in whose ridges and gullies and plateaus—the habitat terms used by Apache trackers—are the direct embodiment of the body-mind of the creature who made it, its breathing, its blinking, its emotional state, and its awareness of its surrounds. Viewed scientifically, it is a recording. Viewed artistically, it is earth-drama. The passionate, reverential attunement to, and inquiry into, earth-drama, in tracking, hunting, foraging, rhythming, singing, and other arts and sciences, gave us the trail to becoming human. More, these earth dramas, I claim, provide the external gestural, proto-grammatical structure that became internalized as the basis of human language and speech-capable brain, through millennia of attunement to, and participation in, these songs of paradise. Linguists take note.

If mind be considered as a spatio-temporal transaction in an environment, then tracks, art works, and other signs can be real manifestations of mind. Mind involves brain, but is more than brain. From this perspective, how mind works is a broader question than how brain works, contra reductionism. As Mead put it:

Our contention is that mind can never find expression, and could never have come into existence at all, except in terms of a social environment. . . . If mind is socially constituted, then the field or locus of any given individual mind must extend as far as the social activity or apparatus of social relations extends; and hence that field cannot be bounded by the skin of the individual organism to which it belongs. ²²

Our bodies walked out of the Pleistocene era as foragers reverentially attuning ourselves to the circumambient signs of life, on which we depended for survival. These non-human signs of life constituted much of the original Other of the mind's eye, as Shepard noted. In Mead's terms, one could say that the original *generalized other*, or internalized community which provides the unity of the mature human self, was largely non-human, consisting of the animal, plant, and even rock and other beings comprising the intelligible environment. The landscape bears life-influenced lessons, weathering. Learning its lessons can spell survival, so why not treat the very landscape itself as a moral presence, as many native peoples do?²³

The landscape, in this sense, as an object of that sign, "hunting and gathering life," is ingredient in the life of the sign, lives in it. But it was more than mere survival, it was a garden of paradise in ongoing creation from which we evolved these bodies, one which remains tempered into us, though layered over by the 10,000 year veneer of settled civilizing and its "progressive" abstraction from variescent life. We are literally made to participate in creation, not in some illusory paradise of a dead past or hoped for afterlife, but here and now. Yet modern science and the Judeo-Christian-Islamic religious traditions seem blind to the living paradise of nature and the creating, spontaneous self. Creating is the end of being, not simply the beginning, as we will see.

Out of Eden

Animals are among the first inhabitants of the mind's eye. They are basic to the development of speech and thought. Because of their part in the growth of consciousness, they are inseparable from a series of events in each human life, indispensable to our becoming human in the fullest sense. Paul Shepard²⁴

We have met the enemy and he is us!

Walt Kelly, *Pogo* comic strip, 1971

The biblical story of Eden is a beautiful recounting of the loss of foraging, pre-agricultural life, which was a life of ease and good nutrition. This transformation is found in the Old Persian word paradise

itself, *pairidaeza*, which means "walled enclosure," not wildness. Walled off from what? Walled off for whom?

Civilization universally increased work and degraded diet, literally producing shorter, nutritionally deprived people on the average (with the exception of the new elite). From the time of the first written epic, the Sumerian Gilgamesh story, hunter-gatherers have been portrayed as worse off than city-dwellers, but the archaeological record reveals a quite different story.

Life span did not increase with civilization, and may have declined when considered in areas such as infant mortality. ²⁵ For most of the history of London, to give one example, the death rate outstripped the birth rate, and half of all children died before adolescence. Similarly, archaeological studies show New World natives also have shorter, nastier, more brutish lives after agricultural civilization is introduced.

The longer life spans of the past century may have offset the patterns of disease, poorer nutrition, and overwork characteristic of civilization, yet even there, it is largely limited to the wealthier industrialized countries, while the bulk of humans live in a poverty unknown to huntergatherers. The same is true for height, which, as mentioned, declined 4 to 6 inches universally wherever agricultural civilization occurred, and only now has returned to previous levels, and only in those industrialized countries and privileged classes. ²⁶

Anthropologist Mark Nathan Cohen claims that there is no evidence that violence declined in civilized society, but that some archaeological evidence suggests the opposite. Civilization by no means introduced murderous violence, which is manifest in male dominated chimpanzees and common to all human societies, but it did introduce mass-killing warfare as a key element of the power complex. Typical hunter-gatherer "war" tends to skirmishes, not mass-killing. In the highlands of New Guinea, for example, two rival clans will form skirmish lines of battle, and the result will be at most one or two people killed or wounded, plus repayment for their injuries or deaths by some pigs or other barter. It is not like the accounts of Assurbanipal and the ancient Assyrians, which reveals the ethics of the new invention of mass-killing warfare. In the words of James Breasted:

The Assyrian soldiers displayed a certain inborn ferocity which held all Western Asia in abject terror before the thundering squadrons of the Ninevites. Wherever the terrible Assyrian armies swept through the land they left a trail of ruin and desolation behind. Around

smoking heaps which had once been towns stretched lines of tall stakes, on which were struck the bodies of rebellious rulers impaled alive, while all around rose mounds and piles of the slaughtered, heaped up to celebrate the great king's triumph and serve as a warning to all revolters. Through clouds of dust rising along all the main roads of the Empire the men of the subject kingdoms beheld great herds of cattle, horses and asses, flocks of goats and sheep, and long lines of camels loaded with gold and silver (the wealth of the conquered) converging upon the palace at Nineveh. Before them marched the chief men of the plundered kingdoms, with the severed heads of their former princes tied about their necks. As Assurbanipal sat at the banquet table and feasted with his queen in a garden bower, amid birds, fruit, flowers, and music, he looked up at the severed head of the King of Elam hanging on a tree before him.²⁷

The account attributed to Assurbanipal himself boasts mass butchery:

3000 of their combat troops I felled with weapons . . . Many of the captives taken from them I burned in a fire. Many I took alive; from some of these I cut off their hands to the wrists, from other I cut off their noses, ears and fingers; I put out the eyes of many of the soldiers . . . I burned their young men and women to death.

After conquering another city, he wrote:

I fixed up a pile of corpses in front of the city's gate. I flayed the nobles, as many as had rebelled, and spread their skins out on the piles... I flayed many within my land and spread their skins out on the walls.²⁸

Or one could read similar boasting in the biblical Book of Joshua. Or consider Guernica, Hiroshima, or the 120,000,000 or so war-killed of the twentieth century. We like to call this "uncivilized," but that is misplaced idealism. It is the stuff of which civilization has been made since its beginnings, wherever civilizations appeared. The activity of warring in the sense of imperial conquest and "total warfare" is not "natural human instinct" as many would have it, but is a key achievement of civilization in general, and not limited, as some would have it, to European civilization.

Consider that when civilizations started, "Alpha Male-ism" was raised to heavenly heights in the new institution of divine kingship, which linked the king as focal point of the new human power structure with the gods. What the All-Powerful King could claim for Himself could also be claimed for an All-Powerful King God. Social inequality was

radically increased, powered by, and pivoting on the king and by religions with Zeuses and Jehovahs and prophets and saviours.

The advent of civilizations introduced new forms of social inequality, poorer nutrition, standing full-time armies, unlimited population, and territorial expansion—at least until the regional eco-bubble would burst from excessive land exploitation, as happened repeatedly in different civilizations. Remember that desert, dust-stormed Iraq was once "the Fertile Crescent." Salting the land was common practice in ancient war there, and salinizing over-irrigation helped undo the land over time in peace. ³⁰

Though there is a continuum between foraging and agriculture, the key is in settled agriculture and its development into civilization (literally city-fication). That is the watershed of human consciousness, in my opinion, marking the enclosure of humanity into the corral of anthropocentric consciousness. And it has been more than that: also progressively enclosing humanity's dematured domesticates—grain and animals—and gradually the living biosphere, into anthropocentric consciousness, the overweening, human-centric view of the world.

One sees the complaints of excess work already in the Babylonian creation myth, *The Atrahasis*, an indicator of how agriculture-based civilization is an expulsion from the garden of life into excessive work. Humans were created to relieve the gods of their hard work, those gods being the alienated reflection of the civilized condition. But the story also reflects the pathology of the civilized separation from nature, of both humans and the God abstraction. Estrangement and abstraction, two cornerstones of the West as Shepard noted, were already enshrined in this story. Later, Jewish patriarchy scapegoated its own snake-ish, phallic animality and also woman in the expulsion from Eden, propelling the monotheistic abstraction further from life and habitat. Henceforth the One-Size-God-Fits-All: The Great God of the heavens, out of this world, inscribed in a Holy Book.

Consider the myopia of the millennia of living beings bent over and quarrelling over texts, haggling to heaven in spectatorial abstraction while the living circumambient spontaneity stares us in the face, inviting our participation, each and every moment we open ourselves to it. That is the cost of writing-reading consciousness, the false focusing on text as fixed, fixated revelation and foundation.

Paradise, the garden, Eden, *the life that brought us into being*, is projected into a dead, unreachable past, or, in the Christian and Islamic

variants, into a future to die for. It is falsely abstracted as a realm of the dead in the religions of the book. "History" itself is a product of civilization, and written by the "winner," civilization. Still, there are remnants, as in the biblical story of Cain and Able, which Daniel Quinn described in his novel *Ishmael* as a remembrance of the former Jewish nomadic life in confrontation with expansive settled agriculture. After God disrespects Cain's offering of produce and yet respects Able and his offering of newborn sheep, Cain, the "tiller of the ground" land exploiter, kills the nomadic life represented by Able, "a keeper of sheep." Both were ensconced in domestication, but the shepherd's nomadic life was one step closer to hunter-gatherer nomadism. Cain's punishment is both a loss of productive harvests—perhaps a metaphor for ecological devastation that farming often brought with it, and that he must wander. But he does not become a nomad; instead, he dwells in Nod, east of Eden, and builds a city that he names after his son Enoch. Thus, the trajectory to civilization, built on estrangement.

Humans evolved into being reading the living leaves of nature, in *awareness*. Humans disconnected when they started looking to dead leaves of human writing, in *knowledge*, as the chief source of religious learning, for the book and the history it told was a mirror of anthropocentric consciousness, of dematured primates reflecting themselves instead of the intelligible life-signs of ecological mind.

Yet paradise remains incarnate in the human body, fashioned over hundreds of millennia to live attuned to life, not separate from it. When I am in wildness I feel it as sacred, a temple of creation that, yes, necessarily includes death. That wildness lives as well in our huntergatherer bodies and our deeply ingrained passionate intelligence. Only modern life tends to repress our passionate intelligence, seeing it as something like Freud's sewer of the Id: an intra-psychic slaughterhouse, or a Hobbesian state-of-nature slaughterhouse.

The tragedy of the Judeo-Christian-Islamic tradition is its justifying of our estrangement from home, from the Eden of life, through the anti-mythic myth of world-wandering. So we continue to expel ourselves from the living reality of Eden today. We practice the continued destruction of Eden everyday, of the outer biosphere and the inner animate ecology of the soul.

Yet human nature did not evolve as *deus-ex-machina* morality apart from the community of life. Civilization's possessive slaughterhouse view of nature culminates ultimately in Hobbes' perverse and false view of nature as merely red in tooth and claw, and human life in nature

as short, nasty, and brutish. Hobbes' own butchering times were indeed all of this, and he brilliantly interpreted those times in terms of the emergent mythic culture of the clockwork mechanism, transposing the new physics to politics. But nature is something more. For what Hobbes attributed to nature was actually the legacy of agriculture-based civilization.

As archaeologist Dr. Ofer Bar-Yosef recently stated after his team discovered the earliest known fruit crops, cultivated figs from 11,400 years ago, near Jericho:

Eleven thousand years ago, there was a critical switch in the human mind—from exploiting the earth as it is, to actively changing the environment to suit our needs. People decided to intervene in nature and supply their own food rather than relying on what was provided by the gods.³¹

The removal of consciousness from living habitat to domesticated landscape, walled cityscape, and texts marked a profound historical transformation, an alienating dislocation to the literal, in the literal sense of literal: the lettered. Reading signs is a natural human activity, involving multiple senses. Reading texts draws from that natural proclivity, while transforming it from living habitat to fixed readscape. Our overuse of focal vision in literate society tends to distort our eyes, leading to the need for eyeglasses, not to mention a loss of acuity in other senses from over-reliance on visual information. The originals saw naturally, we see historically, anthropocentrically, literate-ly. As someone I have corresponded with who is blind tells friends, "Stop thinking with your eyes!"

"Visual thinking" itself has undergone contraction in modern life, not only through the switch to relying on "focal vision" in everyday life, but in the enmatrixing of vision within the modern mechanical world view, which lost "sight" of sight as itself a form of touching. Even "focus" carries this change, abstracted from its original meaning as hearth, and even fire itself, to that introduced by Kepler in 1604 as "point of convergence." In an interview with Jerry Brown, Ivan Illych drew attention to how vision was seen by the ancient Greeks as a tangible relationship:

Traditionally, the gaze was conceived as a way of fingering, of touching. The ancient Greeks spoke about looking as a way of sending out the *psychopodia*, the soul's limbs, to touch another person's face and establish a relationship between two people. This

relationship was called vision. After Galileo, at the time of Kepler, the idea developed that the eyes are receptors into which light comes from the outside, while people remain separate, even as they gaze at each other, even as they enjoy each other. People began to conceive of their eyes as some kind of *camera obscura*. . . . In our age, people conceive of their eyes, and actually use them, as if they were part of a machine. They speak about interface. Anybody who says to me, "I want to interface with you," I say, "Please go somewhere else, to a toilet or wherever you want, to a mirror." ³²

But if reading written texts is not natural, though drawing upon natural endowments, at least history is natural, no? But marking time in linear historical fashion, according to anthropocentric markers, the very invention of history as we now know it is itself a historical transformation at odds with what preceded it in the entire course of human evolution. In this sense "history," as Shepard said, "is a lie."

Shouldn't the wild human body-mind, as it evolved, be a crucial indicator of what is natural for us humans? What are the beliefs of those hunter-gatherers who bodied all of us into being? They did not live from focal vision, as we text-tiled city-slickered do. They lived from wide-angle vision most of the time, seeing from the entire peripheral field, only occasionally utilizing focal vision. This is not only practical for sensing movement and for enhanced night vision, but indicative of a vastly different consciousness, one participant in its surroundings rather than a spectator of them. Try it sometime.

We have contracted consciousness to the clockworked world we ourselves have created, the ghost in the machine, and call it nature; just as earlier we took the walled enclosure of the city to encapsulate a view of the wild as "walled enclosure," in the term *paradise*. It would appear that we are painted into a corner of the matrix, with no way out. As Blake put it: "For man has closed himself up, till he sees all things thro' narrow chinks of his cavern." But there yet remains a way out of the trap we have fashioned for ourselves: the key is the human body-mind, whose resources reach far deeper than the 10,000 year veneer of civilization.

Taking seriously the wild self through which we evolved involves not only allowing the resources of evolutionary science, but a critical attitude toward the mechanico-centric mind which, thus far, has dominated modern science and evolutionary thinking, allowing machine-like processes and denying quasi-purposive and purposive biosemiotic processes. A fuller view would take more seriously the wild world-views of the wild self found in hunter-gatherer practices and the

archaeological record. It would take more seriously the possibility that animate mind may be a deeper awareness than mechanico-centric mind can allow, and that science may need to throw off the constrictions of materialism and its precisely rendered, yet schizoid, universe. Allowing animate mind as a human reality may reveal that the prison door is unlocked, and has been all along.

The Milk of Human Kindness

What American neo-Puritan, identity heavily armoured by surrounding machines, by inward electronic-habituation, could express the tenderness of Kabongo, an 80-year-old Kikiyu chief of East Africa:

My early years are connected in my mind with my mother. At first she was always there; I can remember the comforting feel of her body as she carried me on her back and the smell of her skin in the hot sun. Everything came from her. When I was hungry or thirsty she would swing me round to where I could reach her full breasts; now when I shut my eyes I feel again with gratitude the sense of well-being that I had when I buried my head in their softness and drank the sweet milk that they gave. At night when there was no sun to warm me, her arms, her body, took its place; and as I grew older and more interested in other things, from my safe place on her back I could watch without fear as I wanted and when sleep overcame me I had only to close my eyes. ³³

Deep in us is a biological gift that is fundamental to being human. It is the gift of empathy, and it is one aspect of the passionate reasonableness of the forest within. We owe this gift—the milk of human kindness, as Empedocles put it—to the forest and savannah without, metaphorically speaking, because it is the fruit of mother-infant bonding and separation, which is a mammalian, and not specifically human or even primate, achievement. That mammalian legacy lives in us, even as our triune brain involves still-living earlier mammalian and reptilian neighbourhoods, inner "forests of symbols," if I may borrow from Baudelaire.

In our more child-like human primate way of development, our neotenous nature, the biological capacity of empathy requires a mother good enough to allow the young child's needs for bonding and for separation to be fulfilled. Hence empathy is a truly bio-social capacity, for, as mentioned earlier, we big-brained primates are born premature, and require intense socializing in the first few years of life to complete

our unfinished giant brains. And that socializing must attune to the biological, developmental need of the child, or else it thwarts it.

Empathy, which is found in other great apes, is older than the human race, and it is a mature form of inference in practical life. How one senses into awareness was far more important to the emergence of humans than what one knew. By contrast, our vaunted rationality is a baby, sprung from the newest part of our human brain. That baby of rationality requires the deeper structure of passionate intelligence for its optimal functioning. Only modern culture went terribly awry, and began to believe that rationality was the be-all and end-all of intelligence, and that it should be maximized instead of optimized. It may very well turn out to be the end-all of intelligence, in that other, slaughterhouse sense. ³⁴

When you start to speak a sentence, do you already know how it will end? Yet we go on speaking. When you improvise, spontaneous intelligence is working, live to the moment. Awareness is a broader reasonableness than mere knowledge. To sense a threatening situation might save your life, whereas merely requiring knowledge of that situation might be a stupid way of spelling yourself dead. Knowledge is an afterthought, serving awareness. We evolved into humankind through awareness, we are devolving out of humankind through knowledge. Twentieth-century human rights emerged cheek by jowl with the greatest human slaughter in history: one step forward, two backward.

Armed with human rights, we slaughter the biosphere. Armed with ever-increasing knowledge, Big Zombie is driving the SUV to Infinity, ever more the organic software of the machine and its growing Night of the Living Dead. Who needs clones when you can just reprogram the populace?

Developmental psychology has demonstrated how basic capacities of the self emerge in early childhood, and how they can be thwarted, reprogrammed. There is indeed nature in nurture, but also nurture in human nature. For humans evolved a strategy that allowed the human infant to be born before its enormous brain was as fully developed as that of other newborn primates. Hence the first two years of life involve both true biological growth and development of the brain, and true socialization. The human infant is truly biosocial; its developing brain calling out social interactions, especially with the mother, and its social interactions affecting its brain patterning. Nowadays, as mentioned earlier, we like to think that vision is simply reception of photons, as

though people are isolate apparatuses. Yet nursing mothers and their infants still hold something like the older view, mixing empathic gaze and touch, pouring out soul between them: a dance of emotional awareness affecting the infant's developing body and brain as well. Without touch, all infants die, even if well-fed. Without creation reaching out through us, we do too, inwardly, like the story of King Midas, who, in turning touching into taking, lost the palpable touch of life.

As mentioned earlier, bonding and separation from the mother is essential for the development of empathy and of an emerging autonomous self. This process requires a "good enough mother," capable of tolerating the separation process of the young child and of supporting its developing needs. "Bad mothers," in Winnicott's terminology, are those who cannot, who must usurp the spontaneous needs of the infant in order to meet their own needs. The result is what psychologists term a narcissistically disturbed self, one attuned to the caretaker's needs, not to its own, attuned through the establishment of what Winnicott terms "the false self."

Shepard described something similar in his account of the ancient Hebrew and Greek patriarchal worlds as "amputating and cauterizing pubertal epigenesis," as selectively fixating normal adolescent development to produce permanently idealizing males who could function for the idealizing patriarchal belief system, branded by its beliefs and alienated from a natural identification with the variescent earth as the outcome of developmental maturity:

What the desert fathers—in the form of history, Hebrews, patriarchs, and monotheists—did to the ontogeny of the person must be seen in the context of the swaths already cut by agriculture. Those were in the psychological debilitations of diminished maternal care in large families and the loss of wildness and otherness from the juvenile's world. The desert fathers, like their Arabic, pastoral models, scourged adolescence. They could amputate and cauterize pubertal epigenesis because they would further transform the relationship of the infant to its mother . . . The over-mothered infant in patriarchal society and, among boys, their severance from the world of women exploits the theorizing openness of the adolescent. In him the dream of paradise will be nourished by that loss and will feed his fantasies and hopes for the future. 35

Thus the dream of paradise is "installed" through early childhood and adolescent socialization practices which alter the developmental path from mother to earth as generalized mother. Paradise becomes the goal

of a mind fixed in adolescent idealizing, a goal whose antithesis is the negatively idealized wilderness: the "tohu bohu" of biblical void out of which genesis occurred, a term which meant literally desert, conceived as emptiness instead of habitat. One might say that the creation of paradise out of "empty desert void" is a schizoid splitting of the actual wild habitat through which humans evolved into an idealized childish bounty provided by the Father versus a harsh emptiness symptomatic of the vanished mother. Out of such socialization practices, including Greek idealization of adolescence and the fusion of these views in idealizing Christianity, comes the basis of the modern mind. But a further contraction was necessary, the contraction from anthropocentric to what I call mechanico-centric mind. The culture of the clock, which emerged from the fourteenth through the seventeenth centuries, triumphed in a view of the universe as a vast clockwork. But just as the civilizational pivot required a centralized power command in the person of the divine king, the mechanico-centric contraction required a machined version, one, as Mumford pointed out in 1970, which has manifest in our time:

If the first step in the rule of the Sun God was the unification of power and authority in the person of a Divine King, the second was the displacement of the actual king, who was still a living person, by a bureaucratic-military organization. But the third step, the fabrication of an all-embracing megamachine itself, could not be completed until an equivalent supreme ruler wholly of a "mechanical" nature, without human parts or attributes, could be invented . . .

The new megamachine, in the act of being made over on an advanced technological model, also brought into existence the ultimate decision-maker and Divine King, in a transcendent, electronic form: the Central Computer. As the true earthly representative of the Sun God, the computer had first been invented . . . to facilitate astronomical calculations. In the conversion of Babbage's clumsy half-built model into a fantastically rapid electro-mechanism, whose movable parts are electric charges, celestial electronics replaced celestial mechanics and gave this exquisite device its authentic divine characteristics: omnipresence and invisibility. ³⁶

Already in 1970 Mumford foresaw not only the likely expansion of the computer to all facets of society, but the dire consequences for a world run ever more by and for automata. The superior machines of the West defeated the inferior machines of the Soviet Union, not in a battle of democracy versus totalitarianism, but through a more successful way to assemble the megamachine. The West proved that conditioning through pleasure works better than conditioning through pain: pleasure the populace into submission through low-grade virtual experience,

disseminated through television, media, and consumption fantasias, rather than beat people into submission. The living-dead were not deposited here by some mysterious night train or alien pods, they are home-grown products of the evisceration of autonomy and democracy by the dehumanizing power complex we have been assembling, the auto-pilot promised land.

Now the populace, including the youngest children, can be enscreened into conformity through television and media and advertising. The television-advertising complex represents a virtual bad mother, in Winnicott's sense, that gaze substituting for the mother's, demanding that the child meet "her" needs through consuming the commodities "she" presents.

There is today what amounts to a cult of technomania, the belief that the god out of the machine, *deus ex machina*, can save it all for us. In that very belief, one abandons the living spontaneity of soul no machine could ever replace, and morality, on autopilot, becomes programmed conformity: organization man, software of the system, the living-dead, "only following orders."

The false self created by the consumption machine is not arbitrary, but is a rationalized projection of the system, dependent upon it, a genuine agent of its system requirements. It is a self merged to the needs of its "mother," the seducing system of advertised commodities; a self without the real boundaries that result from the developmental process of separation from the caretaker in early childhood.³⁷

"Cooo, cooo, look at me, I can talk, I can live abstractly, I'm smarter than the environing intelligence," says the human–all–too–human, newborn-like, civilized primate. Beware of that terrible two-year old within. Though its "No!" stems from a developmental requirement of the human self, when regressively exacerbated, it becomes the implanted basis for the modern mechanico-centric negation of living nature: the era of the emotional two-year olds, fixated in a culture of Narcissism. Intellectual Kali Yuga.

Real boundaries involve the ability to be empathic *and* autonomous; false boundaries of the narcissistically disturbed self involve a strategic attunement to the mother/other and dependency. Becoming aware of its spontaneous feelings would threaten the merger that is the false self; therefore it must deny its own spontaneous life.

A self that can be re-programmed to ward off real experiences is one more likely to conform to contemporary system requirements for

excessive consumption. In this sense, marketing and advertising, which have grown enormously in numbers of ads and their reach in the past few decades, especially to young children, can be viewed as the systemic attempt by mechanico-centric mind to re-program the self by providing low-grade virtual substitutes for experiences and emotions. When consuming culture and its advertising, media, and entertainment industries habituate the selves of a populace to its virtual life-world, when people adopt its substitute emotions and ersatz experiences as their own, and allow their children to be colonized by it, then it has succeeded in re-programming the self to the system requirements of the machine. Another name for this process is dehumanization.

Modern sci/tech has achieved precision, but the cost has tended to be the cutting away as unreal the body of the fountain of life, not only the outer biosphere of animate earth, but also the wild self, our biosemiotic essence, our capacities for empathic sensing, for poetic imagination, for full passionate awareness. Is it possible to keep the baby but change the bathwater, not throw them both out? The baby is our hunter-gatherer neotenous body-mind, the bathwater is the self-enclosures of consciousness that began with civilizational consciousness, that narrowed in the Judeo-Greco-Christian-Islamic bottleneck, and that strangulated in the modern mythic machine view of a tick-tock universe associated with science and technology. Why should we remain locked in this mental matrix, when reality is so much more?

The progress associated with history since the beginning of civilizations can be considered as contractions of mind, as humanity shut up inside an anthropocentric, infantilizing mind it constructed, then, in the modern era perfecting the ghost in the machine of mechanico-centric mind, the final Shut Up. Neoteny is a primary and ineradicable ingredient in our bio-social, signifying human essence: we degenerate monkeys are literally *children of the earth*, as the Native American expression has it. The contraction of consciousness to anthropocentric, and in the modern era to mechanico-centric mind is our alienation from our neoteny, a distortion of neoteny to infantilization, wherein prolonged development is systemically altered to arrested development, and our way to suicide.

The news of the biosphere seems pretty grim: a lot will go down in the next generation, including an ever-increasing likelihood that the globally, electronically, virally, economically, and spiritually interconnected house of cards we have been building will collapse too. The good news is that animate mind remains a real aspect of our bodily being, our evolutionary human heritage, capable of animating deepened

conceptions of science and civilization as ways of participating in the community of life, not destroying it. We are beginning to see, for example, how hunter-gatherer diets and close attention to the requirements of child socialization offer practical suggestions to what our bodies need today. But what if something analogous could provide a basis for science as well? The idea of animate earth, Gaia, offers a beginning in that direction; the ancient idea of living mother earth reanimated in scientific vision. So does Peirce's semeiotic realism, and his claim that the universe involves "a reasonableness energizing into being." So does Shepard's call to a deepened understanding of our ritualizing bodies and social lives, and their inseparability from genome and parenting and history. If, as William Blake put it, "The Primeval State of Man, was Wisdom, Art, and Science," the terminus of humankind also remains Wisdom, Art, and Science, renewed. But this requires nothing less than building a new way of life, one more mindful of its limits, more aware of its obligations to the community of life. Even if it has been temporarily evicted by the contemporary human mind, the original body-mind of the wild self remains a living passageway, if we open to it, through which to find a new attunement to the instinctive intelligence of animate earth.

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Notes

¹ Lee and Devore, 1968; Eaton, Shostack, and Konner, 1988; Sahlins, 1973.

² Halton, 1986; 1995.

I added *animate earth* to this diagram at the suggestion of Lynn Margulis, who heard me present an earlier version of this essay. If human animate mind is an internalization of ecological mind, then that source needs to be made visible too. Margulis also placed in my hands a book just then out, *Animate Earth*, by Stephen Harding, for which she had written the foreword, which I recommend as well.

http://www.cbsnews.com/stories/2005/01/06/world/main665159.shtml

³ Peirce 1932–38, Volume 7, paragraphs 380, 381.

⁴ I take, for example, three mammal traits, mother-infant bonding, REM dreaming, and play both as more "primitive" than our human—or even primate physiology—but also key to our further development and to our most sophisticated activities. These three inborn ecstatic capacities illustrate for me how our body-minds involve fantastic realities.

⁵ Shepard 1998b, (126–27).

⁶ Eugene Halton 2005, 135–166; 2006, 91–114.

⁷ Mumford 1967. Schultz and Lavenda, "The Consequences of Domestication and Sedentism." http://www.primitivism.com/sedentism.htm. See Schultz and Lavenda 1998, 196–200.

⁸ Gergen 1991, 146.

⁹ Wrong 1960, 183–193.

¹⁰ Shepard 1998c.

¹¹ McKenna, Thoman, Anders, Sadeh, Schechtman, Glotzbach 1993.

¹² Lozoff, Brittenham, Trause, et al. 1977, 91:1. See also Bergman 1998. Online at: http://kangaroo.javeriana.edu.co/abstract42.htm

¹³ Montagu, "Chapter 4: Tender Loving Care," 1986: 96–197. As he states on pages 97 and 99: "As late as the second decade of the twentieth century the death rate for infants under one year of age in various foundling institutions throughout the United States was nearly 100 percent. It was in 1915 that Dr. Henry Dwight Chapin, the distinguished New York pediatrician, in a report on children's institutions in ten different cities made the staggering disclosure that in all but one institution every infant under two years of age had died. . . . What the child requires if it is to prosper, it was found, is to be handled, and carried, and caressed, and cuddled, and cooed to, even if it isn't breastfed."

¹⁴ Halton 2004, 89–113. Halton and Rumbo 2007, 297–318.

¹⁵ Peirce, op. cit., Vol. 5, Paragraph 119.

¹⁶ Shepard 1998a.

¹⁷ Wilshire 2006.

¹⁸ Misra 2005. See

¹⁹ On birds warbling for warbling's sake, as aesthetic expression, enjoyment, and not only functional tool, consider philosopher and ornithologist Charles Hartshorne, who died in 2000 at the age of 103. He wrote prodigiously on philosophical topics, edited the collected papers of Peirce, was a student of Whitehead, and published in 1973, *Born to Sing: An Interpretation and Survey of World Bird Song*. He dared to say:

"Musicians who have listened to birds believe this much more than ornithologists, who are terrified of being accused of anthropomorphism . . . Having studied thousands of hours of birdsong from around the world, I am convinced some species possess an aesthetic sense, however limited compared to ours. It is part of human egotism to believe that only we have active minds."

"The advantages of sedentism may have been offset by risks associated with increased infection, closer spacing of children, or the substitution of starchy gruels for mother's milk and other more nutritious weaning foods." Cohen 1989, 140.

²⁰ Brown. 1998.

²¹ Thoreau 1841, 185–86.

²² Mead 1934, 223.

²³ Basso 1996.

²⁴ Shepard 1998d.

²⁵ As Mark Nathan Cohen notes in *Health and the Rise of Civilization*,

²⁶ Diamond 1997.

²⁷ Breasted 1966, 199–200.

²⁸ Cited in Saggs 1984, 261–262.

²⁹ Elliot 1972.

³⁰ Consider writing such things as what scribal traditions did then, in the ancient land that is now Iraq, and more recently, in Saddam Hussein's Iraq. Saddam's "history" told to the Iraqi people: virtually the same as Assurbanipal's: the bully as Glorious Victor. In fact, before the first Gulf War, Saddam had his own "King" testimony inscribed onto one of Assurbanipal's ancient relief sculptures.

³¹ Cited in Wilford 2006.

³² Brown 1998.

³³ Cited in Montagu, op. cit., 75.

³⁴ Halton 1995.

³⁵ Shepard 1998b, 62-63.

³⁶ Mumford 1970, 272–73.

³⁷ Halton in press, Chapter One: "The Great Brain Suck."