



Abstract

There is a powerful force, a channel of direct communication that informs nonverbally, triggering the awakening of insight and latent capacities embedded in every new human being.

Why was Joseph Chilton Pearce so passionate about bonding and deeply critical of medical-technological birth?

“There is a domino effect at work here - disrupt one portion of primary brain-body construction and all subsequent development is compromised, the victims' none the wiser.” JCP 2003

Direct, embodied, full-spectrum perception implies a quality of knowing that is infinitely wider, deeper, and more complex than thought's abstracted metaphors.

Attunement defines how this embodied intelligence resonates and the meanings revealed.

Transcendence, play in its original form, is creation's blueprint.

Being open-ended, embedded, and woven in the human design are latent capacities, infinite potentials, epigenetically activated by environmental signals, the model given. No model, no activation of hidden potential. That, according to Pearce, is The Model Imperative.

Into this immutable dynamic each new human being is spawned and marinated.

Like nested Russian Dolls the developing human is embedded in the body and psyche of the mother. The psyche and body of mother is embedded in the body of the living earth. And so it was for 95% of our species' development, until perhaps 100,000 years ago, when the human brain exploded, and with it the capacity to imagine, to create abstract mental images not present to the senses.

Suddenly, unexpectedly, for there was no precedent for this powerful new toy, not in this new abstracted symbolic form, the model imperative flipped. Like a thief or magician, mental concepts expressing as belief and culture grabbed and enchanted humanity's attention, leaving precious little attention for direct embodied full spectrum perception and its infinite, often hidden, nonverbal potential. Steadily, relentlessly, similar to the way digital screens suck our attention into their dead, virtual world, there emerged a conflict between embodied intelligence and culture, culture being born of machinelike intellect.

Unlike any of the 1.3 million species on earth, humans began living in environments sculpted and defined, not by nature, but rather by their imagination, living in artificial worlds, in machines, and increasingly enchanted by technologies. In this brief paper, drawing upon Joe's descriptions, we will explore how Joseph Chilton Pearce viewed pregnancy and birth as a rite of passage, a critical fork in the road that awakens in the mother of the species embodied transcendent attunement with her own nature, or a devolutionary acceptance of machines and machine-like artificial intelligence as the new and future mother of the species, opening door to a motherless transhumanists utopia.

Joseph Chilton Pearce was an original, a modern Leonardo da Vinci, a rare spirit that blended visionary insight with developmental science and authentic spirituality. Joe was like the pirate who scratches a treasure map of immense human potential on the back of a scrap of paper or the one who whispers hints of magic powers hidden in ancient mystery schools, except - those magic powers are real. Joe experienced directly causal-creative states of mind that literally transformed what we call reality.

Doing so, he realized that what we think is “real,” our “reality,” is relative. His seminal insight; there is a strange looping, a reciprocal dynamic between the mind and how the cosmos expresses, that thought as we know it, or technology, can never touch. His classic example; a mental state where fire did not burn.

Observing my bright two-year-old son, observing me, I had an insight. This child was literally reading my mind. Never experiencing dried moss in a potted plant, John-Michael looked up at me, with an implicit: what is it? “Tell me everything you know about dried moss.” My nonverbal perception of that dried moss contained in that instant my entire history of experience or relationship with that tangled mess. Had it been a scorpion the mind-transfer-meaning we shared would have been quite different. Bonding is a state of transcendent attunement.

During our first meeting, I shared with Joe this insight. “Bonding” opens telepathic resonance of shared meaning that is occurring all the time, nonverbally from the inside out and outside in, through the senses. Being attuned to this shared meaning is fundamentally different from intellectual knowing, teaching, or learning. Joe paused, “I’ve been describing this for thirty years,” he said. “No one has said it better.” That was the beginning of our fond and deep friendship that spanned more than twenty-five years.

The word often used for this immediate, whole realization of meaning is “insight.” Joe wrote repeatedly of the “Eureka” experience and developed this theme fully in *Evolutions’ End*, exploring the savant phenomena. Mozart’s compositions come to mind, where an entire symphony was realized or perceived in a specific “state” of the mind, in a flash. Once grasped, Mozart needed to laboriously translate the implicit whole into notes, not unlike words, that the fragmented and linear intellect could recognize, comprehend and share. Metaphorically, a hologram is another example. Sight, representing intellect, looks at the holographic plate and sees the pattern on the left. Change the state of the mind, in this case, the light source to a laser, and we see the three-dimensional projection on the right. The difference between noise and Mozart’s symphony is the state of the perceiving mind, not the implicit meaning or content of the field.

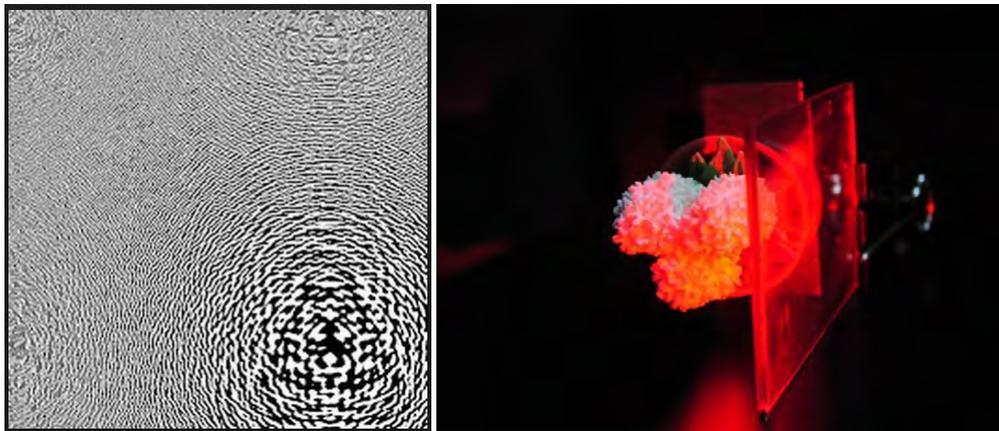


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Years later, supporting this insight, in a dialogue spanning five years in California, the United Kingdom, and Dharamsala, India, with Samdhong Rinpoche, one of the world’s most respected Tibetan Buddhist Scholars and First Prime Minister of Tibet in Exile, we explored how the most important ‘teachings’ are shared telepathically and implicitly via ‘presence.’ Words being the poorest quality of transmission.

Shooting the breeze, as my father might say, Joe once noted; “entire capacities can be lost in a single generation for lack of a model, and the child will never know what they are missing.” To grasp what this means, imagine that sensory overstimulation of some frequencies implies sensory deprivation of many others, causing the thresholds of perception to close down one percent per year. The color red, for example, is there in all its shades, but fewer shades of red register as being seen. Post World War II German researchers confirmed this to be the case. In thirty years, approximately one generation, thirty percent of the subtle shades of a given color would disappear.

We would still see red, but not the subtle shades on either end of the spectrum. In two generations what people see as red would be sixty percent less than the original mind. Apply this to all the senses. Then look at how civilization and technology have changed the physical environment over the last 2,000 years, and more profoundly the last 200 years, amplifying a few experiences, while extinguishing many more. Today science calls this evolution, or de-evolution, epigenetics. Pearce called it "The Model Imperative."

Physicist David Bohm was a significant influence on Joe's worldview, which he described in his second major work, *Bond of Power*, later rebranded; *Spiritual Initiation and The Breakthrough of Consciousness*, along with Swami Muktananda, a yoga guru, and founder of Siddha Yoga. Eastern and Western world views described the human brain, its capacities, and states of consciousness, differently. Both, however, using different metaphors, share the view of human potential being open-ended and therefore infinite, limited by the model-environment given. Epigenetics is the developmental wild card, not unlike stem cells that mutate into different forms and functions adapting to environmental triggers. No model, no signal, no activation of latent potential. That, according to Pearce, is The Model Imperative.

Note the term 'bond' in Joe's second book title. Each successive generation, spanning 300,000 years, opens a direct developmental channel of insight by bonding with adults, who, successfully reaching maturity, at least enough to reproduce, have learned by their own bonds of insight, plus trial and error, how to survive. Nature's design is for this bond is to expand to include the natural world, and further the cosmos, with each expansive bond opening and inviting greater and more expansive, whole, and integrative insights, fundamentally updating and expanding one's self-world-view, one's identity-reality with each.

Maria Montessori described the 'absorbent' mind of the young child. Her colleague Jean Piaget went further. "Unquestioned acceptance of the given is the hallmark of the young mind," he said. Meaning; what we call intellect, symbolic and metaphoric thought with its conditioning, and formal instruction, contribute little in the transfer of essential meaning during the most explosive stages of human development. Other states, other qualities of mind, and direct perception are at play. As the dominance of fragmented, analytic, linear-linguistic thought grows, it pushes aside and negates most other modes of being, including Joe's bond of power.

Renowned teacher J. Krishnamurti referred to thought and intellect as a tiny, mechanical corner in a vast field, referring to the infinite potential of the mind that our tiny corner called thought and intellect excludes. Grasping the significance of our infinite potential, with "bonding" being the critical channel of direct absorbent insight, we are left with the nature and quality of the model environment as the prime teacher. Together, these three forces; infinite potential, the model, and the bond, define what the next stage of human evolution will be, or not. When I asked Joe, "what is the common thread that unites all of your writings?" He replied, "to understand our astonishing capacities and self-inflicted limitations." Now, you know why. Epigenetics in action, fifty years before that term was invented.

All of Joe's books...

The Crack in the Cosmic Egg: Challenging Constructs of Mind Reality

Bond of Power; Spiritual Initiation and the Breakthrough of Consciousness

Magical Child: Rediscovering Nature's Plan for Our Children

Evolution's End: Claiming the Potential of Our Intelligence

Magical Parent Magical Child: with Michael Mendizza, on optimum states of learning and performance

The Biology of Transcendence: Blueprint of the Human Spirit

The Death of Religion and the Rebirth of Spirit: A Return to the Intelligence of the Heart

Strange Loops, Gestures of Creation; The Heart-Mind Matrix: How the Heart Can Teach the Mind New Ways to Think...

And others expand and explore these two themes; our astonishing capacities and self-inflicted limitations, in vastly different ways. We find conditioned thought, intellect, personal ego, and culture on one hand, in direct conflict with our innate infinite potential, what Joe called, "the intelligent of the heart."

Two fundamentally different modes of being, two states of mind and perception, of relating and interpreting one's self, with that defining our relationship to everything. One being deeply conditioned and personal. The other is transpersonal, unconditioned, and therefore limitless. With "bonding" being the bridge from the limited to the unlimited and beyond.

This distinction is fundamental to Joe's worldview. He observed that most of our personal, social, and ecological problems stem from a misuse of memory, abstract knowledge, intellectual hubris, and identity, void of real intelligence with its implicit empathic and life-serving appropriateness. He used the term "Bio-Cultural Conflict" to describe this root cause of our systemic and compounding crisis:

Intelligence is possessed by all living organisms. It is the ability to respond to life for well-being and continuity and to avoid that which is harmful. The more complex a creature the more complex that intelligence becomes. Intelligence in human beings is empathic, heart-centered, and connected with the deepest intuitive roots of life and the matrix of our being. Intelligence is essentially feminine in its nature, direct, subjective, intuitive, and interior.

Intellect, what we call reason, on the other hand, is objective, exterior, outwardly driven. Intellect is a highly specific, brain-centered, form of intelligence. Intellect is abstract, symbolic, evolution's latest achievement and comes about through the newest editions to our brain structure. It is analytical, logical, linear, constantly asking why, taking everything apart and put together in new ways. If it is possible, intellect goes for it without regard to appropriateness.

We can say intelligence is essentially heart-centered and feminine, asking for appropriateness to life. Intellect is essentially brain-centered, objective, and masculine, asking only about life's possibilities.

We see clearly two opposing forces; empathic nurturing, the feminine, grounded in direct nonverbal insight, with its life-serving appropriateness, and self-centered predator images, abstract knowledge, isolated individuals and cultures at war with themselves. Sparta; "spare the rod and spoil the child," verses Athens; "nurturing, feeling safe enough to play, reach out and embrace the world, expand the all empowering bond with life."

Given Joe's personal experience of the immense and powerful causal-creative, reality-altering, nature of the human mind, he understood and profoundly, how bonding plays a critical role in what will happen to humanity in the next few generations. Sweet sentiment had nothing to do with it. Every child represents infinite potential. But of that potential, only those capacities modeled will open, be recognized, and develop. Think of a seed planted in rich, moist soil, with plenty of natural sunlight. Compare this with the same seed planted in sand, illuminated with artificial neon light, and soaked in polluted water. Same potential. Very different outcomes. And the bond being, for premature humans at birth compared to all other species, the bridge between that infinite potential and what percentage, the nature and quality of capacity will emerge, and then become the model for what comes next, up or down.

Recall, the example of overstimulation of some frequencies representing sensory deprivation of others, and how this expresses as generational colorblindness that grows more monochromatic each generation, each seceding generation not recognizing what they don't see. Joe saw this devolutionary cycle in patriarchy; the demonization of Eve, male domination and conquest, technology becoming the new religion, and what happens today to the majority of women who are subjected to medical-technological birth in a technocratic, male-dominated world. Sure, place dysfunctional males in charge of females. What do you expect? Medical-technological birth is a knock-out, one-two punch, crippling the model while simultaneously breaking the bond. Each successive generation imprinting the mother's anxiety instead of power, or, as is often the case, no bond at all, designating the ancient survival brain as the driver of the bus.

As with any rite of passage, pregnancy and birth is for females an explosive, body-centered awakening of new capacities and nonverbal intelligences, billions of years in development, waiting for that trigger to open and develop. And the pregnant mother's body knows and expects something miraculous is about to happen. As Michel Odent, MD., and many midwives know, given the safe place to experience this miracle, the birthing mother's body knows what to do.

No intellectual instruction is necessary, rather stimulating the neocortex gets in the way. For most of human history, women nurtured and supported birthing mothers by creating that sanctuary. No men allowed. Until about 150 years ago, when all that changed.

Below is the best summary of Joe's passionate insights regarding the innate wisdom encoded in every woman's body, being biologically different than men. Her unique role as the mother, protector, and nurturer of the species. How, for centuries, jealous male domination colluded to diminish this most powerful position of all, expressing in religious, corporate-political-social subjugation and most intimately by intellectual-technological interference during pregnancy and birth. This pattern is as ancient as monotheistic religions, when God in the sky replaced nature, the mother, as the center of the universe.

Observe how the blind hubris of the Spanish Inquisition lives on today, in political refusal to allow women to determine if they carry a pregnancy to term. How medical-technological birth cripples, blinds, and denies her access to vast realms of embodied, non-cognitive, nonintellectual, nonverbal intelligences that are subtler, more empathic, entangled, and therefore more life serving and saving than existing knowledge and its mechanistic technologies. Interfering with the bond of power at birth, cripples and prevents that most important model from awakening, developing, and expressing. No adult model, no development of capacity in the child. That is The Model Imperative. "There is a domino effect at work here - disrupt one portion of primary brain-body construction and all subsequent development is compromised, the victims' none the wiser."

I wrote the following brief essay in response to finding that the APPPAH conference in December 2003, was being jointly sponsored by the American College of Obstetricians and Gynecologists, as stated on the front cover of the brochure for that conference. Shortly after this revelation, I received a lengthy two-page form from said College of Obstetricians stating that I had to disclaim any conflict of interest I, as a presenter at said conference, might have with the College of Obstetricians, my signature of said document being required. In the ensuing paragraphs, I was warned that my failure to comply would result in said College informing the audience attending of such perfidy and misdoings on my part. I had already decided that I could not with good conscience support a conference jointly sponsored by the one group whose actions I have assiduously studied for thirty years and know to be an insidiously destructive force and so had withdrawn from participation. Copies of this essay and the College's conflict of interest testimonial are available on Touch the Future's website.

Immediately following the above events, I was sent a copy of a lengthy Washington Post article concerning the American College of Obstetricians throwing its support behind a new move to allow C-sections to be performed outside any strictures of medical considerations and as directed entirely by choice of the delivering mother. Thus any woman can arbitrarily decide for c-sectioning whether in any way indicated as needed, choose her date for the operation, and so on. The Post quoted various authorities saying this would no doubt bring a serious increase in c-sectioning, already far more prevalent than justifiable.

This report was then followed by correspondence from the group trying to stop automatic circumcision of male infants in hospitals, or at least humanize the current barbaric procedures. These people report that their papers stating their case were not even acknowledged by the American Board of Obstetricians - who wouldn't, in fact, even acknowledge receipt of such reports.

Joseph Chilton Pearce
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You cannot do to a living organism what we are now doing to the vast majority of human infants, (and the ongoing spillover into the general abandonment and neglect of children taking place worldwide,) without paying a dreadful price.

The ruinous and hugely expensive take-over of all birthing by hospital-medical procedures has brought into play an equally huge and expensive cradle-to-grave therapeutic operation, undertaken in our efforts to repair the damage we are blindly causing at the same time.

Hospital-medical childbirth, now made sacrosanct and unquestioned on every hand, is a more insidious and devious danger than atomic bombs or germ warfare, since unrecognized and even *unrecognizable* by the public at large, for the demonic force it is. Taking away a woman's rights over her own reproductive process has been a disaster, but intervening in and all but abolishing the bonding of a mother with her infant at birth is a devastating crime against nature; perhaps the most criminal and destructive act on the planet today, and an ultimate, if slow but sure, instrument for species' suicide.

The backlash of entrenched medical-financial interests has brought a barrage of "pseudo-bonding" gestures now "allowed" in hospitals and highly advertised. None of these counterfeit substitutes or cosmetic gestures are bringing about the natural interaction nature intended, since they are after-the-fact additions to a mother-infant pair already damaged. Such maneuvers have, however, further strengthened the medical stranglehold.

Until we get medical-hospital interference out of birthing, and put birth back into the hands of women and the mother herself, as nature intended, we will continue to decline as a species. The statistics have been around for decades proving conclusively that home birth is several hundred percent safer than hospital birth, under any circumstances. Certainly, there are rare cases of "natural childbirth" when an emergency arises beyond the capacities of the mother or midwife, and we have, thankfully, appropriate medical procedures to which we can turn. Holland used such a procedure for generations and had the lowest birth mortality rate of any nation, with some 96 percent of all infants delivered at home.

We must and can awaken the public at large to this issue, the means can be found. Surely the "collective cultural imperative" for medical intervention is enormous and powerful. And surely our entire culture promotes the medical myth through film, literature, the daily news, schooling, on and on. There is an almost direct parallel with the issue of smoking in the latter half of the twentieth century. However, no organization has as yet really set about exposing the medical myth of birth and at least trying to awaken the general public to the outrage.

Surely the task at hand is daunting, enormous, and would require careful long-range planning, carefully organized strategies for undermining the medical myth and disempowerment of women and creating a new image of birthing and womanhood. But we can't do this by pussy-footing around the issue, afraid we might offend. Surely that medical myth is woven into every fiber of the social fabric, but that fabric is becoming our shroud - which we can and must unravel. Just as we can and must awaken in future mothers the ancient intelligence of the heart; de-condition her culturally imprinted self-doubt and fear; and restore in her the knowledge and power of *being* the mother of our race, with the courage to act accordingly. In undertaking such a restoration, we will unfold an ongoing educational agenda not only for survival but for a higher, nobler, more compassionate way of life.

SOME UNEXPLORED ASPECTS OF THE CONFLICT

Pediatrician Maria Montessori once commented that a humankind "abandoned in its earliest formative period becomes its own greatest threat to survival." The following will show how surprisingly early and at times subtly, abandonment takes place. Nearly half-century ago Muriel Beadle asked why is it that the human infant seems born into the world in a state of alert excitement that quickly reverts to distress followed by conscious withdrawal. (This withdrawal lasts for up to ten to twelve weeks on average, before full awareness resumes.) Answering Beadle's query leads to a richly woven fabric of nature's proposing and man's disposing.

Paul MacLean, for many decades head of the Department of Brain Evolution and Behavior at the National Institutes of Health, wrote a paper on three fundamental needs critical to all mammalian life, particularly human, from the moment of birth.

These three needs (each calling for voluminous description) can be stated, in their barest terms, as *Audio-visual communication*, *Nurturing*, and *Play*. All three are interdependent, all are established and stabilized by mother-infant bonding at birth. Failure to establish this bond is a major form of abandonment, wherein all subsequent development (of both infant and mother) is compromised.

First, all mammals, on preparing to give birth, seek out the most hidden, preferably dark, quiet, and safe haven available. At the first sign of any intrusion, of any sort - even the snapping of a twig - and the natural intelligence of the old mammalian brain, which controls birthing, signals that birthing procedures stop, and the mother waits for the coast to clear. We, humans, are mammals and our old mammalian brain's instincts and intelligences are still right here in our head, and absolutely in charge of birthing, interpreting environmental signals, and giving and initiating intelligent responses. In situations of complete safety, unquestioned support and security, fully in touch with herself and nature, a human mother can give birth in as little as twenty minutes - sum total of time from the first signal to birth-passage accomplished. But at the first sign of any interference of any sort, regardless of the nature or reason for it, the birthing process will be disrupted, slowed down, or even halted, by very ancient and powerful intelligences within.

We are dealing with the effects of fear, the ancient startle-reflex, and flight-fight reactions, which center attention-energy in the "reptilian" hind-brain and work against the higher intelligences that integrate and coordinate brain-mind-body. A mother's enculturated fear of birth, and/or a negative birth environment with an air of emergency, crisis, or suspense, acts precisely as does an actual "attack" or external threat.

If a disruption occurs or fear-anxiety is present, the smooth muscular coordination of resonant responses found in a mother "in the flow," where thinking, feeling, and acting are a single harmonious response, is lost, and chaos generally reigns within her - muscle fighting with muscle, instinct with instinct, inner-knowing confused by well-wishing helpers, nature's intentions clashing with culture's attention, mother and infant losing on all fronts - all of which is sadly the norm for the majority of modern women.

Nikos Tinbergen (Nobel laureate in ethology) studied the metabolism of the early infant and determined that a human newborn needs to feed about every twenty minutes in its early days, the periods slowly growing progressively longer as the months go by. Mother's milk, it seems, has almost no fats and proteins, but is, instead, as Israeli doctors termed it, a rich cocktail of hormones, which rather thin-appearing diet requires that the infant feed quite frequently - which is the whole point. Some mammals, rabbits, for instance, produce milk so heavy with fats and proteins that their offspring need only feed once or twice a day. This allows the mother to leave the infant and forage to make more rich milk for that next powerful wallop. One might wonder why nature didn't make a similarly handy arrangement for us humans; instead of a procedure so inconvenient, particularly to us modern people. Look a bit further, however, and we find that she did this on behalf of an intricately interwoven fabric of interdependent needs rather exclusively human and absolutely critical to being fully human.

First, the human newborn is unique in the mammalian world in that it produces no hydrochloric acid in its stomach. Hydrochloric acid is necessary for the digestion of fats and proteins found abundantly in all mammal's milk except that of human mothers. Some *nine months after birth*, however, hydrochloric acid spontaneously appears. Remember this nine-month marker in the exploration that follows here.

Just as it took nature nine months to grow that infant in the mother's womb in the first place, it takes another nine months "in arms" to firmly establish that infant in the matrix of its new world. In regard to MacLean's Triad, consider that hearing develops very early in utero, and language learning itself begins late in the second trimester as ongoing muscular responses the infant makes to phonemes, those foundational units of language - (if the infant has normal hearing and a speaking mother.) Vision, however, while it occupies more of our brain than all other senses put together, obviously can't develop in utero, even though visual sensitivity appears early on, as seen in an infant's aversion to bright lights should we shine them directly on the mother's belly, (which prompts the infant to turn its head away.)

Visual *development*, though, and the audio-visual *communication* that accompanies it, must await birth to unfold. (There is a vast difference between stimuli and communication.)

And at birth, if given a face within six to twelve inches away, two immediate responses take place in the newborn: its initial excited alertness (noted by Muriel Beadle long ago) stabilizes and does not fade, and visual - and audio-visual - development immediately begins. That close-up face literally turns on the infant brain and keeps it turned on, for the infant is born with a preset neural pattern for cognizing-perceiving a face, but only a face. That new visual system doesn't respond to other visual objects, while the infant will lock eyes on a face, if one is given at that required distance, and hold that focus. Then awareness and perception-cognition automatically take place, which, in turn, activates the infant's entire body-brain system. Focus is immediate so long as a face is there to focus on; parallax (muscle coordination of the eyes) forms within minutes, (so the infant can even follow that face around should it move about) and a "construction of knowledge" of a visual world begins - a world based on this stable foundation of a face, a "known" to which all unknown perceptual phenomena will then be related.

Before long other objects in the mother's immediate vicinity are registered, and, through processes of neural association, corresponding new neural patterns form, and a cognitive field of re-cognizable objects grows exponentially (as does the brain itself) - so long as that face pattern remains the stable point of reference. Although any face will work at birth, (even a false face for a brief time,) face constancy and all that goes with it, is the critical factor in this early infant movement from known to unknown, and vitally necessary for stable and stress-free development.

Should a face not be presented, along with all the attendant functions accompanying it, (to be described shortly,) conscious awareness will fade within about 45 minutes and does not ordinarily reappear, as mentioned above, for upwards of some ten to twelve weeks on average.

The reason is that bonding as a reciprocal function between mother and infant is then fragmented, and the ongoing nurturing instincts which bonding awakens and locks into the *mother's responses* aren't there. Most infants then receive only sporadic exposures to a face or faces and, by then, consciousness largely retreated, and the awareness needed for such cognition to take place and be stabilized is missing. Nature will compensate as best she can, but under these conditions, her capacity to compensate is diminished and slow.

Nature arranged that this magical face-trigger be some six to twelve inches from those equally wonderful mammary glands from which flow that life-giving fat-and-protein free nurturing-nourishment. Frequent nursing assures a frequent reinforcement of the stable face pattern on which vision and awareness are based. "Object constancy," as Piaget called it, the stabilization of an object-world of vision, occurs around the *ninth month* of this busy construction period. Among the many facets of this ninth-month milestone, myelination of the neural patterns of this primary visual world takes place, making the neural foundations of vision permanent, no longer "labor-intensive" but "cheap to operate," the ongoing expansion of the visual world automatic and effortless. Now nature can turn her world-building energy to other developments, which open around that pivotal ninth month after birth.

(Any society separating mothers from infants at birth will have a disproportionately large population with impaired vision. The United States, for instance, is virtually a nation of eyeglasses. (We ignore and/or forget research that shows that preliterate people have far more accurate and extensive vision than we have - some of those people can see the rings of Saturn with their naked eye.) Far more seriously, for those willing to look, note how many of the infant-toddlers we see, pushed about in various wheeled devices that keep them separate, out of the way and helpless, have strangely vacant, barely focused eyes, and vapid, nobody-at-home expressions - as though a light were blown out within.)

Some forty years ago Whittlestone, at The University of Adelaide, pointed out that the mother's heart is a most critical factor from conception through birth. Now we know that her heart is every bit as critical a part of the next nine-months "in-arms" and a major reason for nature's programming such an "in-arms" period. Over half a century, ago researchers had found that a heart cell could be removed from a live rodent's heart, put in an appropriate nutrient to keep it alive, and when examined through a

microscope, was seen to continue to pulsate, expanding and contracting regularly, according to the rhythm set by the donor-heart. After some time of this separation from the heart, however, the cell's rhythmic pulsation would deteriorate until collapse, and that erratic jerky spasm called fibrillation, a precursor to the death of the cell, would set in.

If two heart cells were placed on the slide, however, separated from each other, when fibrillation began, by bringing the two cells into close proximity with each other (they did not have to touch and could be separated by a tiny barrier) they both stopped their death-spasms and reestablished their coordinated pulsation, in sync with each other. Each cell had "lifted the other" out of that fibrillation that leads to death into the shared rhythm of life.

This miracle occurs, it turns out, through bringing into spatial conjunction the electromagnetic fields that arise from and surround each heart cell, a phenomenon only recently discovered. These electromagnetic (EM) fields are not affected by ordinary physical boundaries, and when the fields come into contact, their waves entrain, and go into the same coherent pattern, (and coherent wave-forms reinforce each other.) This coherent resonance, in turn, lifts those cells out of chaos into order. Cells and their "EM" fields mutually give rise to and/or influence each other, and the same phenomenon occurs, on a far larger and far more serious level, with infant-mother hearts at birth, a major but largely unrecognized factor in bonding.

The heart itself produces a very powerful "EM" field, in three successive waves: the first and most powerful surround the person's body, flooding every cell and neuron of that body; the second extends out some three feet in all directions and interacts with other heart fields within that proximity, a principal ingredient of emotion and interpersonal relationships; the third extends out indefinitely, for all purposes "universally," (possibly a factor or aspect of the human spirit.)

So at birth, following separation, the infant and mother's hearts must be brought into immediate proximity, wherein they confirm their uterine resonance and re-stabilize each other or "lift each other" into their familiar, stabilized order. This order must be continually reinforced through that warm proximity for about a nine-month period. By that time the infant's heart has matured enough to "stand on its own" without so frequent a stabilization by the mother's heart. Thus here we have another ninth-month milestone marker.

Before leaving this issue, consider the fact that sperm and egg can be introduced in a test-tube, (a deadly dull affair) which may, (with sufficient sperm in support?) result in their union. This shotgun coupling is followed by two or three cellular divisions of that egg, as triggered by genetic coding, but no more. Cell division will *not* continue after those first few gestures toward life, regardless of the type of vitro, temperature at which the fluid is kept, and so on, (variations of which have been tried over the years.) Thus no actual "test-tube" baby has ever taken place and never will. The term is itself a myth-making misnomer, (reinforcing the mechanization-myth science has woven around genetics and medicine around conception and gestation,) since, following that test-tube insemination, the DNA of that newly formed genetic system must be placed within the immediate electromagnetic radiations of a mother's heart. These are found, conveniently, in her womb, whereby odd coincidence, in addition to the rich sea of EM energy with which mother's heart floods that area, nature provides an equally rich sea of nutrients and just the right temperature for ongoing cell division to take place.

DNA is not only both environmentally and electro-magnetically sensitive and responsive, it is critically dependent on these signals for the unfolding of nature's blueprint for new life. Without the appropriate nurturing environment of the womb and heart, gestation can't take place. So, once cell division begins in that test-tube arrangement, that dividing cell must be planted in a mother's womb or frozen for some hypothetical future planting, and quickly.

So at birth, an immediate return to the mother's heart field must be given, or severe infant distress sets in, followed by eventual withdrawal of awareness and alertness. (Forty-five minutes seems about the average "window" of opportunity for establishing the infant-mother relation needed, a relation centered on that heart-field link.)

Again, that six-to-twelve-inch distance of the mother's face, giving immediate proximity to those nurturing breasts, vital to the ongoing awakening experience of the newborn, assures a return to and ongoing stabilization of the infant's heart given by the mother's heart, to which resonance the infant has imprinted on a cellular level from conception. Newborns and mothers wired up for heart and brain wave recordings (electrocardiograms and electroencephalograms) show coherency and entrainment (matching of the wave frequencies) when infant and mother are together. Both systems become incoherent (chaotic) if prolonged separation takes place, whereupon cortisol is released by both mother and child systems and general stress takes place in both.

Remember our two heart cells on that microscope slide, and remember that excess cortisol is quite toxic to neural systems, particularly new ones.

(Remember also that any society interfering with natural bonding at birth will have a corresponding increase in heart trouble. When primary heart connections fail to take place, heart development in the infant is immediately compromised, and a "wounded heart" trauma takes place in the mother, whether she is aware of it or not. The "Post-partum blues" that often follows birth separation can be a devastating experience, affecting the health of both parties thereafter.)

Years ago biologist-anthropologist Ashley Montague wrote a now-classic work called Touching, and recently Mariana Caplan wrote a similar work called Untouched. Both are well-documented studies showing the critical necessity of infant skin stimulus at birth. At birth, the newborn's nervous system is quite undeveloped since the millions of sensory nerve endings distributed over the body can't be activated or developed in utero.

In that water world, the infant's body is protected by a "water-proof" coating of a fatty substance called vernix caseous, which protection also insulates that myriad of nerve endings. So at birth, all mammalian mothers vigorously lick their infants off and on for many hours, even sporadically for days thereafter. This is to activate the dormant sensory nerve endings and the peripheral nervous system, which is, of course, a primary extension of the brain. Failure to activate these nerve endings results in a de-sensitization affecting the reticular activating system of the old brain, where all sensory stimuli are collated or organized into those resonant patterns which are then sent on to higher cortical areas of the brain for world-making and experiencing. Touch deprivation results in a compromised and diminished overall neural growth, sensory system and general conscious awareness in the infant, as well as affecting inner ear development, balance, spatial patterning, and so on, later.

(Mothers separated from their infants at birth obviously can't provide this touch-stimulus, nor are they stimulated to do so later if the separation is prolonged. Mother too has a critical "window of opportunity" for activating those ancient nurturing responses, considered by Paul MacLean to be our "species survival instincts." These instincts are activated by her skin-to-skin contact with her infant, making bonding a reciprocal dynamic of awaking and discovery.)

Language learning, as mentioned, begins late in the second trimester as muscular responses the infant makes to the phonetic content of the mother's speech. This dynamic continues after birth *if* the appropriate model stimulus is provided - a speaking mother in close proximity. The newborn then remains open to phonetic systems in general and will respond to new phonemes with corresponding new muscular patterns, until some *nine months* after birth, at which time the basic phonetic-muscular system myelinates, becomes permanent, and phonetic openness closes to the boundaries of the mother's speech.

During that initial nine months of continued language learning and phonetic completion, speech preparation takes place. Speech is a dramatically different neural-muscular operation than the earlier body-language dynamic, yet subject to the same model-imperative. From the moment of birth, given that face pattern to organize vision around, the infant responds to the mother's facial and neck muscle movements made when she speaks, by making corresponding muscular movements in synchrony with hers, though in a less "robust" manner. (There is, for example, the well-known and certainly robust response of the infant sticking out its tongue if the caretaker sticks out there's.)

These mimetic responses, which mirror facial and neck muscular movements of the mother's speech, automatically connect the infant's audio and visual worlds, by pairing her word usage with the overall phonetic-muscular patterns of his body. Thus this primary audio-visual communication prepares for speech (which involves coordinating over 200 fine-tuned and some very delicate facial-neck muscles.) Around the ninth month after birth, the average infant's speech preparations have led into "lalling" or infant-babbling and even the first words - if, and only if, the appropriate model-signal-stimuli are provided in that critical second-matrix period, a provision made by simply nursing the infant and speaking.

(Infants separated from their mothers and confined to various forms of ongoing separation thereafter (as most modern infants are - through cribs, bassinets, carriages, playpens, strollers, etc. or that most immediate and thorough devastation called day-care,) are denied all these responses, and their development is correspondingly compromised. Nature will compensate as best she can - but compensation is always a poor substitute for natural, spontaneous mimetic growth. We live in a compensated society, however, where the abnormal has been sustained until it has become the norm - we citizen-victims none the wiser.)

A note in regard to breast-feeding: a few years back a group of medical men in Israel, disturbed over their own country's birth procedures, and the inability to breastfeed most mothers then exhibit, pointed out that any society eliminating breastfeeding has an immediate, one-for-one corresponding increase of breast cancer. These findings were not published in the US, which eliminated 97% of all breastfeeding throughout the twentieth century since our powerful medical groups simply block such reports. At a recent (2003) workshop I gave in up-state N.Y., a woman oncologist reported that her medical group had found just such a correspondence in their women.

Finally, (in this brief survey) but perhaps the most important of all these ninth-month-markers, we come to the prefrontal cortex, a major neural system that cannot unfold in utero (except in a most rudimentary form) and must await birth to begin its full cellular growth. If conditions are right, this fourth brain will develop into the largest neural lobe. During the in-arms and early crawling period, the primary phase of prefrontal growth takes place, completing in that significant ninth month. (A second prefrontal growth spurt, equally "experience-dependent," is designed to begin at mid-adolescence. This later prefrontal growth spurt is critically dependent on the successful completion of the first one, years before, and is intimately linked with a corresponding growth spurt in the cerebellum.)

Since the mid-1980's the prefrontal cortex has been the subject of intense investigation but already is recognized as the latest evolutionary neural system to develop, (it is probably less than 50,000 years old, compared to millions up to hundreds of millions of years behind the older lobes and modules of our brain.) This latest and greatest of nature's neural achievements proves to be the "executive brain," able to moderate and control all responses, reactions, and instincts of those older "animal brains," with their sensory-motor, defensive, sexual, and instinct-bound patterns, as well as the "neo-cortex" giving us speech and a vastly higher intellect. Only this newest prefrontal system can organize the entire brain into smoothly synchronous attention or intention, link all our "lower instincts," as well as thinking-feeling, with higher fields of intelligence, and translate all the "higher human attributes" such as love, empathy, care, and creativity, into daily action. The prefrontal cortex, which Patricia Goldman Rakic calls the "governor" of the brain, gives us what Elkhonon Goldberg rightly calls the "civilized mind." If developed.

But, as Allen Schore's research makes clear, the genetic structure of the prefrontal cortex proves to be the most "experience-dependent" of all brain systems, that is, those genetic systems are critically dependent on appropriate environmental feedback. This feedback is given through the multi-levelled functions of infant-mother bonding and ongoing in-arms relations, and the overall positive emotional environment that should result. It includes nurturing through breastfeeding, sufficient movement and sensory stimuli, immediate proximity to the mother's face and heart, language and speech stimuli, and so on. Failure to provide this overall emotional support inevitably means a compromised prefrontal cortex, which literally cannot grow sufficient cellular structures and make the necessary neural

connections with the rest of the brain for full operation. And a compromised prefrontal cortex results in an impaired “emotional intelligence,” a corresponding difficulty in relating with others or controlling our ancient sexual-survival reflexes, with a corresponding tendency toward apathy, hopelessness, despair, and/or any of the many forms of violence.

Just as it took nature nine months to grow the basic “triune brain” unfolding in utero, this prefrontal growth takes the nine months following birth, with all the attendant developments which center around the heart. Thus all these strands briefly sketched in the above, gather to completion around this ninth-month milestone. Then, if these foundations are in place and functional, from the ninth to twelfth month another major neural structure grows to connect this new evolutionary “executive brain” with the ancient limbic or emotional brain, which older system has direct unmediated neural connections with the heart (through the ancient amygdala which is as much the top part of the defensive “hind-brain” as the lowest part of the emotional brain.) Thus this “orbitofrontal loop” as it’s called, this huge bridge between old and new, proves, as the research of Allen Schore clearly shows, the most decisive factor of our life and is, again, critically experience-dependent. If emotional nurturing is lacking, this bridge will be compromised and/or the little development made will be largely de-constructed, re-routing the emotional brain’s portion of the orbitofrontal loop back into the defensive “hind-brain” system. (But that is part of a survey of the third ninth-month cycle, the toddler period.)

At this ninth-month point, when the orbitofrontal loop begins its massive growth, the ancient cerebellum, in the back of the brain, undergoes a corresponding growth spurt. The cerebellum, rudimentary until this time since only sparsely needed, is involved in all speech, walking, coordination of muscular systems, and much more. (This muscle coordination takes place through the muscle spindle system, those tiny neural extensions found on each striation of muscle tissue throughout the body, which played a major role in the uterine infant’s physical response to those phonemes underlying language, literally “embedding” language in the body.) So, at this ninth-month period, as nature prepares to organize the entire forebrain into a single coherent whole, the cerebellum readies the infant body for that upright stance we humans enjoy, which will be followed by walking and talking, displayed in that magnificent and exciting exploration of and “building structures of knowledge of” our physical world. Infancy comes to an end and the early child or toddler appears.

To prepare for the toddler’s excited charging out to explore all aspects of the world, (equally dictated and orchestrated by nature’s agenda,) the child will not only touch but taste every item of interest in that world, and to prepare for the new diet-world opening, which will no doubt contain fats and proteins, the appropriate digestive juices are forthwith provided. Nature dutifully turns on that long-absent hydrochloric acid in the child’s metabolic system. Hydrochloric acid simply wasn’t needed - at least not according to millions of years of genetic encoding. - in that critical “In Arms” period, for which nature provides a vastly superior food and supreme method of dispensing.

So we have now come full circle in this brief sketch of overlooked aspects of birth and bonding, its ways and means and why’s, from the initial enigma of no hydrochloric acid to its grand entrance as cued by nature, when the curtain rises on a new stage of development, ushering in an ongoing series of new bondings with new matrices, over the years - the family, the earth itself, society, the pair bonding leading to species renewal, bonding with one’s own offspring, with the spirit within and universal without, and so on. Marshal Klaus spoke of an interlocking “cascade of redundant patterns” nature has built in to assure this critical first bonding between mother and infant, the bond which will provide for the threefold nurturing MacLean referred to, truly an “eternal golden braid” (to steal Hofstadter’s phrase.) Marshal Klaus calls bonding the establishment of the greatest love affair in the universe, on which this wondrous unfolding of human life depends.

Now we can see the astonishing and thorough intelligence and careful planning, the intricate interweaving of a myriad of critically timed and interdependent responses which nature evolved over eons of time and invested in this birth-bonding process entrusted to us. From the beginning, however, that new life unfolds in a universe based on love or fear - depending on the relations established and the model provided.

So now, more than ever, we can see the astonishing extent to which modern practices have by-passed, compromised, or outright eliminated, virtually every item on the agenda of this incredible architectural design. Now we can understand why our medical interferences with birth - taken as axiomatic and unconsciously accepted as the norm by virtually the entire globe - are proving to be our global undoing.

You cannot do to a living organism what we are now doing to the vast majority of human infants, (and the ongoing spillover into the general abandonment and neglect of children taking place worldwide,) without paying a dreadful price. The ruinous and hugely expensive take-over of all birthing by hospital-medical procedures has brought into play an equally huge and expensive cradle-to-grave therapeutic operation, undertaken in our efforts to repair the damage we are blindly causing at the same time.

We witness the strange contradiction of a nation madly caught up in patchworks of healing and hoped for wholeness while blindly allowing a radically damaging, unnatural birth practice to continue unquestioned and unchecked. Our contradiction overwhelms us, neutralizes our very effort at recovery, and breakdown is widespread. Child abuse and child suicide are but the most blatant signs of the breeding ground for violence our interventions are spreading worldwide. There may never have been a "golden age" of birthing and child-rearing, (other than a few remnants such as the Yequana Jean Leidloff wrote about,) but also there are no historical precedents for a species abandoning its own offspring, as witnessed today, worldwide.

Finally, there is a direct correlation between our final abolishing of breastfeeding through an insane birthing and daycare. Daycare, now so massively present, is but cosmetically camouflaged abandonment *and a direct result of technological interference* - as is our ecological rape of the planet - (clearly evident causal procedures far too lengthy to defend here.). A bonded mother does not abandon her infant no matter how severe the financial pinch nor socially sanctioned such behavior might be. A child bonded to mother and earth does not grow up to rape the planet.

Hospital-medical childbirth, now made sacrosanct and unquestioned on every hand, is a more insidious and devious danger than atomic bombs or germ warfare, since unrecognized and even *unrecognizable* by the public at large, for the demonic force it is. Taking away a woman's rights over her own reproductive process has been a disaster, but intervening in and all but abolishing the bonding of mother with an infant at birth is a devastating crime against nature; perhaps the most criminal and destructive act on the planet today, and an ultimate, if slow but sure, instrument for species' suicide. The backlash of entrenched medical-financial interests has brought a barrage of "pseudo-bonding" gestures now "allowed" in hospitals and highly advertised. None of these counterfeit substitutes or cosmetic gestures are bringing about the natural growth nature intended, since they are after-the-fact additions to a damaged, broken, infant-mother relationship. Such maneuvers have, however, further strengthened the medical stranglehold.

Until we get medical-hospital interference completely out of birthing, and put birth back into the hands of women and the mother herself, as nature intended, we will continue to decline as a species. The statistics have been around for decades proving conclusively that home birth is several hundred percent safer than hospital birth, under any circumstances. We must and can awaken the public at large to this issue, the means can be found. Surely the "collective cultural imperative" for medical intervention is enormous and powerful. And surely our entire culture promotes the medical myth through film, literature, the daily news, schooling, on and on. There is an almost direct parallel with the issue of smoking in the latter half of the twentieth century.

However, no organization has as yet really set about exposing the medical myth of birth and at least trying to awaken the general public to the outrage. APPPAH has long exhibited tacit deference for the medical and obstetrical worlds along with a ready voice for the myriads of therapeutic inventions continually boiling forth from the damage done. The focus must be put on the prevention of the travesty, not therapeutic patchwork after the fact, and the apologetic dodge of "winning over" the obstetricians (into voluntarily making themselves obsolete) is an irrational argument.

Surely the task at hand is daunting, enormous, and would require careful long-range planning, carefully organized strategies for undermining the medical myth and disempowerment of women, and creating a new image of birthing and womanhood. We can't do this, however, by pussy-footing around the issue, afraid we might offend. Surely that myth is woven into every fiber of the social fabric, but that fabric is becoming our shroud - which we can and must unravel. Just as we can and must awaken in future mothers the ancient intelligence of the heart; de-condition her culturally imprinted self-doubt and fear; and restore in her the knowledge and power of *being* the mother of our race, with the courage to act accordingly. In undertaking such a restoration, we will unfold an ongoing educational agenda not only for survival but for a higher, nobler, more compassionate way of life

Documentation for the above essay is in the common domain, as much of it has been for decades - but for sake of brevity is largely left out here. I also leave out the epochal work of and references to James Prescott and Michel Odent, whose works are widely known, and readily available and no summary of such is practical here. My intent is to cover aspects of birth bonding *not ordinarily addressed*, to show how bonding effects all neo-natal development for the first critical nine months - the "in-arms" period. I will do a follow-up essay to show how the first nine-months post-natal largely determines the next nine-month "toddler period," in the same way. My point is, that there is a domino effect at work here - disrupt one portion of primary brain-body construction and all subsequent development is compromised, the victims' none the wiser.

Epilog

Alan Watts observed, "you can't catch the wind in a paper bag." Thought and intellect, the fragmented, limited, and abstracted corner of Krishnamurti's vast field, can't contain the infinite. The human brain evolved the capacity to imagine, but not the proprioceptive feedback necessary to remain completely aware that what is being imagined is only an image.

Enchanted and lost in its own process, imagined fragments are mistaken as independent realities, such as personal ego, endless beliefs, nationalism, and cultures with their inevitable conflicts, now exponentially compounded by equally dead technologies. From these emerge dead counterfeits of living processes that are assumed to be real. Starving we eat the menu for lunch, mistaking that image for what actually nourishes. How long can this go on before a starving species turns on and consumes itself, completely unaware of the infinite potential they have lost?

Each of our technologies represent dead counterfeit of living processes and capacities that are innate, embodied, and vast in their potential. Today, nearly all of humanity live in the belly of the beast, in the dead technologies and artificial environments they have imagined. Those environments and technologies are now The Model Imperative, snowballing in a dumbed-down, de-evolutionary cycle that imagines itself to be expanding. The intellect is incapable of self-correcting. As *The Frog Prince* and *Beauty and the Beast* fairy tales describe, the selfish violence of the reptilian brain needs a higher model to uplift and transform the lower into the higher, and that is precisely what a mother's kiss and female nurturing provide. Interfering, breaking the bond, and sensory deprivation of this authentic nurturing inflicts irreparable damage to the developing male body and therefore psyche, males being far more biologically vulnerable than females. Interfere and prevent each new generation from bonding and experiencing transforming attuned nurturing, and the lower eats the higher, racing ever closer and faster towards a motherless transhumanist utopia.

Michael Mendizza