

My first book, *The Crack in the Cosmic Egg*, which I wrote and rewrote for 12 years, was a protest against the prevailing academic, consensus view, which narrows our perceptions and limit us to grim necessity, as William Blake would say, to the death of spirit. In my 23rd year of life I underwent a series of paranormal events, which challenged the foundations of classical thought. These events took place with abundant objective witnesses. Over time however, I watched how these witnesses screened out or blurred-over their own perceptions, and I realized this was a necessary move to keep intact their established consensus of what was real. This selective tendency of the brain-mind is part of a general maintenance system, which keeps our collective world experience stable, and seems to function below awareness, healing little rifts in the fabric of the known.

Since these paranormal events were my direct experience, not just witnessed, I questioned their meaning, which opened a whole new realm of possibilities, and I wondered how much of our potential this automatic survival-system filters out? Through studying child-development, I saw how our cultural world view was formed by our social models; and how this view is locked into the very neural structures of our brains, not as opinion but as our world-forming, perceptual-conceptual process. When writing my third book, *Magical Child*, I started giving workshops and seminars to get feedback on my ideas. By the time I completed the book, this feedback had enlarged my original focus to include astonishing capacities and self-inflicted limitations.

Q. So your intention has always been to draw our attention to these undeveloped capacities and limitations we impose on ourselves and on our children?

To grasp the nature of adult spiritual development we must understand the nature of child development which in turn, opens fully to us only when we understand the self organizing properties of the brain and the way our brain draws on fields of intelligence and memory. The paradox of the idio-savant is a dramatic example of this and challenges large sectors of common-sense and classical belief.

Q. What is the savant?

Do you recall the movie *Rainman*, with Dustin Hoffman? It was supposedly based on a autistic person - in our current pathological use of that term. The film actually presented a combination of an autistic person and the idio-savant. Savants are people with an average IQ of 25.

They can give volumes of information in one specific, limited field such as geography, mathematics, or calendar dates. Careful research shows that most of these individuals are uneducable, illiterate, and cannot have acquired or "learned" the information they so liberally dispense. They are incapable of learning even rudimentary functions much less abstract systems such as numbers and letters. Yet, if you ask them a question concerning the particular field of knowledge they are apparently plugged into, they can respond without error.

Howard Gardner proposed that a particular intelligence such as mathematics or music are, in effect, their own field of operations with which the brain can interact. Recent discoveries in language formation bear this out.

Carl Pribram proposed that the brain "translates from non-spatial-temporal realms," potentials and functions not in time-space but which give rise to our time-space experience. All these point toward a new perspective in reality-organization and suggest an open-ended capacity at birth that closes prematurely.

Q. How do savants enter into this?

Consider the mathematical savant who was asked what would happen if you take a grain of rice and double it on every square of a checker board from top to bottom. This turns out to be 2 to the 64th power, which is a number greater than the atoms we estimate to be in the sun. It reads 18 quintillion, all the following quadrillions, trillions, billions, millions, hundreds of thousands, etc. The savant, who couldn't read, write, or learn by our processes, took about 45 seconds to spell out the answer.

Only the most advanced computers can fill in all the gaps of a number like 2 to the 64th power, as the savant did automatically. We can't say the savant's brain "computes" the answer, since he hasn't been trained in mathematics. The neurons of the brain are no more "computing" information than are the transistors in a television set "computing" the information coming from the station. The television set is "translating" from a field electronic activity generated thousands of miles away, but it can hardly be expected to be aware of its function. The savant is translating from a field of activity not in time-space, but one that gives rise to our perception of time-space.

Through training we learn about a field, as mathematics, and can engage it in dynamic two-way exchange. This opens that field of intelligence to introspection, creativity and invention, but also makes us subject to error. The savant has no awareness of his own knowledge. They can't reflect on their response nor hesitate in doubt, and never makes an error.

But they can't enter into the operation or learn about the subject. If given the appropriate stimuli, a question or request about their one area of information or function, they simply act-out, through speech or actions the operation as it takes place through them.

Q: What other examples draw attention to this new view of reality-organization?

The Eureka! phenomenon is a good example of the paradox of brain/mind and fields of intelligence. Gordon Gould, awarded the Nobel for his discovery of the laser back in 1957, spoke of that discovery falling into his head in a single flash when he was just loafing around. He spoke of being "stunned, electrified" at the enormity of what he saw in that split-instant, and spent the rest of the weekend writing furiously to get down on paper all that this insight implied. He couldn't account for the burst of knowing, but reflected that he had studied physics and optics most of his life. All this, he felt, had "fed the bricks and mortar" which had put together this magnificent edifice beneath his awareness. What then is mind, and what is awareness - who is aware of what, and in every case of Eureka!, why does the answer or discovery occur when the person is not thinking about that issue at all?

Q: This seems to imply a quality of perception that is beyond our normal definition of thinking or intelligence.

First, intelligence is the capacity to respond for one's own well-being, and so, peripherally, the well-being of one's society or even species. Intellect is a particular form of intelligence, one that abstracts from a broad field of phenomena some narrow part to examine in a linear, logical, inquisitive, exploratory, inventive way. Intellect however, only asks what is possible and is driven to explore accordingly, without any particular concern for appropriateness or well-being. Intelligence, on the other hand, moves for our well-being, or survival and asks, in effect, is what we do appropriate?

This intelligence moves the infant-child toward education, which begins in the womb. Education is being led forth into knowledge. Knowledge is knowing on many levels, such as body-knowing and intuitive understanding, emotional awareness, perceptual delight, the stuff that our real life is made of. Most learning of this sort takes place beneath awareness simply through contact with a rich environment, as Maria Montessori understood so well.

We equate education with teaching, as pouring information into a child. Montessori claimed that no teaching took place in her schools, the adults were there to keep the absorbent mind of the child open to absorb knowledge of its universe.

What we must provide is an appropriate environment, which means one rich with concrete experience and offering complete emotional security for the child, free of threat. Do this and you can't keep the brain from learning, because that's all its designed to do. Only through learning of this kind can well-being, which means high-quality survival, come about. As adult models we need to think of facilitating education rather than teaching, and ponder what well-being entails, what the brain-mind is after, what it needs. Otherwise we'll continue to spend years and huge sums of money on very little real learning.

Q: Having seen this, what are our hidden possibilities and why are they important?

For a long while academic thought has considered the brain a chemical-electrical soup, bringing in signals from the outer world and processing them into an inner facsimile of that world, which include, of course, all the information we try and "teach." Current research has pretty well exploded these notions. Consider instead that the brain is translating from fields of potential, physical, emotional-relational, and intellectual potentials, all of which are inherent within any child's system, simply awaiting the appropriate stimulus and nurturing.

Obviously we need to develop cognitive skills and discover the processes by which these fields manifest, but to spend years trying to pound information into the young person, from the top-down so to speak, is a very limited approach.

Q: You have said the capacity to learn is infinite.

Brain matter is localized, but it's operations are both in and beyond time-space, what quantum physicists speak of as localized and non-localized, as wave and particle.

Within any brain is the potential for unlimited structures of knowledge, but nothing is as worthless as infinite potential. Actual education, coming into knowledge, can only take place by selectivity, distinguishing a particular reality from the whole. And this selectivity is determined by our models, parents and society.

All processes are complementary dynamics. Brain-mind and world create each other through "structural coupling." Mind shapes its environment, which gives shape to that mind, and the two can never really be separate. An environment for the child includes all the shaping forces, including our misguided notions of schooling, testing, failing, with the inevitable guilt, anger and closure of the absorbent mind.

Within the first three years of life the absorbent mind of the child has either opened up to embrace a benevolent universe or closed down into a frightened defense mechanism on guard against a world it can't trust. Which is the root cause for the social mess we have today.

Q: This calls into question the critical role we adults play in this process.

Stages of development unfold at birth, age one, four, seven, eleven, and concluding (for now) at age fifteen. Except for birth, these are statistical averages. Any child may vary from them as much as a year, but the universality of the stages themselves is beyond question. Each stage consists of a block of potential intelligences and/or abilities appropriate to that age. For optimal development, those abilities must be stimulated and nurtured within the time frame of that stage. This stimulus-nurturing implies a model imperative. Just as no teeth could unfold unless the new infant is nourished, no intelligence or ability will unfold unless given a like stimulus from the environment. Not even the physical senses can function until the infant is given sufficient sensory stimulation. No intelligence can unfold unless the child is given an appropriate environmental model of that intelligence - someone who has themselves developed that intelligence and, in turn, provides the child with both initial stimulus and ongoing guidance in his or her own development of that capacity. There are no exceptions to this.

As part of this model imperative, the nature, character, and quality of the model determines to an indeterminable extent the nature, character, and quality of the unfolding intelligence-ability of the child. Children don't become who we tell them to be. They become who we are and the mother is the first and most important model in a child's life.

Plato said, "give me a different set of mothers and I will give you a different world," which is simply to say that the mother is the most powerful presence in shaping the emerging mind. She is the infant's environment and emotional world, and that infant has no choice except to rough in his basic knowledge of the world as he finds it expressed in her.

Q: Which implies that if we want to change the world, change childhood, we must begin with the model, by supporting mothers.

Montessori despaired over changing the adult, recognizing that once neural structures form and mature they don't lend themselves to reconstruction. She saw a way around our adult limitations by carefully designing a rich, secure environment for the child, leaving very little to chance. The environment includes of course, parents, and later teachers. But Montessori's adults didn't teach, they facilitated and allowed the child's absorbent mind to function. She let the environment teach the child.

Parents must understand the environmental needs of the child, at each stage of development. Above all, the parent must respond to the child's need for total emotional nurturing. To be betrayed by a primary caretaker is the most serious injury that can occur. And emotional deprivation, much less immediate abandoning of the infant to day-care, creates such deep anxiety that it affects every aspect of a child's growth, physical, emotional and mental. Herein lie the roots of violence, social maladaptation and most of our woes.

Q: What is it going to take to get parents and educators to truly understand the profound implications of their personal behavior and modeling?

First, we have to get birthing out of the hands of men and return it to the natural intelligence of women, who managed fairly well for untold ages and can do even far better with contemporary knowing and techniques. The modern midwife is a trained, efficient, careful practitioner who still relies on her natural instincts and body-knowing, leaving emergency methods for the rare 1% or so of labors that have problems. The whole issue is to stop intellectually interfering with the natural intelligence of the system, and treating the other 99% of deliveries as emergencies. Women need this as much as the child.

The interaction of mother and infant at birth and afterward activates an intelligence enfolded within the mother's neural system which literally empowers her to make the proper response to her child. It activates her mammary glands, charging her with the sensually rewarding desire to nurse and nurture her infant at all costs. She comes into her own as the mother of the species, a person of power.

Dr. Paul MacLean spoke of "species survival instincts" and survival is indeed the issue. Awaken these in the mother, as they were so long as women tended women at this crucial time, and support the mother as needed to follow these nurturing passions, and you will have no psychologically abandoned, withdrawn defensive, fearful children or adults.

Q: In what ways has the current birth practice destroyed this innate intelligence?

Destroyed is a bit strong, damaged is more appropriate. The damage is brought about by mother and infant being separated at birth, and even before birth. Women caught up in various pursuits preclude intimacy with the prenatal infant and prebirth bonds are natural to us. Then every action of medical manipulation at birth results in separation of mother from infant, physically, emotionally and mentally.

Each medical intervention with childbirth breeds more intervention. Each solution, each new monitoring device, creates more problems that demand more intervention.

"If it isn't broke don't fix it" is nature's dicta, to which the medical community has turned a deaf ear. Again the issue lies with certain bonding procedures which are designed by nature to take place at birth which profoundly effect the neural structures of both mother and infant if they do take place and equally effect them adversely if not.

Q: There is a general impression that birth practices are improving.

Things are better today than a hundred years ago, but there is far more publicity and brain-washing regarding birth-reform than actual fact. Those in the birthing rooms undergo all the hospital processes deemed necessary to protect the investments and income of the hospital.

I have observed births with fathers present, movie camera in hand, the doctor, having doped the mother and infant, getting the infant out, cutting the umbilical cord immediately (a disaster in itself) and placing the infant on mother's belly briefly, for the benefit of the camera, following standard procedures, just with the added theatrics of a movie. Then the father and mother proudly show the film later to prove they had bonded with infant. Such bonding is a travesty, a double lie.

Q: I understand that real bonding is only possible through prolonged and intimate contact between mother and infant.

I wish the term bonding had not been invented. For one thing it assumes that these two separate creatures must be brought together and a connection made between them. In the natural scheme of things, no separation should have taken place, no connection broken. The point is to maintain the connection established in utero in the new post-uterine experience. The mother is the environment in both cases, and the so-called bonded infant simply discovers the rediscovery of the known, its mother, in a marvelous new setting. The mother is the environment, but now a moving one, in an expanded, infinitely open world to be embraced. The known moves into an exciting unknown. That stability must be maintained if the absorbent mind is to remain open and form new structures of knowledge of a vast new and benevolent world.

If the infant is suddenly removed from all his known structures, which were established in utero, and these are extensive, and placed in isolation, as we have throughout this century, then all the genetically encoded programs for moving into the new world are seriously undermined, delayed, and are at risk. The infant retreats to defensive posture against an alien world that has brought rejection, isolation, and pain.

Q: We seem to have accepted an increasingly dysfunctional norm as normal. Why has this happened?

The major cause, separation of mothers and infants at birth, has grown throughout our century. At the same time achieving a high standard of living became the focal point of all schooling and training, creating a new mind-set and set of values. Standard of living has nothing to do with the development of intelligence, including ironically, the ability to be socialized and schooled. Quality of life determines the growth of intelligence, and as standard of living increased, the quality of life for children decreased.

Quality of life to an infant-child means only one thing: complete unconditional acceptance and emotional nurturing on the part of a permanent caretaker. We have the most emotionally deprived children on earth, separated from parent at birth, and continually separated as they grow. Convinced that we are giving them what is most important, a high standard of living, we overload them with material goods to compensate for the love and attention denied. We earn money to buy these goods by working to make them, leaving little time for the child already isolated.

So our heaping goods on the child to compensate for the love and nurturing they don't get, itself keeps the wheels of industry turning. And around it goes. Each child grows up to intensify the cycle in their interaction with their own offspring. It's an insane spiral toward chaos, sponsored and encouraged by a society based on economic games in which a few winners are bought at the price of masses of losers.

Meanwhile we build more and more prisons and accuse our young of moral failure for not becoming what we are not.

Q: What are the other factors, which have changed impacted the development of intelligence in our children?

The breakdown of the extended family was another key factor. Michael Odent once said that our attempt to sanctify a "nuclear family" made of a separate social unit of mother, father, and child is untenable. Strip away the extension of family, kinfolk, grandmothers, and so on, the backbone of all societies, and the nucleus implodes.

For largely economic reasons the extended family disappeared by 1950. By that time, through medical maneuvering, birth shifted from home to hospital, delivery practices underwent radical change, with massive medical interventions culminating in that critical separation of mother-infant. Hospital stays were lengthy affairs since the injured mother required a long convalescence.

Once at home, mothers followed the pattern established in hospital, having infants in the crib, even for bottle feeding, picking them up as little as possible and all that. Home was a single-family sealed unit, where the new mother had little access to advice or relief, and since bonding hadn't taken place, no intelligences for nurturing the child had been awakened in her and she was generally unsure and confused about handle the infant. The infant, in his or her separation anxiety, colic from incorrect diet, and general lack of stimuli, cried, day and night. Serious increases of actual physical child abuse began at that point, though the greatest abuse was emotional deprivation.

Q: Can we recoup these nurturing instincts in mothers after half-century of disruption, and on a large enough scale to save an endangered species?

A century is nothing in evolutionary time, and the intelligences at stake are ancient and powerful. Regardless of her personal birth history and childhood, any woman allowed to bond with her infant will respond according to those genetically encoded "Species survival" skills.

A 35 year old woman I know, a professional person with graduate degree, decided to have a child, her first. Thirty five is considered a high-risk period by medicine men.

This woman had a typically disastrous birth and childhood history herself, with her share of resulting anxieties and neuroses. But she was informed, and brave enough to withstand the great brainwash, avoided medical people entirely and entered into pregnancy and birth with intelligent planning, careful midwife assistance, total confidence and genuine excitement.

At the time of delivery she felt competent and in charge, delivered in her family bed with no visible signs of discomfort, and so rapidly the midwife arrived too late for anything except the clean-up. This mother was up and about the house immediately, infant at her breast, even drove to town that day. She breast fed her child for three years - the last year or so "token" feedings as needed for emotional nurturing, and scorned the library of how-to-parent books written by all the male specialists. Her own patterns of behavior and attitude changed from timorous uncertainty to ongoing energetic, secure confidence. She had come into her own through her child, and of course was, in turn, helping that child come into its own. The infant unlocks the true nature of the mother even as she unlocks the infant's.

Q: The obstetrical-hospital complex is a multi-billion dollar industry, with enormous prestige, political clout, an "archetypal" mythical imagery of grim necessity burned into the nation's psyche. How can such a structure be turned around?

I've given up on that. Women have undergone a stringent and specific brain-washing throughout the twentieth century to convince them that birth is the most dangerous and painful experience life inflicts on us, that they are themselves incompetent to deal with either pregnancy or birth. Common sense thus dictates that they should surrender their lives to male surgeons, at vast expense on every level, and few ever stop to question this. Those that do, face enormous social and legal opposition should they run counter to such propaganda. Fear is a powerful weapon and used to full effect in this case. Husbands are as terrified of home-birth as wives, both are quite willing to buy their way out of responsibility. That hospital births have a 600% higher mortality rate than home births, regardless of conditions in that home, is an unsung irony.

Further, to be politically incorrect, note this century's remarkable rise in women's enmity towards men, and men's rage toward women. The age-old "battle of the sexes," gave rise to endless literature and humor, but has now turned deadly. Many women are unconsciously angry at men because male surgeons literally robbed them of their power, their place in the universe, turned their breasts from the fountainhead of life to an advertising gimmick, and denied them any rights to their own reproductive functions. They know "Something tremendous was supposed to happen" at birth and didn't and intuitively know those lost or aborted functions were of universal significance. Women rigorously deny the source of the wound within, but it often surfaces, as anger, both at husbands and even their children, making the pair-bonding on which life and family rests divided.

On the other hand, males harbor an equally deep resentment against women since at their own birth, the time of their greatest vulnerability and need, that need was denied them.



Males carry a rift within their core as great or greater than women. That betrayal at birth was by a women, the mother, an episode known only as rejection by the infant and one that harbors so much pain he will never risk himself to such intimate openness. He wears various forms of armor and must deal with his frustration and rage as best he can.

The rest of this mess is a fallout of such magnitude that few of us, overwhelmed as we are with the immediate crises engineered, have the time or energy to trace out the root cause and address it. So the chance of changing either hospital practices or women submitting to it wholesale is probably nil. The most we can hope for is "operation life boat" - a few women who sense the nature of this largest betrayal of modern times and no longer buy into it. They will be the vehicle for a saving remnant perhaps, and we can only work to increase their number.

Q: Obviously women can handle their own at any level in the market place, run corporations as well as anyone, but do they need to shut out their deepest level of yearning to be the mother of our race as designed, rather, than just a competitor with men?

I remember back in the sixties hearing a high school teacher berate the women students for a lack of incentive and ambition, saying: "Are you just going to sit at home and have babies? Don't you want to make something of yourself?" To be a mother was held up as failure. So perhaps our late-blooming professional mothers had to work out from under that terrible social guilt trip before they could admit to their heart's desire.

Q: I knew for a long time that bonding was the most important thing, but the ongoing developmental stages, particularly development of imagination, is equally significant.

The parent as model for development is critical and the ongoing purpose of bonding. No intelligence will unfold in the child until given a model for that intelligence, and the model is an adult who has the capacity. This isn't "role-modeling" as found later in life, but the more primary need of direct environmental stimuli activating precise neural structures in the infant-child.

Q: I'm impressed that my son, John-Michael, who is now eight, still continually glances at us in any new situation, reading our responses throughout the day, not just to check how we do things, but to check our response to how he's doing. He's always checking himself out through our responses, and we don't have to say anything and often are not even aware of it.

The most common query of the toddler and early child is "Whazzat Mama, Whazzat Daddy?" And later its "Look Mamma, Look daddy!" The constant need for recognition of accomplishment and sanction for actions undertaken. A small child seriously needs to know where they stand in the adult world, whether their actions fit. Model sanction is critical, not just for a secure sense of self, but for the actual constructing of world view.

Q: Most of us had a mom and dad, a pretty stable set up, but now family is being radically redefined.

One of the many problems facing development today is our failure to provide a constant model for our children's development. parent-caretakers drop them off at the day-care center early in the morning, where a series of shifting caretakers throughout the day present a continually changing model for behavior. These toddlers are picked up by parent-caretakers late in the day for a brief, hectic evening meal bedtime preparation, a bit of television to really scramble their world structuring and off to bed. Ambiguity and confusion of relation between self and world is inevitable, adding to the anxiety of separation and abandonment suffered at birth re-enacted daily.

Q: Can't children create a structure of knowledge without models?

To activate any neural structure of brain an environmental stimulus is required. We know the uterine infant makes a physical response to the mother's speech throughout the last trimester, and that this gives the sensory-motor foundation for language itself. If the mother is a deaf mute, no foundation builds in the infant and speech will be delayed until a language environment is given. Further, as is obvious, the character and nature of the speech-model determines to an indeterminable extent the character and nature of the resulting language capacity in the child.

Consider the "pointing-syndrome" when a child points toward an object and checks out the parent's response to it, which virtually always includes a name for that object. Given sanction by this model guidance, the object in question acts as model for the child's interaction and building a "structure of knowledge" of that object, the name given being an integral part of that structure. In the same way, consider the discovery years ago that our visual system had one neural pattern built-in genetically, hard-wired into our brains, and that is the ability to recognize and respond to a face.

From the moment the newborn's head pops out and eyes open, he responds to a face if given one to see at close quarters. The ongoing development of a visual world depends on a constant visual model of a face at a distance of six to twelve inches. The infant spends 80% of his visual time zeroing in on that face, 20% looking out at other objects. The constant shift from known to unknown patterns brings about the awakening, stimulation and myelination of the whole visual system during the critical in-arms period. Denied a face as constant referent, this process can be delayed by many months and vision is itself never as efficient. The game holds for all other intelligences and abilities, whether physical, intellectual, musical, mathematical. or whatever. No model, no structure, and the structure reflects the model.

Our children don't develop intuition, though this major intelligence opens for development around age four, since this is not part of our cultural heritage. The Australian Aborigine, on the other hand, develop this capacity to a superb degree and, as a result automatically pass it on to their children. Even our perceptual world closes in early childhood according to the nature of models provided. Marcia Mikulak found that in children of preliterate societies in Africa, register 25 to 30% more environmental stimuli than our children do.

They are more aware of their surroundings, hear more, taste more, smell more, see more objects and can name more of those objects than our children. They simply know more about the living world around them.

Q: Piaget and developmentalists in general distinguish between an initial concrete language where words denote actual objects or events and a late maturing semantic language where words are self-referent and so can represent state of mind or abstract concepts. This is the kind of word structure on which all higher education is based. You claim that early storytelling and play are critical to the development of these later maturing intelligences. Concrete language, word and object being a single neural pattern leads to the ability to create internal images of objects no longer present to the sensory system, which in turn leads to the whole realm of imagination and creative thought. We need to go back and re-establish how words create mental images, a function setting us apart from all other animal life.

As I mentioned a while ago, our toddler spots an unknown object, does that fast check-in with his caretaker to get their reaction, and, given sanction, interacts with said object to taste, touch, smell, look at, talk to, and so on, which action brings about a full sensory-knowledge of that object.

Critical in this is the name for the object given by the caretaker. If the caretaker doesn't name the object, the toddler points and demands a name: "Whazzat Mama?" That name enters into the neural processes of brain processing that experience, giving what Piaget called a "construction of knowledge" of that object, a critical part of this structure being that name. It is as much a part of the construction as sight, taste, touch or whatever, not an appendage to it.

Now the trick is, in the absence of the actual object, the name alone will stimulate the neural network involved, bringing about an internal, or mental, partial re-construction, a memory of, or "picture" and impression of the object. That's why language is essentially metaphoric, it stands for a concrete event in the child's experience and can, when employed, stimulate memory of that event.

All learning, memory, creative thought and later "abstract thought" as in higher education are dependent on this capacity for internal imaging. The brain communicates with itself through various forms of imagery, quite beneath our awareness. We say "I see" to indicate we understand something.

Q: So this is a logical place to move into play and storytelling.

Long before the infant can speak words, he understands the gist of adult speech and is fascinated with it. Before age two the toddler is mesmerized by story telling, all body movement stops and they stare intently at the source of the words. What they are seeing, however, is an internal representation of those words, an inner visual world created in response to the external auditory stimulus. Each word stimulates its related neural network not only to create an internal facsimile, an image, but connect that image with those of the preceding and succeeding words, bringing about a flow of images as the story unfolds.

To create this flow of connected imagery the brain must find new neural connections between its myriad sensory-maps, those networks giving us our knowledge of objects, the twenty five or so areas of the brain involved in vision itself, and all the auditory structures as well.

The challenge is so demanding no energy is left over for other processing, which is why the youngster goes virtually catatonic, stock still and spellbound during story telling. Each new story forces employment of myriad of new neural routings, each literally expanding the brain's neural structures and strengthening previous ones. The reason the young one wants to hear the same story over and over is that through repetition those new neural fields and connections between fields are stabilized. The long axons involved myelinate, making that new capacity for inter-communication between brain areas permanent.

The brain growth spurt provided by nature at the beginning of the first four stages of specific learning, at birth, age one, four and seven, are utilized primarily through story telling and the play that arises from it. Denied these two stimuli of story telling and play and those new neural additions are wasted and eventually removed from the circuitry. Use it or lose it is nature's dicta.

Q: I would suggest that if parent and child are involved in a story there is a shared perceptual experience adding to and strengthening the whole bonding process.

A child nestled in your lap for story telling is sharing your subtle emotional fields, the resonance of your words themselves, as well as the warmth of shared worlds. The levels of exchange go far beyond just an audio-visual stimulus-response, as with recording or radio; the model imperative enters on even stronger ground.

Q: I want to move to the last chapter in your book. How would we summarize it?

I would say the first fifteen to eighteen years of development is to establish us as strong individuals, or egos, in a physical body and physical world, able to handle these given, created products. All of which is but the appropriate foundation for an adult stage of development designed to open after adolescence, which leads us to discover ourselves as creative creatures in a sea of creative process. This is an extension of Piaget's movement from "concreteness to abstraction" or the physical to mental. We are designed to move from physical identity to spiritual identity, recognizing that the higher is nested in the lower, completely dependent on it though at a discontinuity from it.

Bernadette Roberts spoke of spiritual development as true maturation. We could use David Bohm's holomovement metaphors. He speaks of moving from the explicate order of energy, the temporal-spatial world of things, to the implicate order of energy, the "frequency realm" giving rise to the physical. And, of course, this itself is but the gateway to the supra-implicate order that causal realm giving rise to creation itself. And finally Bohm's "realm of insight-intelligence" from which everything flows. This is the progression of developmental stages awaiting our true maturation and entry, what evolution has in store for us. And we embrace this potential by embracing exactly what we are and where we are, physical body-souls on a physical-spiritual earth.

The three year old is not an incomplete adult but a perfect three year old. He or she becomes a perfect adult by being perfectly a three year old. We "prepare" for future development by being completely and totally here and now within what has been given us, not by rejection or renunciation of that given body-world. We either carry the totality of our being with us or are involved in airy flights of fancy. When the higher function incorporates the lower into its service, as it must to develop, the lower is transformed into the nature of higher. It is not left behind. As Meister Eckhart once said, in his rather flamboyant excess, when God comes into Meister Eckhart's soul, Eckhart becomes God, and God becomes Eckhart. That is rather what the evolutionary process and human development is about.

End

Joseph Chilton Pearce is the author of many books including *Crack In The Cosmic Egg*, a national best seller *The Magical Child*, and most recently *Evolution's End*. For over twenty-five years Joe has lectured internationally on human development and the changing needs of children.

He was a faculty member on child development at the Jung Institute in Switzerland. He spoke on the new paradigm of human development at the seventh annual Transpersonal Psychology conference in India. Oxford University invited Joe to present the impact current obstetrical practices are having on the development of child intelligence. The Canadian Government sponsored a workshop with Native Americans on the prevention of violence and substance abuse. Sony Corporation sponsored a seventeen-day lecture series on the future of education in Japan. He addressed Hawaii's crime prevention commission on the current causes of crime and violence. The State of Louisiana sponsored an address on the crisis facing the American family. Three different departments at Harvard University, the University of California and Stanford University have each sponsored educational conferences featuring his work. The Governor of California invited Joe to address two special legislative planning sessions on the challenges facing children and families. Last year at Columbia University he addressed special conference on education in the 21st century. Currently he is studying and lecturing on the "intelligence of the heart.