

**ARTICLES**

<b>Editorial — A Strong Voice for the Child in Education</b> by Ron Miller	<b>2</b>
<b>A Mouthful of Flowers: Ecological and Spiritual Metaphors from Early Childhood</b> by David Sobel	<b>3</b>
<b>The Spiritual Realm within a Holistic Conception of Child Development and Education</b> by David Hutchison	<b>12</b>
<b>Holism and Meaning: Foundations for a Coherent Holistic Theory</b> by Ron Miller	<b>23</b>
<b>A New Wineskin for Holistic Vintage</b> by E.M. "Mac" Swengel	<b>33</b>
<b>Synergy, Holistic Education, and R. Buckminster Fuller</b> by Alex Gerber	<b>44</b>
<b>The Humanistic Paradigm in Education</b> by Roy José DeCarvalho	<b>51</b>
<b>Progressive Activists Form National Education Group</b>	<b>59</b>

**DEPARTMENTS**

<b>Book Reviews</b>	
<i>Educating Psyche: Emotion, Imagination and the Unconscious in Learning</i> by Bernie Neville	<b>61</b>
<i>Spare the Child: The Religious Roots of Punishment and the Psychological Impact of Physical Abuse</i> by Philip Greven	<b>62</b>
<i>The Long Haul: An Autobiography</i> by Myles Horton, with Judith Kohl and Herbert Kohl	<b>64</b>

*Cover photo of Justin Lloyd-Miller by Ron Miller. Quotation from Holism and Meaning: Foundations for a Coherent Holistic Theory in this issue.*

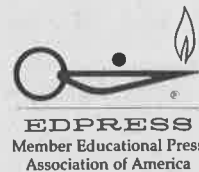
**Holistic Education Review** is an independent journal, having no philosophical or financial affiliation with any organization, institution, or political group. It aims to stimulate discussion and application of all person-centered educational ideas and methods. Articles explore how education can encourage the fullest possible development of human potentials and planetary consciousness. We believe that human fulfillment, global cooperation, and ecological responsibility should be the primary goals of education, and we will inquire into the historical, social, and philosophical issues that have prevented them from so becoming.

**Holistic Education Review** (ISSN 0898-0926) is published quarterly in March, June, September, and December by Holistic Education Press, 39 Pearl Street, Brandon, VT 05733-1007. Annual subscription rates are \$26 for individuals and \$40 for libraries. (Foreign subscribers, please add \$9 to above rates.) Single-copy price is \$7. Application to mail at second-class postage rates is pending at Brandon, VT, and at additional offices. POSTMASTER: Send address changes to **Holistic Education Review**, 39 Pearl Street, Brandon, VT 05733-1007.

Editorial and Business/Subscription Offices:  
 Holistic Education Press, 39 Pearl Street, Brandon, VT 05733-1007

Publisher and Executive Editor: Ron Miller, Ph.D.  
 Contributing Editors: Edward T. Clark, Jr., Ph.D., Philip S. Gang, Ph.D.  
 Editorial Assistant: Jennifer Lloyd, M.A.

Copyright 1991, Holistic Education Press



Modern educational systems are driven by two overriding aims: to inculcate the dominant adult culture into the young generation, and to mold the young into a competent, efficient work force. The first aim is advocated, and clearly articulated, by conservative educators such as E.D. Hirsch, Chester Finn, and Diane Ravitch, with their emphasis on "cultural literacy." The second aim is expressed forcefully by corporate leaders, governors, and other politicians, like Secretary of Education Lamar Alexander. When educational issues are addressed in federal and state governments, in the mainstream press, and in school district policy making, these voices, and these points of view, are distinctly heard and rarely seriously challenged.

Yet there are *thousands* of educators and parents who hold a different vision of education, a vision that is child-centered, respectful of personal and cultural diversity, and hence more genuinely democratic than established educational systems. This vision is represented by many innovative approaches and methods: whole language, cooperative learning, Montessori schools, experiential education, "alternative" schools, Waldorf schools, progressive education, the integrated day, learning styles, global education, home schooling, and much more. Educators and parents who support these approaches insist that education is not about "cultural literacy" and economic competitiveness so much as it is about *nurturing the full and healthy development of every child's latent potentials*. This is a profound vision, and a legitimate alternative to the dominant aims of modern schooling — but the various communities of child-centered teaching are largely ignored in educational policy making today; *their voice is almost never heard* in the times and places where it counts the most.

Quite simply, we urgently need to change this situation. It is time for our voice to be heard, to be understood, and to be reckoned with. It is time for every child's healthy human development, and every child's unique and precious possibilities, to have a voice in education. Dear readers, *WE* are that voice — and it is absolutely imperative for us to step forward to claim it now.

Political and corporate leaders, seeing children as little more than an exploitable national resource, have put together an educational agenda based on national standardized testing (leading inevitably toward a national standardized curriculum), a constricted view of educational achievement and "excellence," and a pedagogy of control, cajolery, and coercion. These leaders intend for education to more efficiently replicate the dominant culture, with all its current flaws and

## EDITORIAL

# A Strong Voice for the Child in Education

inequities, in a docile and obedient young generation, and for schooling to be a national training program for the corporate economy. This is nothing new — these have been the goals of American education since the time of Horace Mann — but today the voice of inculcation and control is more powerful than ever before, represented at the highest level by the "education President" himself and amplified by a spreading national fear over the declining economy and decaying moral core of our culture. Today the dominant voices are narrowly conservative, and that is limiting enough, but when people fear imminent societal collapse they become susceptible to the still more repressive voices of demagoguery and fascism, and I believe we are dangerously near that situation today. It is time to speak up.

This is what we need to do: We must stop speaking out *only* on behalf of our particular educational communities; we must not advocate *only* for whole language, or Montessori schools, or learning style techniques, or any other approach in isolation. We must speak on behalf of the child, on behalf of *all* educational approaches that nourish healthy human development. We need to establish a *coalition* of child-centered, humanistic, progressive, alternative, and democratic educational movements that will represent all of us in policy-making decisions, in the national press, and in professional circles. This should involve several key components:

- A national advocacy center, which would issue press releases, policy statements, and other documents wherever and whenever important educational issues are under consideration.
- A networking and lobbying effort, which would establish working contacts among the many diverse child-centered educational communities, and between this movement as a whole and key political, academic, and media figures. It would also need to network with other movements that are working for greater democracy, justice, and compassion in this society.
- A clearing house for research (to back up the value and effectiveness of

progressive educational approaches) and resources (training, consulting, publications) upon which local groups of teachers, parents, and policy makers would draw to augment their understanding of innovative and person-centered approaches. A national network would facilitate local organizing, lobbying, and training efforts.

- Publications, like *Holistic Education Review*, that advocate a broad vision of a transformed system of education and keep educators and parents informed about new developments, conferences, books, and other materials in diverse alternative movements.

Several organizations have begun to work toward this vision of a unified coalition: the Global Alliance for Transforming Education, the Network of Progressive Educators, and the National Coalition of Education Activists. Discussions are already underway to find out how these groups might effectively join forces.

I call upon you, readers of this journal, to join and support these efforts, no matter what your commitments to specific schools, communities, and organizations. All of us are, of course, too busy to get involved — nevertheless, we need to become involved. Our resources are all stretched to the limit — but we simply must find new and creative ways to finance an effective national organization that will work on behalf of us all. This is no time for rivalry or suspicion; we must honor the very real differences in our approaches even as we agree to join hands for a larger cause. The repressive voice is dominant because it is unified; the progressive voice, although shared by thousands of good and caring people, is ignored because it is fragmented, and flailing about at the margins of political and academic discourse.

It is time to put aside our rivalries and join together. I urge you to join the Global Alliance for Transforming Education (4202 Ashwoody Trail, Atlanta, GA 30319), the Network of Progressive Educators (P.O. Box 6028, Evanston, IL 60204), or the National Coalition of Education Activists (P.O. Box 405, Rosendale, NY 12472). If you already belong to an educational network or association, then work to have it become affiliated with this emerging coalition. And finally, consider becoming an activist yourself, at the core of this movement, devoting full time to the networking, organization, advocacy, and fund raising that will be required. We are trying to find ways to create full-time paid positions, and we will need dynamic people to fill them. Contact me through the *Review* if you want to explore any of these proposals. Let the voice of the child be heard in education, and in our culture at large!

— Ron Miller

# A Mouthful of Flowers

## Ecological and Spiritual Metaphors from Early Childhood

by David Sobel

### "Observations and Reflections on Dadhood and Daughterhood"

I started keeping a journal, entitled "Observations and Reflections on Dadhood and Daughterhood," two days before my daughter Tara's birth on October 5, 1986. This journal process has all but eclipsed my other journal attempts. No longer can I record my dreams or exotic travels. Instead, my hands are kept full just capturing the fleeting moments of life's fullness, or preserving, with integrity, the gems of insight that come as Tara describes her experience and makes sense of the world.

My journals document a wide range of experiences. Illustrating my academic bent, much of what I have documented is Tara's language development. As often as possible, I try to transcribe her comments and our conversations verbatim, and I sometimes write as I sit and talk with her. Collecting epiphanies of cognitive development has been foremost in my collector's mind. But the journal has also been a vehicle for exploring the meaning of fatherhood, and for reflecting on my own personal development and the increased scope of the emotional world that parenthood has opened up for me. Although I had taught human development for years prior to having a child, I really wasn't prepared for the waves of startling new feelings that washed over me in the first few years. It was like being torn from my raft and rolled along the bottom in heavy surf. Sometimes, I didn't know which way was up.

An integrated quality of objectivity and reflective subjectivity has emerged from keeping these journals. It became clear early on that parenthood and childhood were injecting serious, no-nonsense lessons directly into my bloodstream. My journal has helped me to focus clearly, to listen with a philosophical ear. The result has been my realization, especially in the past year, that Tara speaks great wisdom about the world, and our relationship to it. Rachel Carson has spoken eloquently about "a sense of wonder." What I have discovered in her and rediscovered in myself, through my discussions with my daughter, is "a sense of metaphoric insight." Both in her weaving together of the world and in my searching for metaphors to accessibly explain the world, I have found my way to understandings that,

*David Sobel is co-chairperson of the Education Department at Antioch New England Graduate School in Keene, NH. When not listening to his children, he teaches courses in developmental psychology, science education, curriculum theory, and the ecology of imagination in childhood. His special interest is in the child's relationship to the natural world and the ways in which this relationship can unfold in an authentic manner.*

---

**The inner life of childhood bubbles to the surface in young children's language. When correctly tuned, the attentive ear can harvest a wealth of instructive metaphors about our relationship with trees, angels, and other beings.**

---

up to this point in my 40 years, have been hazy. For this, I am thankful.

### The metaphoric roots of early language

Art Linkletter, in the late 1950s and early 1960s, popularized an appreciation of early language with his book, *Kids Say the Darndest Things*.<sup>1</sup> On his television show, Linkletter invited parents to send in the unusual things that their children had said, and he read them on the air and then assembled them in the book. It was like a precursor to the television series "America's Best Home Videos." A mother of an eight-year-old recently shared one of these in one of my graduate seminars. Her daughter had been hard at work in the shed, her art studio, and appeared after an hour with an elegant poster to be displayed at the general store next door. Around an attractive illustration read the bold edict, conceived in all seriousness, "Save the elephants. Don't use Ivory Soap!"

It's easy to see how this young girl could make the mistaken connection between the killing of elephants for their ivory tusks and the brand name of Ivory Soap. We are prone to consider these literalisms merely cute, but underlying many of the engaging comments of young children are clues to the nature of their thinking and the inherent structure of language. In this case, the eight-year-old's inclination towards literalism and concreteness in language is demonstrated. In younger children, from 18 months to six years, we are often treated to glimpses of the metaphoric underpinnings of language.

Heinz Werner, the German developmental psychologist, paid close attention to the qualities of the perceptual world of early childhood.<sup>2</sup> Contending that the progress of development is from undifferentiated perception in childhood to articulated perception in adulthood, he attempted to describe the qualities of a perceptual world with malleable boundaries between the subjective and objective worlds in early childhood.

One illustration of the undifferentiated quality of young children's perception, Werner claimed, is their tendency to experience the world *syn-*

*aesthetically*, in blended sensory modes. By this he meant that the senses of seeing, hearing, smelling, tasting, and touching often merge together. We are familiar with this in our experience of smell and taste. Things that smell bad evoke a bad taste in our mouth. And when we can't smell, it's difficult to taste. But young children sometimes experience this blending in seeing and hearing as well. One specific form of synaesthesia is *chromaesthesia*, or color hearing. Individuals who experience chromaesthesia experience certain sounds as having specific colors.

In his autobiography of place entitled *The Lord's Woods*, Robert Arbib described this form of perception at about the age of seven:

Carl said I was crazy. How could something you couldn't see have a color? In the dark, my brown army blanket smelled blue, not brown at all. Old Mr. Wheeler down the street smelled blue, too. Like a penny, or a nail. Carl thought it was dumb. But to me, even sounds or letters came furnished with colors. One morning last year in third grade I told Miss Wilson that the letter S was blue. She asked me whether other letters had colors too. I told her that A was yellowy brown. (In cat, though, it was yellow.) I was silver. O was white, of course. U was gray. Everybody was laughing. Miss Wilson thought I was goofy. She didn't say so, but she stared at me for a long time and then turned her back to the class. I think she was crying, and I was sorry. (Even with my eyes closed, the woods smelled green, and always would.)<sup>3</sup>

Although most adults experience the senses as distinct and separate, like the separate rooms in a traditional house, children can experience them as being fluidly merged, like the kitchen, dining room, and living room in an architecturally modern house with only partial walls delineating the spaces. Experiences don't fit into neat sensory-mode packages; for example, seeing a beautiful meadow might easily evoke the sounds of music for children, or it might taste delicious to them.

The existence of the synaesthetic experience in childhood suggests a biological foundation for metaphor. The same tendency that unifies the experience of sight and sound also

merges the perceptions of experiences in the child's everyday life. I recall a comment from a child when I was teaching a group of four-year-olds. One morning, after a night of disturbed sleep, I took off my glasses to rub my tired eyes. One of the children exclaimed, "Your eyes look so soggy!" That *soggy* is an adjective normally associated with wetness and not conventionally applied to eyes never occurred to this child (my eyes were not teary or wet). Via the unifying feeling of something like *droopiness*, this child bridged the gap between eyes and the characteristics of wet things. This tendency toward metaphor comes out of the child's intuitive sense of the unity of all things — a unity between things in the object world and a unity between the child and the object world. Walt Whitman illustrated this foundational unity in his oft-quoted, "There was a child went forth every day, and the first object he look'd upon, that object he became."

This unifying principle holds true in much of the young child's language. Images or emergent concepts that are in distinctly separate realms will often get kneaded together in spontaneous metaphor. The unifying tendency that allows children to see analogies across wide chasms of adult perceived distinction often disappears as children move toward concrete operational thinking and become conscious of the "silliness" of these metaphors. This unique language phase seems to peak between ages two and five.

Let me share an assortment of examples from Tara's speech in her second and third years to illustrate how this metaphoric way of seeing is deeply ensconced in the child's perception of the world. The final example is clearly illustrative of chromaesthesia, while the others are predominantly visual analogies.

August 23, 1988 (age 1 year, 10 months).

A beach game played two or three times this summer has been "playing gator." Tara and Toby (an adult friend) try to hide behind the rocks in the shallow water. I am the alligator and creep through the water, with just the top of my head sticking out, searching for them. When I get close, I lunge and roar and miss them. They scream and laugh and splash. The last time we played this was about six weeks ago.

On a long afternoon walk down to the Otter Pond just with Tara, we stop by the edge of the water to look. I point out a frog stationary in the water, head slightly above the water and body floating below the surface. Tara whispers to me, "Frog playing gator," making the analogy between the gestalt of my body while playing the game and the frog's posture.

November 26, 1988 (age 2 years, 1 month).

On a walk today, we stop to watch a bunch of midges circling in a cluster in the air. Tara says, "They're juggling," referring to the clowns we saw juggling about a week ago. I realize that the haze of midges does look similar to the haze of balls suspended in the air when juggling. We had said very little about juggling since the circus, and it had not seemed to have much impact that day.

August 29, 1989 (age 2 years, 10 months).

After dinner, my wife, Wendy, and I are sitting on the couches looking at the newspaper. Frustrated by this lack of activity, but also responding to the concentration on our faces, Tara says, "You have to be mean to look at words." And then, as if to translate, she says, "You have to be serious."

September 11, 1989 (age 2 years, 11 months).

Tara comes downstairs after her nap. There had been a thunderstorm just as she was going to sleep. We have this conversation:

Tara: I heard some pink thunder. Not soft, but a little loud.

David: What color is loud thunder?

Tara: Avocado! Avocado green!

David: Any other colors?

Tara: Blue thunder is a little loud too.

As teachers we often struggle to get students to see the world metaphorically. We concoct exercises, using "right hemispheric" techniques to cultivate a different way of seeing the world. But rather than trying to teach something new, we are really trying to uncover, or dust off, a facility for thinking and seeing that is inherent in early child development. The process of making sense of the world is one of making analogies between disparate things. The child is born with a metaphor-making capacity that facilitates leaps of imagination — the analogizing of bugs and jugglers, chainsaws and cheese, faces and airplanes. This capacity to make connections

also gives children access to creating unusual and telling ideas about ecological concepts.

### A "Council of All Beings"

Much has been said about children's tendency to perceive the inanimate objects of the world as alive. Dolls and stuffed animals are easily animated by the young child. Sticks readily become snakes or horses. This tendency is often compared to the Native American's investment of living qualities in the wind or the flowers. Although we acknowledge and accept this tendency as charming or endearing, we tend to conceive of it as a primitive attitude, the characteristic of minds not yet objectified or acclimated to the structure of the real world. But with new interest in the conception of Gaia, the planet as a self-regulating, metabolic organism, it may be time to reevaluate our attitude toward anthropomorphizing or personifying the natural world.

---

## The animation of the natural world is a way of creating living bonds with the ecosystem.

---

In responding to Tara's comments that suggest her sense of the aliveness of the natural world, I try to support and encourage this "misconception." Some people feel that this misleads the child into false views of the world. It's like the myth of Santa Claus that falls apart at age six. Upon discovering that Santa doesn't really exist, children are crestfallen and broken-hearted. Wouldn't it be better not to cultivate the fantasy in the first place? As regards Santa, I haven't made up my mind. But as regards the natural world, the answer is clear to me: The animation of the natural world is a way of creating living bonds with the ecosystem. If children feel that the wind, earth, and water are their "friends," then they will feel a protective commitment to them as they mature.

The following examples illustrate Tara's natural inclination toward personifying the world. Similar to the tendency toward metaphor in lan-

guage development, I feel that these examples suggest a developmental tendency toward building a relationship with the natural world.

September 19, 1990 (age 3 years, 11 months).

We are driving back from Peterborough, and I start talking about how foggy it is. Tara wants to know what fog is, and I say it's when clouds get sleepy and they come down to rest on the ground. She thinks about this and asks with a giggle, "The clouds think Mother Earth is their pillow?"

In this situation, I certainly paved the way for her response in the explanation that I chose. This was intentional on my part. From experience, I have learned that these kinds of explanations are accessible to children. The explanation starts from known concepts (clouds, getting sleepy, lying down for a nap) and assembles them to create a new understanding. I have personified clouds by saying that they get sleepy,

but this comes from my desire to support children's empathy for the natural world. Tara's question adds a kind of comfortable grace to the picture. Her image suggests an intuitive friendliness between clouds and the Earth that had been lacking for me. Whereas I have seen clouds and the Earth as related elements of the natural system, I was not used to seeing them as cuddling up with each other.

Tara and I have developed a much more elaborate form of this personification in regard to the moon. Driving back from a wedding at the end of August, 1989, Tara started talking to the full moon as we drove along. It felt completely natural for me to provide the moon's voice (low, soothing, and perhaps a little grandmotherly) and respond to her. The moon asked her about her day and she responded chattily, looking at and addressing her comments to the moon. This relationship developed a functional value when Tara and I went out for walks at

night. Inspired by Jane Yolen's wonderful *Owl Moon*,<sup>4</sup> we developed a tradition of going outside to call in owls on full moon nights.

*November 11, 1989 (age 3 years, 1 month).*

*I went out owling with Tara tonight. Warm 40s and blustery. We walk along the road to the Monadnock-Sunapee trail and then turn up the path through the woods. Tara walks a lot of the way up until a thick patch of darkness scares her. Then I pick her up. At the waterfall, Tara talks to the moon:*

*Tara: It's kind of scary out here in the darkness.*

*Moon: Oh, I'll protect you, and there are lots of friendly animals around. Deer and rabbits and skunks....*

*Tara: I have a skunk hat! [refers to the hat she is wearing, which is a fanciful interpretation of a skunks' head.]*

*Moon: It looks so soft. If I had hands, I could reach down and touch it.*

*Tara: Well, I could glue hands on you. [She reaches up and makes some gluing motions with her hands in the air.] There, I did it.*

*Moon: Great! I'm reaching down and feeling your soft hat, and here's a soft moon kiss for you.*

My emergent objective (in other words, I wasn't clear about this when we started moon discussions) is to have Tara feel as though the moon is her friend so that she feels accompanied, not alone, in the dark. Starting from her native tendency to talk to the moon, to imbue it with consciousness and personality, I have encouraged a relationship that is soothing and reassuring. I remember distinctly when I was twelve years old an experience of being out in the night looking for something lost. Huddled in the bushes, scrabbling in the leaves, I realized I was not afraid of the dark. Instead of the anxious, empty feeling in the pit of my stomach I normally felt at night, I felt embraced and softly held by the darkness. The darkness, and the wild unfamiliarity of the woods by association, felt less alien and more accessible. It is my fantasy that I can support the emergence of this kind of feeling tone in Tara's relationship to the dark aspects of the natural world, in part, through encouraging her personification of the moon.

Brooke Herter, in an unpublished essay on moon dancing, describes a memory from age six when her mother would rouse her and her sister in the middle of the night to dance in the light of the full moon. Her mother awakens the girls, issues them out onto the moonlit, dewy grass and watches from the door. Herter describes:

My mother at the door, framed in the moonlight, bridging the world of home-safeness with the reign of moon-magic. We jump and run, backwards and forwards, rolling over, never touching, but always entwined by a triangular thread that embraces each other and our home. [Later, back in bed, as her mother leaves ...] She is gone, down the hall, leaving a smell of freshness and evening lingering by my pillow. But the moonshine stays till my eyes close. Playing in my room, waking the books and stuffed animals with its touch. I feel intrigued, small; I think I have a friend in the moonshine, but I'm not sure.

In recollecting on the significance of these experiences, Herter explains:

In recalling my moon-jumping sojourns of the night ... I am reminded of the absolute wonder of those evenings. As a child, I had no words to describe the largeness of the moon, the deepness of the night or the sweetness of the air. But I had a child's knowledge of an everlasting pact, friendship, bond between myself and the natural world.<sup>5</sup>

By fostering this "friendship" with the moon, Herter's mother created a bond between herself and the natural world. Similarly, in Tara's talking to the moon, I hope to encourage the same kind of foundational trust that will provide the sustenance for an environmental ethic to emerge.

This final account has less to do with personification and more to do with the deep empathy that children have with living things. As skittish animals will often flock to children, so children flock emotionally to animals, even cold-blooded ones.

*December 23, 1989 (age 3 years, 2 months).*

*We stop at the Peterborough Fish Market, and Tara looks in the display cases. There is a platter of whole, uncleaned trout. Their unlidged eyes stare blankly, their mouths are agape as if they died in mid-sentence. Tara blurts out, "Those fish aren't happy! Why are they in there? Why are they dead?"*

*They want to be swimming around in the water."*

*In the car, as we drive away, she is very insistent. "I feel sad about the fish." And she starts to sob. Not crying, but wracking, deep sobs of swollen emotion. Her sobbing is so heartfelt that I feel teary myself. I try to explain that the fish give themselves to us so we can eat them, but she insists that they don't want to be dead, that they want to be swimming around in the water. It's hard to refute her conviction.*

Then, some six months later, another related discussion. I do not recall intervening discussions on the topic of fish.

*July 13, 1990 (age 3 years, 9 months).*

*After seeing Alice in Wonderland in Robin Hood Park, Tara and I are riding home in the car. Spontaneously, she initiates a conversation unrelated to anything I can remember in the last six hours. "Isn't it sad when fish die? Why do they have to die?" It is evident that she has been thinking about this, and I can sense the day when she will not want to eat fish. I say sometimes it makes me sad, but I also like to eat fish. When I say that the fish become part of us, our skin, our hands, when we eat them, it makes it better somehow. She laughs and smiles at this silly and happy idea.*

Inherent in this sympathy for fish are, I think, the seeds of an inherent respect for all beings. Joanna Macy's work on the "Council of All Beings" aspires to having people feel a deep affinity with all organisms with which we share the planet.<sup>6</sup> We should respect not only the glitzy, cuddly mammals, but also the creepier, less human life forms like bugs and horseshoe crabs and fish. The deep ecology movement aspires to have humans recognize the integrity of all species. My sense is that this is an old understanding rather than a new one from both the phylogenetic and ontogenetic perspectives. It was the mindset of our genetic forebears, the hunter-gathers, and it is an intuition of young children, to sense the camaraderie between people and other organisms. And trusting that Tara's inclinations and feelings are representative of young children, it would appear that this empathy extends to nonliving organisms like the moon and the

clouds. As the metaphoric tendency of early childhood bridges the gap between images and concepts in language, it also bridges the gap between unlike organisms and creates a kind of interspecies empathy. Cultivation of this empathy in early childhood is one of the foundations of living lightly on the planet.

### Photosynthesis and interdependence

One of the clearest expressions of this kind of foundational empathy came at the end of a long discussion between Tara and me on our way to the dump and to pick up the milk, a Saturday morning ritual. I like taking Tara to the dump to provide a concrete image of where things go when we throw them away. She helps throw the bottles into the recycling bins. A few weeks earlier we got to see the behemoth metal recycling truck drop off and pick up the immense 30-foot-long recycling bins.

At the farm we watch Diana hand-milking the cows, we pick up the Angora rabbits, we feed apples to the horses or pigs, and we build forts in the hayloft or ride the sheep. These

December 9, 1989 (age 3 years, 2 months).

Tara walks out of the house and sees exhaust coming out of the exhaust pipe of the truck. She inquires, "Daddy, is the truck making new soil?" I don't know if her reference is spawned by the notion of something coming out of a pipe making new soil or whether she is analogizing exhaust and poop. (A few days prior to this, when I told her not to stand in the exhaust because it would make her sick, Tara had asked, "Does the exhaust make the air sick?") In any case, the discussion leads to my making an analogy between us eating food and pooping and the truck eating gas to make it go and then making exhaust, which is like poop. In response to this she asks, "Is it like sawdust?" analogizing what's left over after you cut wood with what's left over after you eat and poop.

We get in the truck and are driving down the road. Some minutes have elapsed, and I think the discussion is over, but she asks,

Tara: Well, what do trees eat?

David: They drink water that they suck up from the ground.

Tara: With their bottoms? [She says this incredulously, thinking that this is different from what she does with her bottom].

David: Yes, and they breathe air and eat things from the soil.

---

## *It took the naive wisdom of Tara's young mind to make the final analogy between those tangible, physiological connections and the binding unity of love among all organisms.*

---

encounters often lead to talking about what animals eat and how we sometimes eat animals. The following discussion seemed to fit our Saturday morning ritual because of its underlying emphasis on where things come from and where they go.

In the two weeks prior to this discussion, there had been some family discussion around where the poop goes when you flush the toilet. My wife, Wendy, had said that the poop and the water go down through some pipes and into the backyard, out behind the barn, where they get made into new soil.

Tara: But what do they eat from the soil?

David: Little things in the soil. [I respond, not knowing how to be more descriptive.]

Tara: But what do they eat? [She demands insistently. She is getting frustrated with my oblique answers.]

David: Vitamins. [I say finally, seizing on the closest analogy that I can find in her everyday experience to the raw materials that trees extract from the soil. This tangible image seems to quell her need for an answer. I can image her envisioning lots of little pills hidden in the soil. The trees reach out with the fingers of their root bottoms somehow and....]

Feeling successful with this analogy I pulled from the empty hat of my mind, I forge ahead with the Golden Guide to Photosynthesis.

David: And the neat thing is that we kind of share the air. The air we breath out of our mouths, the trees breathe in with their leaves. And the air the trees breathe out of the leaves, we breathe in.

Tara: [She considers that for a moment and then summarizes.] And so, there's a little bit of love between us and the trees.

This conversation seems striking at many levels. In the beginning, the analogies are flying a mile a minute. She analogizes exhaust and poop, herself and the air, then poop and sawdust. As we drive down the road, the unseen analogy that operates in her head is, "Well, if we eat and trucks eat, then trees must eat," which then translates into her next question. I am also struck by her persistence regarding what trees eat. "Little things" just didn't cut the mustard. Having entered into this discourse about what things eat and poop, she was intent on filling out the analogy quest with a concrete answer.

Finally, her last comment really wowed me. It was as if the comment had dropped out of the collective unconscious and into her unsuspecting three-year-old mind. Yes, of course, I thought. How could we express this idea any more clearly? Didn't Barry Commoner say that one of the main ecological principles was that "Everything was connected to everything else?" But it took the naive wisdom of her young mind to make the final analogy between these tangible, physiological connections and the binding unity of love among all organisms.

What could be a better foundational principle for ecological living? Perhaps there's a little bit of love between all of the organisms that breathe in and out the same air.

### Energy and matter are neither created nor destroyed

Although I am a firm believer in environmental education, certain forms of it rub me the wrong way. Too often, people teaching environmental education fall into the same trap as do science educators. Teaching the value

of salt marshes or mineral recycling to fourth graders is as problematic as teaching the contrasting particle and wave theories of light to eighth graders. These concepts, in most forms, are prematurely abstract for the age of children to whom they are aimed. I have often encouraged environmental educators to try to adjust their perspective. Instead of teaching "habitats" to third graders, which requires grasping an unseeable assemblage of environmental variables, teach animal homes. Focus on nests — what they're made of and how to make models of them. Too often, we skip the necessary primary experience with the natural world and aspire to inculcate in children the big conceptual ideas that we, personally, have grasped only in our adult lives. "Save the elephants. Don't use Ivory Soap!" is an example of what happens when children are confronted with international problems beyond the scope of their comprehension.

The challenge is to figure out how to prepare the fertile soil of the child's mind so that ecological concepts will take seed and flourish effortlessly. My argument thus far suggests two avenues of thought. One is that ecological thinking, or systems thought, is intuitive. Young children's thinking tends toward synthesis and integration through metaphoric analogizing. Rather than teaching we are supporting. Second, our explanations for children need to utilize metaphors, pictures and images, and stories. All of these need to emphasize the feeling tone of bondedness and connection with the natural world.

This next example illustrates Tara's solution to the problem of finding the right image for an abstract concept. It was significant for me because teaching about the water cycle in third grade, as is done in some schools, has always been something I have railed against as conceptually inaccessible. I remember working with a group of fourth, fifth, and sixth graders who could all recite the water cycle forward and backward. To test the depth of their understanding I asked, "When it rains over the ocean, does it rain fresh or salt water?" Almost all of them were adamant that it rained salt water. These ideas are teachable and accessible, but only with a foundation

of appropriate images and then a raft of tangible, concrete experiences to illustrate each element of the process.

*April 10, 1990 (age 3 years, 6 months).*

*Tara, Eli (her younger brother), and I are walking back from Mrs. Starr's house through the woods, a way we have never come before. We cross over a little stream, and I say that the big puddles in our backyard go under our driveway through a pipe and come down to this stream. Tara asks where it goes then. I say it goes down near Solveig's house (a friend about a half mile away) and into a big stream, then down to a river, and after a long trip into the ocean.*

*David: Then it becomes clouds and rain and it falls into our backyard and goes down and around.*

*Tara: Around and around?*

*David: Yes, just like that, around and around.*

*Tara: Like a ring?*

*David: [I am not sure whether she's thinking of a wedding ring or "Ring around the Rosie," but both make sense.] Yes, we'll call it the water ring.*

*She smiles and I can see that the idea appeals to her.*

*Before bedtime that evening we look at Island Boy by Barbara Cooney.<sup>7</sup> It is too long and not really appropriate for her, but we look at the pictures and skim the story. It's about a boy who grows up on a Maine island, becomes an adult, and moves away to live on the mainland. But then, in his advanced years, he comes back to the island. In the end, he dies and is buried on the island. Everyone comes to his funeral.*

*Tara: What happens after he dies?*

*David: His body goes back into the earth to make new soil, and his spirit goes up into the sky to get ready to come back again. [Not a pre-made answer, but one created at the moment.]*

*Tara: Like the water ring?*

*David: Yes, just like that.*

Tara's final comment brought tears to my eyes for many reasons. First, I was enchanted by the simple elegance of the metaphoric resonance. Here was a set of appropriate image explanations, built on each other, that provided a glimpse of understanding of the water cycle and reincarnation. Since the "water ring" was created

directly out of her experience, that image was now available to her to use in making sense of other processes.

For me, personally, something deep shifted inside when she said this. Wendy and I had been puzzling, prior to this, about how we wanted to talk about death with Tara. We agreed that we wanted to convey a Buddhist perspective, but hadn't settled on the wording. Not having read *Island Boy* before, I didn't realize that it ended with a funeral and so hadn't decided ahead of time to distinguish between what happened to the body and what happened to the spirit. But in responding to Tara's question, this distinction came to mind. I liked what I heard myself say, and moreover, it made sense to me. Her analogy to the water cycle, suggesting that the spirit flows around and around like the water, made the process of reincarnation seem natural rather than non-Western and alien. It was soothing and familiar, and it made me feel, all in an instant, more comfortable with my own fleetingness.

Finally, I had a sense that this was an epiphany of what parenthood was all about — helping children to make sense of the world in ways that are real, but graceful, and being shaped, in return, by the child's wisdom.

For a long time after this, I don't have any accounts in my journal of references to cyclicity and the water ring. I vaguely recall wondering if the image had evaporated for her. Then, six months later, in early November, the image resurfaced.

My wife and I, like many modern families, have a religious practice that is a loose amalgam of various Eastern and Western beliefs. We do not regularly attend church, but aspire to developing a religious practice so that our children feel the quiet presence of a spiritual framework in our lives. We draw our inspiration from Buddhism and the Earth-based Celtic and pagan seasonal celebrations of pre-Christian northern Europe. In trying to create a regular pattern to the spiritual year, we have oriented toward recognition of the solstices and equinoxes as well as the cross-quarter days, the midpoints between each solstice and equinox. (Ground Hog Day, for instance, is the modern-day equivalent of the pre-Christian celebration of



the cross-quarter day of Candlemas, half-way between the winter solstice and the spring equinox). In our extended community, there is usually a bonfire celebration of the summer and winter solstices, which we regularly participate in. In our own family we are working toward finding ways to signify the equinoxes, solstices, and cross-quarter days in simple ways.

The autumnal cross-quarter day, presently preserved as Halloween, was originally All Soul's Night, celebrated on the first of November. For this evening, my wife created a set of rituals for us to try out. At dinner, in addition to the normal four place settings, she set a place for all of the departed souls in our families. We had recently experienced a number of deaths in the family, and Wendy was searching for a way to help resolve the sadness for ourselves. On each plate was a picture of our deceased family members: Wendy's father and mother, who died when she was young; Wendy's sister; my sister and my mother; and my father, who had died just a few weeks before. For grace, we invited the departed souls to join us. After dinner, in the darkness, Wendy and Tara went down to the frog pond by a neighbor's house. Wendy put candles on pine cones, lit them, and floated them out on the black surface of the water. There were six candles, one for each departed soul in the family. As Wendy and Tara sat watching the tiny flames floating in the darkness, Tara turned to Wendy and whispered, "The souls go around and around, you know."

### A mouthful of flowers

Having accompanied me this far, perhaps you will, unquestioning, take this next step into Never, Neverland. Of my own, I probably would not find my way into this terrain, but guided by Tara, I have been able to follow.

Imaginary playmates are a well-documented phenomenon in early childhood. They tend to appear around age three or four and take their leave around six or seven. Much has been made of the function they serve in the developing ego of the child. It seems a quite understandable step to move from the animation of the inanimate teddy bear or bunny to the animation

of an invisible being. Many adults remember vividly the appearance and character of their early childhood imaginary friends.

For Tara, fairies and angels started to play a significant role toward the end of her third year. To a certain extent, we supported this. A simple straw angel hangs from a beam in her room to watch over her at night. We read the *Flower Fairy* books to her, and the flower fairies leave treasures for her in a special rock enclosure down the road. But around her third birthday, Tara started to recount, completely of her own accord, her experiences with fairies and angels. Our response was neither to foster and encourage this relationship nor to smirk at it, but rather to accept and inquire about her experiences with casual interest.

*September 11, 1989 (age 2 years, 11 months).*

*This morning we found a dead frog dragged into the kitchen by the cats. On the way to preschool Tara says, "I was walking down the road, and I found a dead angel lying in the road," in her very serious, straight ahead, tone of voice.*

*September 13, 1989 (age 2 years, 11 months).*

*At dinner, Wendy and I are trying to catch our five minutes of daily conversation before Eli, Tara's younger brother, starts screaming or the phone rings. Tara interrupts and with no introduction says, "I was walking in the road, going to pick blueberries, and I met an angel, and she wanted to eat blueberries, but she couldn't because her mouth was full of flowers."*

For the next six months, Tara's fairies and angels remained generic; no specific personalities emerged. Then about a week before we departed for a family trip to California, Annie showed up. Tara started talking about playing with Annie. Sometimes Annie was a fairy, sometimes an angel, sometimes a fairy-angel. In this week prior to departing, Tara spent long periods up in her room, playing with Annie. Once I went upstairs when Tara was playing with Annie. Tara was crying. When I asked what was wrong she said, "I want to be the mommy, and Annie won't be the sister." When I suggested that she ask Annie nicely, she rolled over slightly on the bed, whispered under her voice, and then said, "Annie won't do it. She wants to be the mommy."

Annie accompanied us on our trip to California and was a dependable playmate while we were there. Wendy and I both thought it was an interesting coincidence that Annie was the name of Wendy's sister who had died about eight years ago. Wendy and her sister had been exceptionally close. Annie is not the name of any friends or acquaintances of ours, and Wendy's deceased sister had been discussed only infrequently in Tara's presence. Wendy's sister lived in San Francisco when she died, the place we were flying to a week after Annie the fairy-angel appeared in New Hampshire.

After we returned from California, Tara's descriptions of Annie became more and more explicit.

*June 19, 1990 (age 3 years, 8 months).*

*Putting Tara to bed tonight, we look at a book, turn out the light, and then, on a whim, I ask about Annie.*

*David: Where does Annie sleep?*

*Tara: Up on the roof.*

*David: Does she go out through the window?*

*Tara: Yeah, well, you know, she folds up her wings and puts them in a pocket. Like on the airplane when the wheels go inside a pocket, Annie pushes a button on her head and her wings go inside. [While at the airport, we had talked about the wheels going inside the plane, but I distinctly remember not using the term pocket, but rather trunk in my explanation.]*

*David: Does she push the button again to make the wings come out?*

*Tara: No, she pushes a different button on her arm.*

*July 31, 1990 (age 3 years, 9 months).*

*Tara wakes up two times in the night, sitting bolt upright and saying she is scared. When I ask her what is wrong, she replies,*

*Tara: Annie wants to take me to her castle, and I don't want to go because I'm too tired. Annie wants to take me because there's a birthday party every night.*

*David: How does Annie wake you up?*

*Tara: She has a magic potion to wake people up. She said she was going to show me it, but she didn't. Annie has a magic wand and a queen hat, and her magic is very strong.*

Now let's change gears for a second. Things can get confusing here because

of the time overlap of the previous and following accounts. About a week prior to this, about July 24th, Wendy had expected her menstrual period. Since she is normally quite regular; to be overdue by a week was of some concern to both of us. There was a lot of anxious discussion between Wendy and me, none of it in front of the children. With great confusion in my mind and heart, I called the closest Women's Clinic and inquired about abortions. We were not interested in a third child but felt extremely ambivalent about terminating a pregnancy. On July 31st, Wendy either had her period or had a miscarriage. The menstrual flow was unusually heavy and painful. Then,

August 3, 1990 (age 3 years, 9 months).

Tara comes downstairs after playing upstairs and announces she has a new

friend. asked if she had used the name in Tara's presence or referred to a female spirit, she was clear, and assured me over and over, that she had not done this.

Lest you start to wonder about our unusual beliefs, or our subtle encouragement to predispose Tara to mimic her parents' spirit beliefs, let me be clear that I certainly am not a "spiritualist." I have always remained open to the notion that spirit forms exist, but I have never had any personal experience to confirm their existence. And though Wendy had "felt" the presence of a young, female spirit, this was completely outside of her normal daily experience or convictions. We were taken aback by both the timing of the appearance of Tara's new fairy-angel friend and her choice of name. That the name was exactly the same, unusual, and completely outside of

beyond a doubt for me, that this form of communication exists.

The second possible explanation is much harder for me to accept. Perhaps fairy-angels, or whatever they are, really exist. The conventional explanation would be to consider fairy-angels a subset of imaginary friends. They are beings that are constructed completely out of the young child's active imagination. They have no objective existence outside of the child's mind. Or, conversely, perhaps imaginary friends are a subset of fairy-angels. Perhaps children are regularly befriended by beings with whom we adults have lost contact. Through this I am reminded of the characterization of angels in Wim Wender's film *Wings of Desires*. In this movie, angels exist all around us and make their presence fleetingly known to adults in times of stress and dire need. Perhaps children's minds, unadulterated by conventional thought patterns, perceive these beings easily. Certainly, the notion of the guardian angel pervades much of the Christian culture.

Whatever the case, I have again had my eyes opened. The possibility of the objective existence of the spiritual realm is cracked open a bit further for me because of my openness to the possible authenticity of Tara's reported experiences. I am anxious to see who else shows up in our lives.

About three weeks after Tara's report of Elena's arrival, my journal entries report the following two discussions:

August 21, 1990 (age 3 years, 10 months).

At dinner, Tara volunteers spontaneously,

Tara: The trees are really angels. A long time ago you could talk to the angels in lots of ways, but now they hide in trees.

Wendy: Did someone tell you that? [We both suspected that this comment could have come from Tara's preschool teacher, who is Waldorf trained. We later checked, and it didn't.]

Tara: No, because I know myself how the angels live and be.

Tara delivers this last with a completely uncanny air of assuredness and authority in her voice. When she talks about this stuff, it feels like, as Alfred North Whitehead would describe it, "first-hand knowledge," or as

---

## *Much of early thinking is unavailable to us because it is not translated into language. By the time articulate language arrives, many of the unusual aspects of early experience have receded.*

---

friend. "A new fairy-angel has come to stay with me and Annie. Her name is Elena. [I had never heard her use this name, nor do we know anyone with that name.] Elena was dead but now she is alive as a fairy-angel."

After Tara has gone to bed, Wendy confides in me. "I haven't talked about this with you because I felt it was odd and I didn't want to make you nervous. But for the last few months I have felt a young female spirit hovering around me, wanting to come into the world. Whenever she came around I expressed the fact that I really cared about her, but I was sorry we didn't want another child. When I wrote about her in my journal, I referred to her as Elena."

When I asked Wendy why she had chosen that name, she explained that she hadn't really chosen it but rather that it was just the name that occurred to her when she felt this strange presence. She couldn't think of anyone she knew or had known by that name, and it wasn't a name we had considered for our previous children. It was just there. When I pressed her and

Tara's experience made the simultaneity too exact to explain it away as mere coincidence.

### **Telepathy or insight?**

Two possible explanations have surfaced for me. Telepathy between mothers and their young children is frequently reported. Joseph Chilton Pearce reports that accounts of telepathic experiences in early childhood increase in frequency about age four and appear to decrease about age seven.<sup>8</sup> It is probably no mere coincidence that this corresponds with the arrival and departure times of imaginary friends. It seems possible that Tara telepathically received the name *Elena* from Wendy and also picked up on the family concern about the possibility of a new child. If it was in Wendy's mind, it seems wholly possible that it could appear in Tara's mind. I have had a few personal telepathic experiences that have made it clear,

John Dewey would describe it, "direct experience." Later in the evening, this discussion ensues:

August 21, 1990 (continued).

Tara walks up to Wendy and pats her on her tummy.

Tara: Mommy, it looks like you're having another baby.

David: Would you like Mommy and me to have another baby?

Tara: Yes!

David: Mommy and I really don't want to have another baby right now.

Tara: If we had a new baby, maybe we could name it one of my angel's names.

Wendy and I are left speechless.

### Preserving the magic

Most developmental psychologists aspire to characterize the unique attributes of early childhood. Jean Piaget referred to preoperational thinking and intuitive thinking as dominating during this stage. Although Piaget used *intuitive* to mean nonrational, Joseph Chilton Pearce uses the term *intuitive* at more of its face value. He suggests that children have the gift of intuition, that they can sometimes perceive the truth in unmediated, nonrational ways. Both Pearce and Selma Fraiberg, the Freudian child psychologist, also use the term *magical thinking*. Fraiberg describes it as the child's belief that mind has control over matter. It is a characteristic of wish-fulfilling, pleasure principle thinking that must be overcome for children to adjust to the reality principled world.<sup>9</sup> Pearce believes just the opposite. He contends that the magical thinking of early childhood is a biologically ordained endowment that children are meant to explore and utilize. Children's inclination to play and fantasy is preparation for making them feel like they are engaged shapers of the world in adulthood.

For me there is certainly something magical about Tara's thinking. Some of the unusual aspects of Tara's thinking have been exposed by her early language development. Much early thinking is unavailable to us because it is not translated into language. By the time articulate language arrives,

many of the unusual aspects of early experience have receded. When early language overlaps with early experience, unexplored terrain is uncovered for a short time. In this way I feel like an intertidal ecologist, scampering out into the intertidal zone during the seasonally extra-low tides to see the organisms that are normally covered up by many feet of cold seawater.

In addition, Tara has the benefit of growing up in a television-free home environment. Tara occasionally watches Saturday morning cartoons at a neighbor's house and is a video hound at friends' houses and on vacations. She has been captured by the thrall of the *Little Mermaid*, *Bambi*, *Peter Pan*, and *The Nutcracker*. But for the most part, she spends her recreational time looking at books, listening to story tapes, dancing, drawing, and creating fantasy worlds. Free of the mind-numbing, time-consuming, and deteriorating effects of excessive television, her imagination has the opportunity to flourish.

In this kind of psychically unpoluted environment, I think it's more likely that organic metaphors will take root and flourish. By *organic* I mean both metaphors that emerge from the natural world and metaphors that are grown with a minimum of additives and adulterations. What's appealing about the "water ring" notion is that it emerged, with a bit of nurturing, out of the fertile soil of Tara's own experience. The metaphor is physically grounded in her play experience and then is extracted and applied to other realms of experience. Recently she used the same image to explain her grasp of how library books go around and around through many people's hands. By supporting and using her images, we hope to have helped her create a sturdy metaphor, one that won't be uprooted by the winds of technological culture.

I have discussed at least two different kinds of magical thinking. The first, I am convinced, is a natural part of all early thinking. Bob Samples, in his book *The Metaphoric Mind*,<sup>10</sup> differentiates between the logical-rational modes of thought and the integrative, metaphoric. Cognitive thought, as well portrayed by Piaget, has discrete stages of development, moving clearly from intuitive to concrete

operational by about ages six and seven and then into abstract thinking about ages eleven or twelve. Deductive logic is not really available to children until puberty. But the metaphoric modes of thought don't appear to distribute themselves developmentally. In fact, metaphor is the *raison d'être*, the catalytic enzyme of early thinking. In most of the accounts I have described above, it is the easy metaphor making of Tara's thinking that makes it magical.

The second kind of magic seems more open to question. Authentic telepathy, encounters with spiritual beings, angels with mouthfuls of flowers? Who knows what mysteries dwell in the minds of children? Where does real experience end and imagination begin? I honestly don't know. What I do know is that there are great pleasures and significant, life-changing rewards in listening closely to, and taking seriously, the language and thought of very young children. My attitudes toward nature and life after death have changed substantially in the past few years because of my discussions with Tara. As a result, I have new respect for that old phrase, "out of the mouths of babes."

### Notes

1. Art Linkletter, *Kids Say the Darndest Things* (Green Hill, 1977).
2. Heinz Werner, *Comparative Psychology of Mental Development* (New York: International Universities Press, 1948).
3. Robert Arbib, *The Lord's Woods* (New York: Norton, 1971).
4. Jane Yolén, *Owl Moon* (New York: Philomel, 1987).
5. Brooke Herter, "Moon-Jumping," unpublished essay in the author's collection, 1983.
6. John Seed, Joanna Macy, Art Naess, and Pat Naess, *Thinking Like a Mountain: Towards a Council of All Beings* (Philadelphia: New Society, 1988).
7. Barbara Cooney, *Island Boy* (Penguin, 1988).
8. Joseph Pearce, *Magical Child* (New York: Dutton, 1977).
9. Selma Fraiberg, *The Magic Years* (New York: Scribner, 1959).
10. Bob Samples, *The Metaphoric Mind* (Reading, MA: Addison Wesley, 1976).

# The Spiritual Realm within a Holistic Conception of Child Development and Education

by David Hutchison

The age of mutually assured environmental and nuclear destruction, from which we are perhaps now only beginning to feebly emerge, has left us with the promise of a bitter image of mass devastation and universal suffering on a scale historically incomprehensible to humankind. There can be little doubt that planet Earth — along with all of her inhabitants — is at the crossroads of life and nonexistence. As with the individual in Robert Frost's "The Road Not Taken," humankind faces a fateful decision: We can continue to pursue a path of senseless destruction and needless suffering (with the inevitable consequence of a lifeless world), or, alternatively, we can drastically reconstruct our present ways of thinking and interpreting the world via a more befitting and realistic representation of reality.

Should we collectively choose the latter response, such a representation will need to counter years of destructive and regressive human endeavor. In part, this can be achieved by legitimizing alternative forms of knowledge and knowledge acquisition that challenge the hegemony exercised by rationality and mechanistic science right into the 20th century.<sup>1</sup>

In education, these forms of knowledge have traditionally been viewed more or less as feminine virtues closely associated with the functioning of the right hemisphere of the brain. They emphasize a more intuitive, aesthetic, and ecological approach to the understanding of our world — an idea that counters and reduces the role of the analytical mind, but does not aim to replace its equally important function. Indeed, we should acknowledge the value of both modes of knowing by recognizing that a rational approach to subject matter, essentially being an act of *comprehension*, is most effectively complemented by intuitive thinking, as exemplified through the act of *apprehension*.<sup>2</sup>

Greig, Pike, and Selby have asserted the underlying argument for the legitimation of ecological forms of knowledge:

*David Hutchison, B.A., B.Ed., has worked with special-needs children, particularly children with learning disabilities, in a variety of educational and recreational settings. The present paper emerged from his undergraduate studies in the philosophy, psychology, and history of alternative education. David is working toward his Master's degree, specializing in Holistic Education, at the Faculty of Environmental Studies, York University, 4700 Keele St., North York, Ontario, Canada M3J 1P3.*

---

**This paper emerges as a pedagogical response to the global crises that challenge our world at present. The author argues for the necessity of fostering throughout childhood a spiritual consciousness that is secularly grounded within the ethical realities of our world. The child's development of consciousness is considered from the holistic perspective and explored within the context of a spiritual pedagogy.**

---

In the West our understanding of the world has been largely shaped through science which, until this century, has sought to understand the world by dissecting it, bit by bit. But this approach leaves unanswered the question of how the parts interact to sustain life and evolve. A shift in perspective is now occurring in many disciplines towards a focus on whole systems instead of constituent parts. A system, whether it is a human family or a tropical rainforest, can only be understood by looking at the relationships between the individual elements; that is, the constant flow of energy, matter or information through the system.<sup>3</sup>

Although mechanistic science has given us many tools and worked toward solving many problems, it has failed time and time again to provide an adequate response to the age-old question of the meaningfulness of life. This is because mechanistic science lacks any appreciative response to life and, indeed, works against such a response in fear of losing its objectivity. Furthermore, in striving for what is *true*, science reserves no occasion for establishing what is *right*. Clearly, this is an unacceptable *sole* response to the precarious state of the world at present.

Three essential characteristics of mechanistic science discredit it as the sole approach to the apprehension of knowledge. First, the *reductionist* tendencies of science reveal its essential

that interdependent phenomena be disconnected and isolated from each other in order to eliminate all confounding variables. This approach does not take account of the essential relationships which exist between entities and violates the well-known axiom that the whole is far greater than the sum of its parts.

Finally, and closely related to the above, is the *compartmentalization* of what is perceived into separate and distinct categories, which invariably leads to the estrangement of the parts from the whole. By way of example, this has enormous implications for ethical development in childhood, for it lends credence to the "us and them" argument that the individual is not responsible for, nor intimately connected to, the plights of other peoples and the natural world.<sup>4</sup>

### The holistic imperative

Without abandoning the contributions of science to our understanding of the world, the epistemology of holism offers a complementary approach to the apprehension of experience that counters the criticisms of mechanistic science noted above.

By way of introduction to the basic tenets of holism, consider the approach that a mechanistic scientist might take to the study of a particular

having discovered the one or two essential elements that make the symphony so appealing to listeners (reductionism).

In sharp contrast, the holistic researcher would transcend the limitations of the above approach by working toward an apprehension of the music in its totality, an appreciative response to the blend of instruments, melody, and counter-melody. One would explore the life of Beethoven and the times in which he lived, searching for and empathizing with the emotional and experiential incentives from which the music was derived. In all of this, one would be emphasizing connections — between composer and music, music and listener, listener and epoch — which rejoiced in the wholeness of the composition and celebrated its transcendental qualities.

John P. Miller has put forward the basic tenets of the holistic position:

1. There is an interconnectedness of reality and a fundamental unity in the universe;
2. There is an intimate connection between the individual's inner or higher self and this unity;
3. In order to see this unity we need to cultivate intuition through contemplation and meditation;
4. Value is derived from seeing and realizing the interconnectedness of reality;
5. The realization of this unity among human beings leads to social activity designed to counter injustice and human [and the balance of the natural world's] suffering.<sup>5</sup>

It will be a primary aim of this paper to clearly establish point 2 within the context of a holistic conception of child development and in relation to a spiritual pedagogy of education. In realizing this objective, however, points 4 and 5 will also be critically explored through the incorporation (already made possible in the above discussion) of an ethical dimension to the holistic position.

### The emergence of ethos

When one picks up any newspaper or news journal, it is immediately apparent that only an ethical response to the problems of our age — such as social inequality, environmental degradation, and military insecurity —

---

## *Much of what is not so easily explained by science ... is either devalued or, worse yet, ignored altogether.*

---

inadequacy as the basis for understanding the complexity of the world in which we live. The ultimate ambition of mechanistic science is to attribute all phenomena to as small a number of causes and constructs as possible. Hence, much of what is not so easily explained by science (and this includes a significant amount of the material that this paper will explore) is either devalued or, worse yet, ignored altogether.

Second, the *fragmentation* of the world is invariably the price one pays when utilizing a scientific methodology, which out of necessity demands

piece of music, say Beethoven's *Fifth Symphony*. First, one might attempt to isolate the specific type of music Beethoven was noted for writing in terms of the era in which he lived and the instruments for which he composed, thus labeling his music accordingly (compartmentalization). As well, one would probably endeavor to comprehend the essential character of the music, from a theoretical perspective, through a rigorous examination/dissection of the chord progressions, melody/counter-melodies, and harmony (fragmentation). And finally, by doing so, one could lay claim to

---

can adequately hope to counter injustice and put an end to suffering. This is because a linear worldview of life that forsakes more than half of our species and fails to appreciate our dependency on the ecosystem for survival is no longer an acceptable criterion of progress; at best it promises a bleak future for humankind, a future in which an essential unity of purpose and vision remains lost and forgotten.

Sadly, it is today's children — some growing up in extreme poverty, all growing up alongside "the bomb" and environmental devastation — who may perceive this future with the most worry and insecurity, for they are potentially the generation to which power will be handed over too late. What parent or teacher must not feel helpless in the face of a child who, seeking reassurance and security, asks, "Will there be a nuclear war in my lifetime?"

And they very well might, albeit more subtly, for children at an alarmingly young age are aware of the potential for nuclear war and the end of the world as we know it. Numerous studies have been conducted which confirm this repeatedly, so that time and time again, children and adolescents rate the potential for nuclear war as being among the most serious of world problems.<sup>6</sup> For example, Greig, Pike, and Selby cite the following study conducted in Britain:

In 1983 thirty 9-10 year olds in an Oxfordshire primary class were invited to each write a list of questions they would like to ask about the future. Individual lists were to be compiled without any help from the teacher or friends. Finally, a composite class list was drawn up. The most frequently recurring questions on the individual lists were: Will there be a nuclear war? (15 students), will nuclear weapons be abolished? (8 students), will there be an end to the world? (6 students), and will schools be the same? (6 students).<sup>7</sup>

Clearly, our response to this growing awareness and uncertainty must be to embrace and cherish life<sup>8</sup> in all of its magnificent forms and to reform our existing system of education to meet the demands of a pedagogy that places life — not subject matter deadened through alienation from life — at the forefront of our schools.

It would appear that in Eastern and Native cultures this valuing and preservation of life has existed for centuries as a primary principle to be upheld. Certainly, the significance of humankind's intimate connection with the balance of nature is better understood in Eastern and Native philosophy/mythology, as is a respect for life that stresses a harmony promisingly reminiscent of the ecological perspective noted earlier:

In India one day, I saw a teacher and a child. The teacher was looking very intently at the child who was doing something which seemed to me completely useless and dirty. She was scratching the ground with her finger and I went to see more closely. There was an ant which on one side had only one leg left and on the other side two legs broken and it was struggling on in this condition. This little child was smoothing the way for this ant. In India, there is respect for life; this child of two years and a half was already filled with this respect for life.<sup>9</sup>

Our world is in danger of dying, the direct result of our relativism of values. Only through a recognition and endorsement of the *ultimate value* of life, of that which gives, breathes and sustains life, will planet Earth be saved and humankind be truly emancipated from powerlessness and doubt. This must be the foundation upon which an ethical basis for knowing is established.

Yet it does not come easy for the individual who chooses to engage the ethical dimension, since one is compelled not only to acknowledge but also to account for and deeply involve oneself in the tragic realities of the lives of so many of the world's peoples. One must choose (and in the face of pain and suffering, keep choosing) as his or her palette the totality of human experiences no matter how actualizing or wicked they may be, for these cannot remain ignored or unaccounted for within a holistic model of humankind.

One who ignores or discounts the importance of ethos, the ethical realm of consciousness, builds an ideology of the world in which truth and authenticity do not figure. So too one short-changes oneself of the possibility of ever truly embracing the reality of human existence, in all its splendor

and misery. This knowledge does not arise from an acceptance of only certain facts, but rather from an intuitive and assuring awareness that all of the facts have been considered and a true understanding of the world has been formed.

### A model of holistic consciousness

Essentially, the intuitive, aesthetic, ecological, holistic, and ethical realms are examples of marginalized paradigms of reality — not simply encompassing feelings, nor sense perceptions exclusively, but knowledge, as legitimate and consequential as the theories and precepts of science — waiting to be engaged and employed for the purpose of meeting the challenges of the existing crises.

Our response to these challenges must be fourfold (see Figure 1). Initially, we need to feel — physically *feel* on a profound emotional level — our astonishing connection to all of life, from the minuscule to the macro, from the wonder of the natural world to the cultural pursuits that naturally arise out of human endeavor. As the lone species that can bring meaningfulness and purpose into consciousness, we need to be humbled by this awesome capacity. Ultimately, we need to realize that it is only when we *transcend* the rational limitations of such a capacity that we can hope to embrace a deeper level of understanding, an understanding whose ultimate intuitions apprehend the spiritual nature of our existence and our relationship to the balance of life on this planet.

Emerging from this affective and spiritual response is the need to *value* life, in and of itself, and to recognize its ever-deepening need for protection. Such a conception will represent the primary criterion upon which the ethical challenges of human endeavor are to be judged.

Finally, we need to *think*, plan, conceptualize, devise, and redefine ways in which we can tackle these challenges constructively. This may lead to any number of concrete actions as varied and involved as legitimizing the United Nations as a world government or packing an environmentally friendly lunch. In every case,

our actions will trace back to that original and all-important intensity of feeling for life established way back.

None of the above responses exist as separate entities unto themselves. Rather, each is a dimension of holistic consciousness whose capacity for expression unfolds developmentally in tandem with each of the other dimensions.

For example, the earliest evidence of a capacity for affective consciousness is found within the almost magical relationship between mother and newborn and, at a later age, in the young child's intense love and concern for self. At its highest level of potential, however, the affect expresses itself in the form of empathy and love for other beings (including nonhumans). In this sense, it is comparable to Agape, Lawrence Kohlberg's seventh stage of moral development.<sup>10</sup> (Here, a potential connection between the affective and ethical dimensions clearly emerges.) So too the affect is

the only dimension of the four to strive clearly toward a physical attachment to other human beings and the natural world. In this sense, it incorporates interpersonal modes of knowing and is inherently social.

Despite the relative complexity of each of the four dimensions, it is the spiritual realm of consciousness that is by far the most profound and incommunicable. Put simply, an entity such as the spirit, which transcends the use of symbols, cannot be fully represented or communicated by means of language, which is itself a function of symbols. Indeed, it would appear that symbolic communication in any form — save along deeply intuitive lines — will fail to grasp fully the inherent essence of the spiritual realm; for language is a socially constructed medium, and out of necessity is closely tied with the intellect. As a result, the spirit, perhaps more than any other dimension of consciousness, cannot be fully apprehended

unless it is directly experienced. Yet this limitation should not be lamented for too long, for as Carl Jung has argued, a symbol, such as the word "spirit,"

loses its magical or, if one prefers it, its redeeming power, as soon as its dissolubility is recognized. An effective symbol, therefore, must have a nature that is unimpeachable. It must be the best possible expression of the existing world philosophy, a container of meaning which cannot be surpassed; its form must also be sufficiently remote from comprehension as to frustrate every attempt of the critical intellect to give any satisfactory account of it; and, finally, its aesthetic appearance must have such a convincing appeal to feelings that no sort of argument can be raised against it on that score.<sup>11</sup>

Therefore, even as the present paper attempts to isolate the inherent dynamics of the spiritual realm, much of the vitality and resilience of the spirit will be lost, only fully recoverable by the reader through a direct embracing of the spirit which remains unmediated by the intellect.

#### Relations between the dimensions

At their highest levels of potential, the dimensions of affect and spirit are inseparably fused, possibly even indistinguishable. This will be clearly evident, even throughout the present paper, although numerous attempts will be made to isolate the essential character of the spirit that exists independent of the affect.

Certainly the most important contrast to be made between these two dimensions is that, while the underlying tendency of the spirit is to establish *meaning*, the essential inclination of the affect is to establish relations — not semantic as in the case of the spirit, but immediate *physical relations* between individuals, and between individuals and nature. This will be an important distinction, particularly in regard to our discussion of the spirit's inherent bond with the natural world; for while the affect will move to establish relations with other organisms in the form of love, the spirit will endeavor to empathize with the underlying and shared conditions that unify humankind and the balance of nature as one.

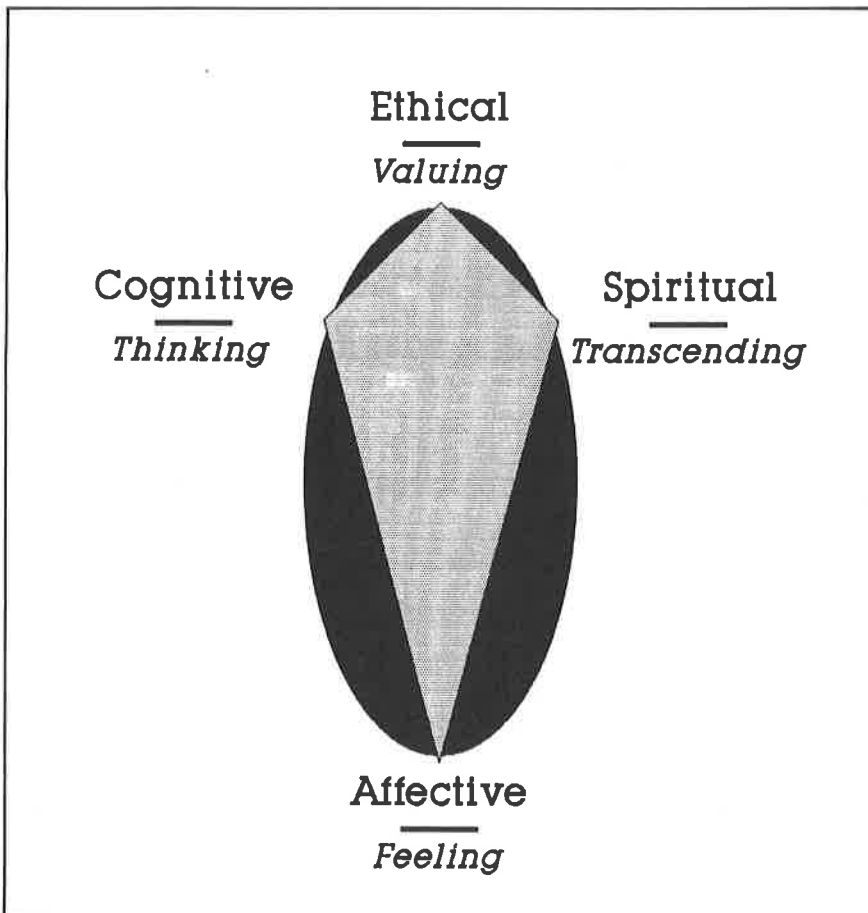


Figure 1. A model of holistic consciousness.

Finally, because the affect and spirit are active agents of process (i.e., they respectively embody the acts of loving and devotion), each can be contrasted with the ethical dimension, which is distinguishable by its adherence to ultimate values.

In many ways, the spirit serves as a buffer of reassurance for the numerous instances of suffering and injustice uncovered through the ethical dimension. Essentially, it restores an element of hope to our apprehension of the world in the form of meaningfulness and purpose.

Particularly when we deal with young children, as with the earlier

lending to the educator than that which is directly apprehended by the learner through the ethical dimension.

Indeed, in this day and age, we should be prepared to ignore all other functioning of holistic consciousness in favor of a complete devotion to the ethical domain, were it not for the fact that it is precisely the balance of the dimensions that makes the thorough functioning of ethos at all possible. For it is only by engaging the affect that we come to acknowledge fully a universal moral code (built on an appreciation of life and that which sustains life), and only through the proficiencies of the intellect that we are able to

dom cannot be lost. It can be said that they were worthy of their sufferings; the way they bore their suffering was a genuine inner achievement. It is this spiritual freedom — which cannot be taken away — that makes life meaningful and purposeful.<sup>12</sup>

Although a spiritual response to an ethically challenging experience is appropriate within a model of holism, it does not therefore follow that any and all possible spiritual experiences are of service to overcoming the challenges that face humankind at present. Indeed, a spiritual dimension which remains unregulated by ethos, ignorant of ethos' overriding importance, or ungrounded within worldly phenomena (thus becoming essentially mystical or esoteric), loses its utilitarian value as a constructive approach to apprehending the world. Essentially it relinquishes its potential contribution to the alleviation of suffering and injustice.

Thus, the holistically conscious individual practices the ethical imperative that the spirit must, out of necessity, work within the context of the ethical dimension and remain secularly grounded within earthly phenomena. It is within this framework that the spiritual pedagogy of the present paper is embraced.

### **The child's development of holistic consciousness**

Put side by side, on the one hand, all that has been discovered about little children by modern scientific methods of research and experiment, and on the other side — the world's nursery rhymes and fairy tales! It is the poetic genius which comes at the heart of the matter, and it is a science transformed by poetic genius which will ultimately understand childhood. But in this understanding there will be poetical modes of thought which would certainly not at present be regarded as scientific. It does not, however, follow that they will not be true.<sup>13</sup>

Just as the holistic position is valuable in terms of the greater understanding it offers us of the challenges we presently face and the context in which they should be perceived, so too it advances an alternative understanding of the development of consciousness in childhood. As with its handling of science, the holistic per-

---

## *The holistically conscious individual practices the ethical imperative that the spirit must, out of necessity, work within the context of the ethical dimension and remain secularly grounded within earthly phenomena.*

---

example of the youngster who wonders whether there will be a nuclear war in her lifetime, we need to pay heed to the needs of the child in terms of interpersonal security, trust of significant others, and reassurance. It is at times such as these that the skills of the holistic educator are most required. We must delicately balance the child's need for reassurance of meaningfulness and purpose in the world (essentially a spiritual understanding) with the equally apparent meaninglessness of the value of life (as demonstrated incessantly, throughout the world, in the form of suffering and injustice). We must also acknowledge to ourselves (if not also to the child) our essential powerlessness, in the face of nuclear weapons and ecological devastation, over our own destiny and that of the child.

From the holistic perspective, a primary responsibility that teachers clearly have to their students is the obligation of engaging each of the four dimensions of holistic consciousness discussed above. Yet no subject matter remains more important and chal-

lenging to the educator than that which is directly apprehended by the learner through the ethical dimension.

Indeed, in this day and age, we should be prepared to ignore all other functioning of holistic consciousness in favor of a complete devotion to the ethical domain, were it not for the fact that it is precisely the balance of the dimensions that makes the thorough functioning of ethos at all possible. For it is only by engaging the affect that we come to acknowledge fully a universal moral code (built on an appreciation of life and that which sustains life), and only through the proficiencies of the intellect that we are able to put this moral code into effective practice (e.g., through the efficient production and distribution of food and other social resources).

So too the spirit plays an important function in this regard. Through its apprehension of meaningfulness and purpose in the world, it effectively balances the horrors uncovered by the ethical dimension. By transcending these phenomena, it constructs a sense of order and security that clearly establishes the will to live for so many of the world's peoples. Yet as much as this is true for the holistic theorist who chooses to engage ethos, so too can it apply to the individual who suffers. Victor Frankl wrote of his experience as a prisoner in a German concentration camp during World War II and the inherent capacity of the spirit to meet the challenges of suffering:

"There is only one thing that I dread: not to be worthy of my sufferings." These words frequently came to my mind after I became acquainted with those martyrs whose behavior in camp, whose suffering and death, bore witness to the fact that the last inner free-



spective does not deny (at least in total) the utility of traditional notions concerning child development, but seeks to transcend them. For while more traditional models

conceive of the infant as a *tabula rasa* (behaviorism), a primitive bundle of instincts and urges (psychodynamic psychology), or a rudimentary collection of simple sensory-motor structures (cognitive psychology), this more transpersonal perspective of child development conceives of the infant as developing within the context of a larger whole, which under certain circumstances the child is capable of perceiving.<sup>14</sup>

Indeed, in one sense it would seem that the young child does exist for a time in a cosmos in which the whole of life is rarely broken down into its component parts; yet, as A.C. Harwood asserted, this perspective has primarily been acknowledged, and more importantly valued, by supposedly unscientific writers exclusively.

Jules Michelet (1798-1874), the great French historian, compellingly portrayed the holistic nature of childhood when he stated that children

compare and connect very willingly, but they seldom divide or analyze. Not only does every kind of division trouble their minds, but it pains them and seems to dismember reality. They do not like dissecting life, and everything seems to them to have life. All things, whatever they may be, are for them organic beings which they are very careful not to alter in the slightest way. They draw back the moment it is necessary to disturb by analysis anything that shows the least appearance of vital harmony.... Not only do they not divide, but as soon as they find anything divided or partial, they either neglect it or mentally rejoin it to the whole from which it is separated; they reconstitute this whole with a rapidity of imagination that could not be expected from their natural slowness.... Their mutual understanding is due to one thing — their common sympathy for nature and life, which causes them to delight only in a unity that lives.<sup>15</sup>

For centuries, philosophers, poets, and other thinkers have beheld the entry of the infant into an earthly world from the perspective of a divine birth, as if the infant were a child in exile, having descended from the high heavens into an alien secular world

and a helpless physical being.<sup>16</sup> Many of these theorists have empathized with the extraordinary spiritual significance of the early and later years of life, so that Michelet, for example, conceived of childhood and the approach of death as being moments of extraordinary closeness to God, "when the infinite radiates grace in man."<sup>17</sup>

From traditional theories of child development comes the notion of the essential helplessness of the infant and young child. Yet, considered within a spiritual context, this powerlessness is precisely what establishes purpose in the mother's relationship with her child and leads to the development of that all-important bond of trust and security between newborn and mother:

The very young child [birth to age seven] has direct, immediate faith: It is not "trust in" or "believe that." He trusts all and believes all; because ... he is immersed in the spiritual reality. [But] this immediate, interior faith has to come to terms with the mediate, outward experience of earthly life.<sup>18</sup>

This coming to terms with the mediate, outward experience of the

sents the optimal age for learning, a direct result of the extensive plasticity of the brain and the unfolding of the intellectual faculties. Yet, throughout most of this period, the child also remains deeply immersed within the affective dimension of holistic consciousness, inherently attuned (at a feeling level) to an apprehension of beauty and an identification with the fantasy and concrete experiences of self and others.<sup>20</sup>

Coupled with the unfolding of the intellectual faculties, the striving for autonomy, and the gradual emergence of an independent self-identity, the affective milieu of middle childhood is rich in opportunities for learning and expression, and encompasses the developmental period when the child is most impressionable and influenced by surrounding concrete situations:

From the years seven to eleven ... the child structures a knowledge of personal power in the world. This knowledge of the self (one's mind-brain-body organism) as matrix grows through the child's physical interactions with the physical body of the earth, much as the

---

*For centuries, philosophers, poets, and other thinkers have beheld the entry of the infant into an earthly world from the perspective of a divine birth, as if the infant were a child in exile, having descended from the high heavens into an alien secular world and a helpless physical being.*

---

secular world develops during middle childhood in the form of initial attempts at independence of thought, so that, in the mid to late periods of this stage, the child begins to differentiate self from significant others.<sup>19</sup> This process culminates in the emergence of a truly autonomous self-concept sometime in the next stage of adolescence.

Many developmental theorists have noted that middle childhood repre-

early infant structured a knowledge of the mother through sensory interactions with her. Dramatic and profound new modes of interaction unfold for development during this late-childhood period. Autonomy — becoming physically independent of parental help and learning to physically survive the principles of the physical world — is the goal of the period. Development of this personal power prepares for a shift of matrix [in adolescence] from earth to self.<sup>21</sup>

---

With the emergence of an autonomous self-concept (sometimes referred to as an existential awakening), the abstract powers of the intellect come into full use. The adolescent is able to make connections between entities that are purely theoretical distinctions, far removed from his or her concrete and immediate experiences of life.

As well, it is in this stage of consciousness that an ethical awareness of the world arises and the adolescent becomes increasingly discerning of moral inconsistencies in the behavior of parents, teachers, and the world as a whole. Where in the previous stages of his or her development, the adolescent trusted and depended on significant others for care and guardianship, and unconsciously invited authority from them, he or she now closely attends to their deficiencies and recognizes that they, like him or her, and like the rest of the world, are inherently fallible by nature. So too the adolescent begins to construct an understanding of the world in which the dream-like perceptions of earlier

stages are left behind in favor of an engagement to the "truth," in all of its splendor and misery:

The first secretive thinking whereby we look upon the world from our own private corner and criticize and judge it, arises with puberty. It brings with it the first consciousness of good and evil in the world. To many children adolescence brings the first realization that all is not right with their home and parents, with their teachers, with the world at large. They have eaten off the tree of knowledge of good and evil. They have become aware of misery and oppression in the world, of temptation and sin in themselves.<sup>22</sup>

Edmunds has succinctly expressed the essential underlying character of each of the developmental stages of consciousness discussed above. In infancy and early childhood, the world is built on trust and goodness; in middle childhood, the world is apprehended through beauty; and, in adolescence, the world is built on truth.

### A developmental model of holistic consciousness

It is reasonable and worthwhile to consider each of these three stages of consciousness in relation to the "Model of Holistic Consciousness" presented in this paper, for the integrative capacity of these two counterparts is immense (see Figure 2).

The stage of *infancy and early childhood* manifests itself within the dimensions of spirit and affect. The bond between infant and mother is of the highest affective order, for the dependency of the infant on the primary caregiver will never be greater. (Remember, it is solely the affective dimension which is interpersonal by nature.) Yet the infant is also profoundly connected to the spiritual realm, for, through its divine birth, the infant has descended from a world well beyond the earthly experience of the older child and adult. All of this will almost certainly be soon forgotten as the child's connection with the realm of spirit becomes less pronounced, a direct consequence of

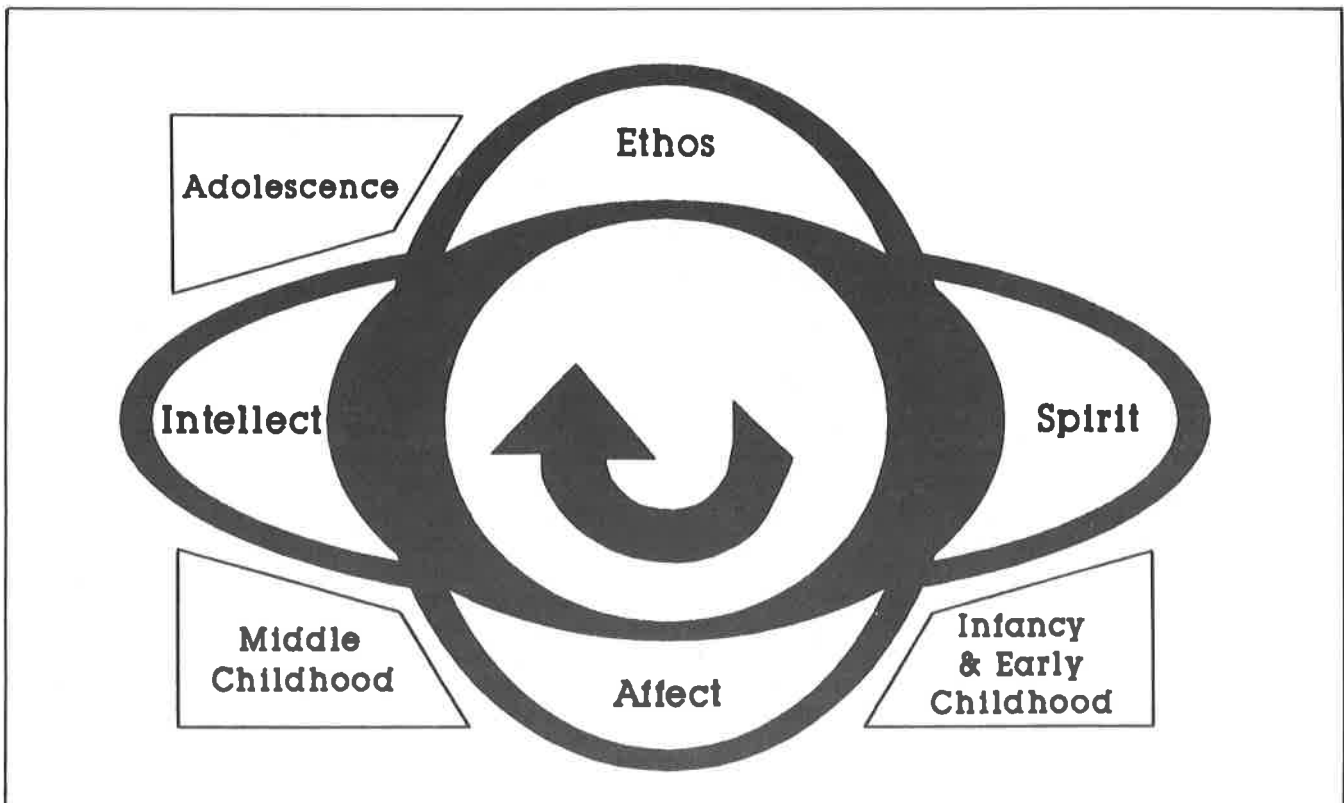


Figure 2. A developmental model of holistic consciousness.

maturation and socialization into a secular world.<sup>23</sup>

Implicit within this process of socialization is the emergence of the capacity for language, and particularly during *middle childhood*, the ability to read and write. A fair explanation for why the spiritual realm often does not figure significantly after early childhood is the high degree to which the older child's experiences are largely socially constructed (a function of language and intellect) and interpreted, by the child, through secular norms (essentially the rational postulates discussed in the early parts of this paper). Yet at the same time, a strong connection with the affective dimension is clearly maintained throughout middle childhood, and this connection fosters a capacity for an appreciation of life. Clearly, this appreciative response will be a crucial source of nourishment with the rise of ethos during the next stage of development.

*Adolescence* is marked by the sharpening of the abstract powers of the intellect and the emergence of the ethical dimension of consciousness. It is in this stage that holistic consciousness approaches maturity, for the development of a capacity for conceptual thinking allows for the recognition of relationships and interdependencies between entities far removed from the concrete experiences of early childhood. As well, world events that exist quite apart from personal experiences become increasingly important to the adolescent — as does the need to reconcile the suffering and injustice endured within these events with the desire to regain the implicit security and trust of earlier childhood.

Many young adults abandon their allegiance to ethos soon after its capacity for expression unfolds. They clearly perceive the reality of suffering within the world, but simply refuse to engage it. Two factors relating to the development of holistic consciousness may offer possible explanations for this all-too-common phenomenon. First, a deeply rooted appreciation for life may not have been successfully established in middle childhood. (This is the affective basis for ethos for which I argue in earlier discussion.) Second, the risk of engaging ethos may simply be too great.

The spirit itself establishes the sense of security and meaningfulness in relation to the world that the adolescent craves, but in the face of ethos and absence of spirit, does not attain. In earlier childhood, the adolescent's development of a sense of security may have been hampered or even completely blocked by abuse or inopportunities. Yet even in fertile ground, the spirit, being the first dimension to appear in childhood (i.e., at or before birth), is also likely to be the first to disappear as the infant matures.

describe the world of nature with this as his constant background; not as a theory, but in the mood with which he describes plants and animals, the earth, and the world of the stars.... At first, the child hungers and thirsts for the divine in the world of nature. Gradually — as the child learns his own loneliness, his own solitariness in life — he needs to feel destiny, too, as a field where the divine works.<sup>24</sup>

Previous discussion has endeavored to establish the legitimacy and necessity of fostering, throughout

---

## *We must continue to foster a spiritual life throughout middle childhood and adolescence, if only to maintain the effective functioning of ethos in adulthood.*

---

Nevertheless, its potential importance lasts for a much longer period than its expression in the consciousness of the child. Particularly when the challenges of the ethical dimension reach their peak during adolescence or adulthood, the spiritual realm is destined to play an important role as the primary maintainer of meaningfulness and purpose. Otherwise, the challenge of ethos will simply be too great to bear.

Although it may be an oversimplification to argue that the abandonment of ethos in adolescence or adulthood results exclusively from the disappearance of the spiritual realm in early childhood, it seems that the spirit can nevertheless play a crucial role in the preservation of security, meaningfulness, and purpose during adolescence and beyond. Thus, the imperative arises that we must continue to foster a spiritual life throughout middle childhood and adolescence, if only to maintain the effective functioning of ethos in adulthood.

### **A spiritual pedagogy in practice**

The element of joy and sorrow is really everywhere ... it is through this consciousness that the meaning of all beings in their relationship to the Ground of existence is to be appreciated. The teacher needs to be able to

childhood, a spiritual consciousness that remains secularly grounded within the context of the ethical realm. The final task of this paper is to begin to explore the inherent constitution of such a consciousness as it functions within the context of a spiritual pedagogy.

Unquestionably, one of the most significant characteristics of the spiritual realm is its intuitive attachment to the natural world. The extent to which this connection is instilled in the child at an early age is indicative of the degree to which a healthy appreciation of life and participation in life will effectively set the stage for a well-functioning ethos in adolescence.

The need to view humankind as being at one with nature, intimately interconnected with its functioning, is a common theme within the epistemology of holism. From the ecological perspective, humankind is viewed as being an implicit part of nature, inescapably connected with its workings, functioning, and ultimate destiny.

An apprehension of this interconnectedness occurs through two modes. First, the spirit, in its quest for meaning, empathizes with the underlying and shared conditions that unify the balance of the natural world and humankind as one. From a cognitive perspective we may choose to *name* these shared conditions as finiteness,

the need for nourishment, and so forth; nevertheless, the spirit, by its very nature, remains unmediated by these symbolic representations, yet still clearly attains the same, if not often more profound, intuitive understandings.

By contrast, the spirit is also deeply rooted within an ecological context and seeks to establish the essential interdependency that exists among the organisms of the natural world. This is achieved by celebrating and empathizing with the unique contributions of individual plant and animal species to the preservation of life on this planet and the maintenance of the ecosystem.

By way of illustration of this second mode, consider Nor Hall's argument for a spiritual reconnection between humankind and the natural/physical world through what she terms

the soul-felt, necessary enactments of the interrelationship between human beings and the green-life, rock-life, animal-life, and plant-life. We are coming to a point in our habitation of earth where these rituals respecting nature are necessary. (We need ways to recognize collectively the spiritual dimension to water cycles and fuel cycles, for example — ways to recognize our essential dependence.) Is there a way to re-enact the fact that man is as much dependent upon and part of the fossil fuel he burns as the primitive hunter was dependent upon and part of the deer he ate? Ancient fears of physical survival are coming up again out of a necessity to balance the very great fears of psychic survival that characterize our time.<sup>25</sup>

Clearly, it is a twofold recognition of our essential solidarity with the balance of nature and our dependence on it for mere survival that the spirit seeks to apprehend. Therefore, within the context of a spiritual pedagogy, it is of paramount importance that the holistic educator instill (and sustain) in the child a profound appreciation and respect for nature and its workings.

Friedrich Froebel (1782-1852), educational philosopher and founder of the kindergarten, similarly envisioned the learner's apprehension of the natural world. He wrote that the child

should early view and recognize the objects of Nature in their true relations

and original connections; he should learn by his longer walks to know his own neighborhood from beginning to end; he should roam through the adjoining country; he should climb to the highest points, that he may survey the connection of the whole surrounding country, and be able to describe it to himself.... By his own observation and his own discovering, by his own notice of this continuous and vivid coherence of Nature, by the direct view of Nature itself, not by explanations in words and ideas for which the boy has no intuition, there shall dawn upon him early, and, however dimly at the beginning, yet more and more clearly, the great thought of the inner, continual, vivid connection of all things and phenomena in Nature.<sup>26</sup>

In many ways, the outdoor environment surrounding the school is the classroom of the holistic educator. Through careful observation, wanderings, and pilgrimages, the child slowly becomes aware of his or her profound spiritual connection with the natural world. Yet such a realization can be fulfilled only through direct empathic contact with nature, a contact whose ultimate conclusions are seemingly personally constructed, yet collectively intuited.

Complementing the child's immersion experience into the natural world is the high degree to which he or she embraces the "dream pictures"

truth if it brings revelation of the spiritual world from which he has come. It is this deep sense for truth which lived in the folk of long ago and which meets us today in folklore, in fairy tales, in the great mythologies and sagas. The pictures these contain give nourishment to the people as a kind of heaven-born milk. The young child needs and longs for that kind of nourishment, not for what is merely fanciful nor for what is prosaically true, but for imaginative pictures which breathe of a higher reality. What is thus nourished through the picture will later grow into a faculty for virile, penetrating thought.<sup>27</sup>

Fairy tales and mythology engage the affective and spiritual dimensions of consciousness in early and middle childhood and, through their connections with other holistic curricula, give rise to creative pursuits such as drama, story-telling, and painting. There is also an abundance of material within the myths of yesteryear to engage the emerging ethos, by way of archetypal symbols, such as good versus evil, heroism versus wickedness, reward versus punishment, imprisonment versus liberation, and ignorance versus realization.<sup>28</sup>

#### The child's yearning for rhythm

The spirit is physically grounded within the individual as it expresses itself through the gross and fine work-

---

***Within the context of a spiritual pedagogy, it is of paramount importance that the holistic educator instill (and sustain) in the child, a profound appreciation and respect for nature and its workings.***

---

handed down from ancestral ages of long ago. Not surprisingly, heightened receptivity to and identification with the myths and legends of such distant ages emerge naturally in the consciousness of the young child, who still being

very close to his prenatal origin, brings into the world a deeply intuitive knowledge of what is true. Somewhere in his being he knows that truth is only

ings of the body. Particularly in regard to the development of the young child, the mechanics of the body and the healthy development of the spirit are intimately connected. Through explorations of movement — what we may essentially term *spirituality in process* — a sense of self is established that acknowledges and celebrates the significant degree of autonomy one has over one's physical actions:

Children at age four or five receive satisfaction from the act and effort of painting. Putting paint on the brush, mixing colors, making the paint move around — up or down the page, making one color run into another are parts of a process which provide satisfaction in the effort required, with little or no need to end up with a finished piece of work. It is painting, not the painting, that matters to the child.<sup>29</sup>

Intimately connected with the spirit's physical manifestation in the body is the high degree to which the child subconsciously yearns for rhythm in his or her metabolism and surroundings.

Manifest within the steady pulse of blood through the cardiovascular system<sup>30</sup> and the habitual intake of air

and purpose can emerge from a spiritual pedagogy.

The philosophy of holistic education, from which such a spiritual pedagogy emerges, affirms the need for our educational system to work toward: the decompartmentalization of the curriculum; and the legitimization of

- a broadened subject base that includes issues and themes of global importance;
- forms of knowledge beyond mere reason and intellect, including spiritual, affective, and ethical knowledge;
- alternative methodologies that harness these complementary forms of knowledge and help to make a broadened subject base more accessible to students.

---

*Through explorations of movement — what we may essentially term spirituality in process — a sense of self is established that acknowledges and celebrates the significant degree of autonomy one has over one's physical actions.*

---

through the lungs, the rhythmic system clearly reveals itself within the behavior and functioning of the child. For example, thumb-sucking and rocking are essentially rhythmic movements, since they are cyclical and consistently maintain a steady "beat" over time. So too is the running of a stick over evenly spaced railings, swinging one's legs when perched on a highchair, and the common childhood practice of walking between (or alternatively on) the cracks of the sidewalk.<sup>31</sup>

The cravings of the rhythmic system are also associated with the child's need for routine, structure, and interpersonal security. That is, the young child yearns for a cyclical day-to-day routine and a safeguarding classroom structure. So too he or she puts the utmost faith in the classroom teacher and subconsciously counts on receiving leadership from the teacher, a security-need whose satisfaction essentially determines the depth and intensity to which meaningfulness

Clearly, it is only within the context of these educational reforms that a pedagogy of the spirit can ever truly hope to embrace the underlying dynamics and potentialities of the spirit toward actualization. The wonder of the natural environment, the child's intuitive connection to the ancestral ages of long ago, and yearning for rhythm — all of these dynamics must necessarily remain unmediated by the intellect and kept undiluted by rational explanation. Otherwise, the spirit's resilience is soon lost and its capacity for actualization is undermined.

Consider the possibilities that openly present themselves when we embrace the ordinary from a new perspective, and then use this discovery as nourishment for a child's maturing spiritual consciousness:

[The children] are asked to look — closely, lying on their stomachs in the forest, crawling through the bog ... submerged like frogs in a marsh, roots in a forest, or fish in a pond.... They

examine the buried leaves of a pond lily, dead insects in a pitcher plant ... and combative spiders on a crowded hummock. They squint, crawl, slither, tunnel and slide — hold their nose, cover their eyes, plug their ears .. and lock their arms. And, they laugh and scream and moan and shout and howl and shriek and cheer and squeal and exclaim.... From the sounds of boys in a marsh ... we have learned that the most poignant moment is that precious second of ecstasy that comes quickly, but lasts forever in memory.<sup>32</sup>

We have no rational postulates to assist us in apprehending the wonder and majesty of the natural world. Only by engaging the spirit in a genuine search for something of which we are but one simple element in the unity of the whole (and most certainly not the masters of this whole) can we gradually grasp a sense of the spectacle of life and the magnificence of nature's implicit structure. Essentially, harnessing the dimension of spirit requires of us a conscious acknowledgement of our incompleteness as human beings and reverence for a far deeper purpose than our atomistic conception of the world will allow.

Instilling such reverence should clearly be among our highest educational priorities. Yet such an ambition is bound to remain unrealized until we can find ways of reformulating existing disjointed and fragmented educational programs. To this end we need to revitalize the integrity of our existing programs through a baseline rationale that places all curricula within the ethical contexts of our world. Concurrently, we need to provide children with opportunities to embrace such an agenda for its own intrinsic value and, particularly beginning in adolescence, out of a concern for the quality of life on this planet and its very survival.

Yet our capacity to engage ethos is only viable to the degree that we can formulate a more favorable conception of our world. Formulating such a conception remains the most pressing task of a spiritual pedagogy. Either we collectively embrace such a task with sufficient determination and openness to see well beyond a world of suffering and injustice, or we succumb to the ominous forces of destruction

and oppression. The decision, it appears, is ours to make.

### Notes

1. *Mechanistic science* refers to the Newtonian-Cartesian conception of our universe. Such a conception holds that the universe is composed of indestructible particles called atoms, which are the fundamental building blocks of all matter. The space between this matter is of a three-dimensional kind and is absolute and uniform. Time exists independent of the material world and displays an unalterable flow, beginning from the conception of the universe through to its future. In such a representation, atoms move in accordance to eternal and unalterable laws, so that all phenomena (at least in theory) can be explained in terms of complex cause-and-effect linkages.  
While the validity of the mechanistic worldview has long been rejected within the discipline of physics, Stanislav Grof has argued that this deterministic view of our world "continues to be considered scientific in many other fields ... particularly in those scientific disciplines that study human beings ... to the detriment of future progress ... [and in] serious neglect of a holistic approach to human beings, society, and life on this planet". See S. Grof, *Beyond the Brain: Birth, Death, and Transcendence in Psychotherapy* (Albany: State University of New York, 1985), pp. 17-19.
2. D.A. Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (Englewood Cliffs, NJ: Prentice-Hall, 1984).
3. S. Greig, G. Pike, and D. Selby, *Earthrights: Education as if the Planet Really Mattered* (London: World Wildlife Fund, 1987), p. 4.
4. Other examples of the "us and them" argument include the industrialist who ignores or renounces personal responsibility for the pollution he or she causes, and the alienation of Third World nations and their problems from the deeds and inaction of First World nations. See J. Miller, "The Holistic Curriculum and Values Education," *Ethics in Education* 8, no.3 (1989), pp. 5-8.
5. J. Miller, *The Holistic Curriculum* (Toronto: OISE Press, 1988), pp. 17-18.
6. M. Yudkin, "When Kids Think the Unthinkable," *Psychology Today*, April 1984, pp. 18-25.
7. Greig, Pike, and Selby, *Earthrights*, p. 67.
8. I am aware of the critical problems that the "appreciation of life" as an ultimate value poses for an ecological conception of our world. Death as an important contributor to the sustenance of life on this planet remains unaccounted for within the discussion that follows and is an important issue for further inquiry. By directly embracing "life" as an ultimate value, I am attempting to counter the misappropriation often afforded to other values, such as "freedom" and "democracy," by various political ideologies, fascism being of particular note.
9. Mario Montessori, "Dr. Maria Montessori and the Child," in *The Spiritual Hunger of the Modern Child*, edited by J.G. Bennett (Charles Town, WV: Claymont Communications, 1984), pp. 56-57.
10. See R.E. Carter, "Beyond Justice," *Journal of Moral Education* 16, no. 2 (1987), pp. 83-98.
11. C.G. Jung, *Psychological Reflections* (New York: Bollingen Foundation, 1953), p. 41.
12. V.E. Frankl, *Man's Search for Meaning* (Boston: Beacon, 1962), p. 66.
13. A.C. Harwood, *The Way of a Child* (London: Rudolf Steiner Press, 1979), p. 38.
14. T. Armstrong, "Transpersonal Experience in Childhood," *Journal of Transpersonal Psychology* 16, no. 2 (1984), pp. 214-215.
15. J. Michelet, *The People* (1846; rev. ed., Urbana: University of Illinois, 1973), pp. 138-140.
16. T. Armstrong, *The Radiant Child* (Wheaton, IL: Theosophical Publishing, 1985).
17. Michelet, *The People*, p. 122.
18. J.G. Bennett, "A Survey of the Problem; The Subud Approach; A Summing-up and Practical Conclusions," in *Spiritual Hunger*, p. 204.
19. L.F. Edmunds, *Rudolf Steiner Education: The Waldorf School* (London: Rudolf Steiner Press, 1987).
20. Ibid.
21. J.C. Pearce, *Magical Child* (New York: Bantam, 1977), pp. 24-25.
22. Harwood, *Way of a Child*, p. 75.
23. Armstrong, *Radiant Child*, 1985.
24. Rev. A. Bittleston, "The Taste of Reality: Dr. Rudolf Steiner and the Child," in *Spiritual Hunger*, p. 99.
25. Nor Hall, quoted in Greig, Pike, and Selby, *Earthrights*, p. 10.
26. F. Froebel, *The Education of Man* (New York: A. Lovell, 1885), pp. 234-235.
27. Edmunds, *Rudolf Steiner Education*, p. 32.
28. R. Metzner, "Ten Classical Metaphors of Self-Transformation," *Journal of Transpersonal Psychology* 12, no. 1 (1980), pp. 47-62; and D. Sloan, *Insight-Imagination: The Emancipation of Thought and the Modern World* (Westport, CT: Charles F. Kettering Foundation and Greenwood Publishers, 1983).
29. S.J. Lapsley, *Selected Aspects of Eastern Thought and Some Applications to Education* (Toronto: OISE doctoral thesis, 1985), p. 105.
30. A fair explanation for the underlying importance of the rhythmic system possibly lies in the child's unconscious craving for a return to the steady pulse of the mother's heartbeat during the prenatal stage of development.
31. Harwood, *Way of a Child*.
32. S. Van Matre, *Acclimatization: A Sensory and Conceptual Approach to Ecological Involvement* (Martinsville, IN: American Camping Association, 1972), pp. 12, 19-20.

## Classified Ads

To place a classified ad, contact the Review, at 39 Pearl Street, Brandon, VT 05733-1007.

Rate is 45¢ per word (\$20 minimum) pre-paid with ad copy.

**Position Announcement** —  
National Director, American Montessori Society. Candidates should have extensive experience in administration as well as demonstrated leadership ability. Send vita and references to: Kenneth Bronsil, Chp., Search Committee, American Montessori Society, 150 Fifth Avenue, New York, NY 10011.

**B.A. in Early Childhood Education.** Learn to teach with awareness and inspiration. A contemporary approach to working with children: Steiner, Buddhist psychology, and more. For details, write or call THE NAROPA INSTITUTE, 2130 Arapahoe Ave., Boulder, CO 80302. (303) 444-0202. Attn.: Richard Brown.

# Holism and Meaning

## Foundations for a Coherent Holistic Theory

by Ron Miller

Since the mid-1970s, an approach generally known as *holism* has been emerging in science, medicine, psychology, education, and social theory. Holistic thinking has been applied by numerous practitioners in the healing arts and education, often with significant success, and it has been popularized by the writings of Theodore Roszak, Fritjof Capra, Marilyn Ferguson, Willis Harman, and others. But so far holism has failed to attract the serious attention of more established scholars and theorists. It is perceived to be a quasi-religious popular movement, part of the "New Age" phenomenon, which is largely disdained by critical intellectuals. The aim of this paper is to propose that holism is, in fact, a legitimate, coherent, and *powerful* critical theory offering profound insights into modern culture's most crucial issues.

In order to establish holism as a legitimate intellectual approach, it is necessary to define and clarify its philosophical and methodological foundations. Despite the growing literature on holistic thinking, this has not yet been satisfactorily achieved. By and large, holistic writers have focused their critique on the "mechanistic" or Newtonian/Cartesian worldview of the scientific/industrial age, and offered holism as the one comprehensive remedy, without recognizing that there are *other* fundamental sources of our cultural problems, or acknowledging other critical perspectives on modernity. Bridges need to be built between holism and critical theory, between holism and progressive social movements, between holism and "reconceptualist" thinking, "deconstructionism," and other so-called post-modern approaches.

Such bridges simply cannot be constructed without a coherent holistic theory. First, we need to address gaps or contradictions in our own thinking. We throw around words such as "spirituality," "consciousness," "paradigm," and "global" without often pausing to define exactly what we mean. Recent papers in *Holistic Education Review* have called this carefree attitude to our attention, suggesting that there are, in fact, problematic aspects to such terms.<sup>1</sup> To take one example, what is the relationship between personal spiritual growth and social change?

*Ron Miller is editor of Holistic Education Review and author of What Are Schools For? Holistic Education in American Culture. This paper was written in preparation for a presentation on holistic education to the Network of Progressive Educators conference, St. Paul, MN, April 13, 1991. It was also inspired by conversations and correspondence with Kathleen Kesson-Hatley, Ed Clark, Jeffrey Kane, Charles Jakiela, Steven Gelb, and David Purpel, and by the author's efforts to build an educational movement on behalf of the Global Alliance for Transforming Education.*

---

**The holistic vision, if it is to make an impact on the present culture, needs to be clarified and translated into language accessible to other intellectual and social movements. One way to achieve this task is to identify various levels of holistic interpretation, each appropriate to particular social and cultural issues.**

---

Does the one necessarily bring about the other, or do we need to address both facets of human life? In the absence of a coherent, critical holistic theory, such questions are not often enough raised.

Perhaps a major reason for this is that holistic approaches reflect, to a rather significant extent, assumptions that are intuitive and implicit rather than clearly articulated. The holistic healer or educator simply *knows* that there is something more to the human being — some spiritual essence that transcends physical symptoms and social conditioning — which needs to be taken into account. But we do not often describe this essence in language that serious scholars, or a skeptic

Holism must not adopt an aloof, missionary attitude toward other perspectives, as it has often done, but must begin to engage in genuine dialogue with them. We must learn to speak in languages other than our own, and to appreciate the value of other world-views. If “wholeness” is, indeed, the truth of the cosmos, then any genuine search for truth will arrive at it, eventually. And any genuine search must involve honest dialogue. The discussion that follows is intended to be the opening of such a dialogue.

#### The basis of holism

As holistic educator Edward T. Clark, Jr., has explained, holism rests

---

***The fundamental task of holism is to take insights that are essentially mystical — derived from intuition, enlightenment, or the surreal world of quantum mechanics — and articulate them in languages that speak to the conditions of our present culture.***

---

tical public, can accept, and so our efforts are generally dismissed as “New Age” romanticism. We need to be able to demonstrate that what we know intuitively can be discussed thoughtfully, carefully, rationally. The holistic movement needs to balance its enthusiasm for “right brain” insight with a deeper respect for “left brain” explanation. This is dry and academic in comparison, but it is a vital aspect of our work.

Yet even when holism has been given sophisticated expression, as in the work of thinkers like Carl Jung or Rudolf Steiner, the scholarly community still refuses to take notice. My sense is that holistic thinkers tend to take too much for granted; once we have discovered “wholeness,” it seems so self-evident to us. We wonder how any sincere person, exposed to this truth, can fail to see it. But we forget that other thinkers have their own understandings of the world, often painstakingly achieved.

on one very simple principle: Everything in the universe is connected, in some way, to everything else.<sup>2</sup> Despite the classifications and dichotomies we can make intellectually, despite the prevalence of conflict and violence, despite the objective appearance of separateness, the cosmos is ultimately a Whole, a unity, a fantastically complex system of relationships. Sometimes these relationships are obvious, as in an ecosystem. In environmental education, there is an exercise in which students represent different animal and plant species, and pass a ball of yarn back and forth as they describe how each species depends on another for food, shelter, or pollination. By the end of the exercise, the circle of participants is intricately interconnected by a beautiful web, which is a perfect metaphor for wholeness. Other connections, such as the gravitational pull between distant stars, are far more subtle and faint.

Holism asserts that *everything* exists in relationship, in a context of connection and meaning — and that any change or event causes a realignment, however slight, throughout the entire pattern. “The whole is greater than the sum of its parts” means that the whole is comprised of a *pattern of relationships* that are not contained by the parts but ultimately define them. Holism, then, stands in stark opposition to the method of *reductionism*, which holds that analysis, dissection, and strict definition are the tools for understanding reality. Holism asserts that phenomena can never be fully understood in isolation; it asserts that reductionism can only give us a *partial* view of anything it dissects. The part may be useful for some limited purpose, but the more we manipulate the world to suit our limited purposes, the more unforeseen consequences our actions have on the larger context. This is the primary source of the global environmental crisis, according to holistic thinkers. Our culture’s incessant search for technological achievements has brought about widespread disruptions in the ecosystem. We have faster automobiles and jets, but also oil spills and the greenhouse effect. We have nuclear energy, but also rising cancer rates. Every action affects the larger context in profound as well as subtle ways.

This principle of cosmic wholeness is the very core of holistic thinking. It is holism’s most powerful insight, as I hope to show. But it is also a grandiose claim, which makes it highly difficult for other perspectives to digest! And precisely here is where holistic thinkers need to roll up their sleeves and begin the work of dialogue. We need to translate this insight of wholeness into a theory that is well grounded in various intellectual and cultural contexts. The fundamental task of holism is to take insights that are essentially mystical — derived from intuition, enlightenment, or the surreal world of quantum mechanics — and articulate them in languages that speak to the conditions of our present culture. I believe that the key is for holistic theory to describe *multiple levels of wholeness* that are each appropriate to particular intellectual, existential, or practical issues. Outlining these possible levels, and discuss-



ing their relationship to other intellectual approaches, is the focus of the remainder of this paper.

### Levels of wholeness

To begin with the principle of holism, rather than reductionism, means that we never lose sight of the fundamental interconnectedness of all phenomena. In identifying "levels of wholeness," we state up front that our classifications are arbitrary and fluid, holding relevance for particular intellectual or social problems as we presently perceive them. We would caution any specialist working at one particular level to frequently check their assumptions and conclusions against the context provided by adjacent levels, and by the principle of cosmic wholeness. No level, however carefully defined, is complete in itself.

But in our everyday world, in the projects we have taken on, the maxim that "everything is connected to everything else" does not have much practical relevance. We could not build a house, or perform medical treatments, or compose a symphony, or conduct a school, if we had to stop first to consider *all* the possible meanings and consequences of our every action! Holistic theory, then, must rest on a second basic principle: flexibility. Our theory must be sensitive and nimble enough to determine which level of wholeness is appropriate to the task at hand. Cultural historian Hayden White once suggested that an observer of culture should be a "*bricoleur*, a handyman or tinkerer,"<sup>3</sup> someone who is not attached to a rigidly fixed methodology or theory, but who can respond resourcefully to problems as they arise. This is a model that holism, in order to offer a truly useful perspective, must embrace.

For my purposes here, let me propose five levels of holistic interpretation: the person, the community, the society, the planet, and the cosmos. This will keep the following discussion manageable, and especially relevant to educational issues. Certainly for other purposes, other levels would be appropriate: A holistic physician would be interested in the wholeness of the organism; a holistic therapist would be interested in the family system; and a social scientist might dis-

tinguish between *culture* (as belief system) and *society* (the institutionalized power structure), to give a few examples. But these five will show us how holistic theory might appropriately range among different levels.

### The whole person

Holistic educators are always concerned with what they call the whole child, whole human being, or whole person. After extensive interviews with 60 holistic educators from various alternative movements, I came to the conclusion that the concept of whole person contains several essential elements:<sup>4</sup>

**Intellectual.** This is, of course, the traditional domain of education. It involves the ability to learn and remember relevant information; to think creatively and critically; to compare, analyze, ask questions, and solve problems.

**Emotional or affective.** This includes students' concerns, the things that move them, interest them, pose existential opportunities or conflicts. Holistic educators aim for psychological health — often summarized in the concept of self-esteem — in order to free students to deal with these concerns effectively. This may involve an explicit concern with the

hidden, unconscious forces of personality, and the use of methods such as visualization and meditation.

**Physical.** This includes not only health, nutrition, and physical fitness, but also the awareness that the body holds onto emotional tensions and traumas that are not effectively dealt with. Also, the body is capable of expressing tacit knowledge that is not easily translated into verbal or mathematical language, through crafts and the mechanical arts, for example, or through dance.

**Social.** Every person develops in a social context; not only language, but basic emotional characteristics are formed in interaction with others, particularly in the child's first few years. In seeking to make human interactions nurturing and supportive to all involved, holistic education is necessarily *moral* in nature.

**Aesthetic.** Holistic educators take very seriously the human love of beauty. The arts — graphic and performing — hold a central and exalted role in most holistic educational approaches. Imagination and creativity — the natural desire to give form to ideas and feelings — are highly respected and encouraged.

**Spiritual.** Holistic educators recognize that there is a part of every person

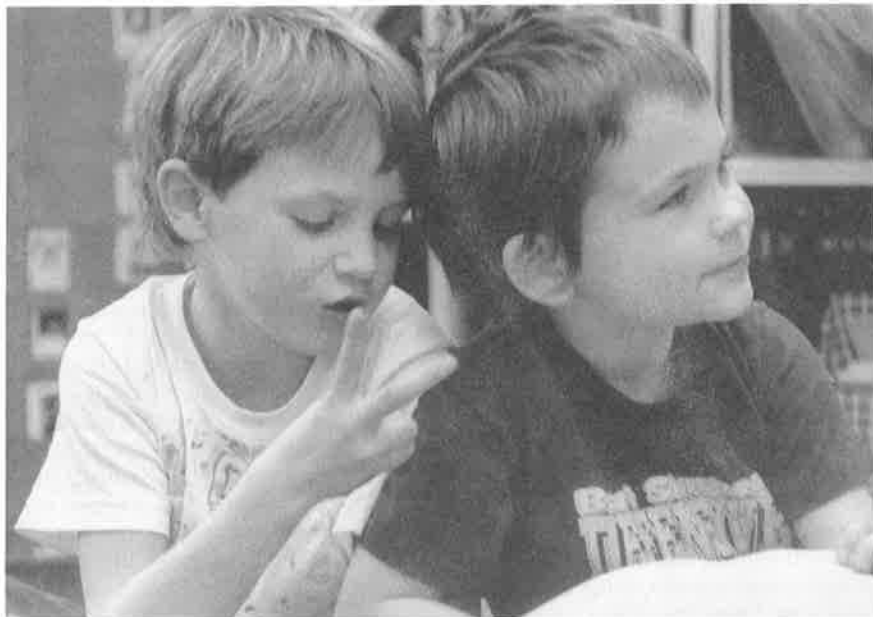


Photo © Joel Brown

that is "immutable and mysterious"<sup>5</sup> — an inner core that lies beyond the physical, social, and other sources of personality. Whether they use traditional religious terms ("soul," "the divine within") or the language of depth psychology ("the higher self"), to describe this core, holistic educators recognize it as the very essence of the person.

At the level of the individual person, then, holism asserts that each human being is a complex, interrelated system of abilities, potentials, and creative energies. To pin a reductionistic label on the student, such as "learning disability" or "hyperactive" or "at risk" — or to classify students according to grades and scores — and then to treat the person accordingly, is to ignore this complexity. A student's learning problems may primarily be intellectual (or "educational," in the conventional sense), but they certainly involve a web of related issues: the student's sense of self-worth, his or her position in the classroom and school community, the expectations of his or her family (which may reflect class, race, or other societal issues), as well as cultural forces which may have defined "learning" too narrowly, in ways that are alien to this particular person's life. Thus, even at the level of the individual person, holism calls for a radical overhaul of education as well as other social institutions based on reductionist and technocratic assumptions. No person is simply a "case," or a test score, or a citizen, or a worker. Children are not a national "resource" to be utilized by the state or by industry; every human being is too complex, too whole, to treat with such ruthless, utilitarian reductionism.

### Wholeness in community

*Community* refers to the group of people with whom one has frequent, meaningful interactions on an ongoing basis. In education, the classroom is clearly a community; the entire school, including the families of its students, is potentially a setting for a rich community life. The village or neighborhood can also be experienced as a larger community, with which a school may have important relationships.

A holistic perspective is concerned with the *quality* of human relationships within a community. A community is more or less whole to the extent that these relationships are characterized by open and honest communication, genuine concern for the integrity and welfare of each member, and a mutually accepted process of decision making. Many theorists have addressed the philosophical issues and social-psychological dynamics that affect the quality of community life. This paper is not the place to review that extensive literature;<sup>6</sup> the point here is that a *holistic*

striving for wholeness celebrates diversity and individuality. Genuine democracy thrives on variety. Diverse perspectives, shared and debated in an atmosphere of trust and goodwill, enrich one another and ultimately the entire group. The whole then becomes, indeed, greater than the sum of its parts.

### Holism and society

Holistic social theory calls attention to what it sees as modern society's dominant values: an imbalanced

---

***Holistic educators recognize that there is a part of every person that is "immutable and mysterious" — an inner core that lies beyond the physical, social, and other sources of personality.***

---

approach to community actively strives for the fullest realization of democratic, personalistic values possible within a given setting. It will pursue whatever course is necessary to foster greater communications, mutual personal concern, and democratic decision making; this may involve examination of the group's philosophical stance, individual or group counseling, special community projects or retreats, and/or appropriate political activism needed to free a community from outside control.

A holistic sense of community life aims for more intensive, more genuine interaction between people; if the person is seen holistically, then engagement between persons involves many levels — intellectual, emotional, moral, aesthetic, spiritual. Such a community does not rest content with passive obedience to rules and authority, but fosters active commitment to community life. It does not equate democracy with voting, but encourages a greater degree of informed, concerned, enthusiastic participation in the daily life of the community. It does not lock members into roles, but allows fluidity and growth. And finally, a community

emphasis on unlimited economic growth, technological control over nature, and the accumulation of power. It holds that these values have supplanted more humane, spiritual, and ecologically wise values, such as personal and community wholeness and environmentally sustainable economic development. But while this focus on values is highly useful, holism still needs a more rigorous and convincing approach to the inherently *political* nature of social problems. For the most part, holistic theory has attempted to apply insights from other levels — personal, community, global, and cosmic — to explain these issues, and has not adequately addressed the specifically political and ideological sources of such problems as inequality, racial and gender discrimination, imperialism, militarism, and violence. It also needs to examine more closely the ways in which dominant ideologies are perpetuated, not only through outright propaganda, but subliminally, in the structure of language itself.<sup>7</sup> As I have written elsewhere, a culture educates far more thoroughly and definitively than do teachers in classrooms. This is the level at which holistic theory has,

so far, been least adequately developed, especially in comparison with other critical theories.

To the extent that holism has focused on these issues, as in the work of Hazel Henderson, E.F. Schumacher, Mark Satin, and others, it is most commonly associated with the "Green" political movement that has emerged in various nations in recent years. Green thinking is not simply radical environmentalism, as it is often portrayed in the mainstream press. Rather, it is a call for a substantive *decentralization* of political and economic power. A central "pillar" of Green philosophy is grass-roots democracy, a principle implying the active participation of individuals and communities in social decisions (political, economic, technological) that affect the quality of their lives. Green (or holistic) political theory is "neither left nor right"; it opposes the concentration of power in the state as well as in massive corporate entities, and seeks instead to empower the person and the community, presuming that they will be enlightened by "Green" values such as peace, justice, and environmental sustainability — in short, reverence for all life.

However, the Green movement, especially in the United States, has failed so far to become a potent political force. It has been damaged by internal divisions, often fiercely partisan. Part of the reason for this, I think, is the difficulty of applying holistic values from the cosmic and global (and personal and community) realms to issues that require coherent political insight. If Green thinking is neither left nor right, then what is it? Greens say they are, instead, "out in front"; but just what this means has not yet been made clear enough.

### A whole planet

In the past two decades, an ecological paradigm — a concern for systems, patterns, and relationships rather than bits of data — has been attracting adherents in the hard sciences (physics, chemistry, neurophysiology) as well as the "soft." Researcher/theorists like David Bohm, F. David Peat, Ilya Prigogine, Rupert Sheldrake, Sir John Eccles, Karl Pribram, and others on the

leading edge of scientific thought are establishing ecological thinking as a legitimate, indeed theoretically superior, way of interpreting physical and biological phenomena. The implications of this still-emerging paradigm are enormous.

To begin with, the field of ecology proper — the integrated study of natural habitats and ecosystems — has helped transform the environmental movement from a polite, sportsman's interest in "conservation" to a sustained and radical critique of industrial society itself. Whether expressed in the leftist "social ecology" of Murray Bookchin, the "deep ecology" critique of anthropocentrism by Arne Naess, the "bioregional" perspective advocated by Kirkpatrick Sale, or the "ecofeminist" critique developed by Charlene Spretnak and others, the radical ecology movement has exposed the fragmentation, alienation, and violence inherent in modern culture's orientation toward the natural world. All of these movements seek to reclaim a sense of wholeness — a healed relationship between humanity and the larger context of evolving life of which humanity is only one part.

Ecological thinking has been further galvanized by the "Gaia hypothesis" developed by biologists Lynn Margulis and James Lovelock. They suggest that the Earth is a complex, harmonious, self-regulating system of dynamic processes — in a sense, *a living organism*.<sup>8</sup> This view of the planet as an integrated whole has been experienced literally by means of our flights into space. Photos of Earth taken from spacecraft, and many astronauts' (and cosmonauts') profound experiences of wholeness and oneness — verging on mysticism — have suggested that the planet is, indeed, a precious and unique treasure with an integrity of its own — a tiny and fragile oasis of life in the vast black emptiness of space.<sup>9</sup> This moving image, now emblazoned on posters, publications, and flags, is perhaps the most powerful and recognizable symbol of the holistic movement.

But global holism does not rest merely on symbolism. Holistic theorists, like other observers, recognize that in recent years the nations of the world have become profoundly inter-

connected by trade, by communications technology and the news media, by an increasingly global culture (dictated, so far, largely by Hollywood and multinational corporations). Holistic theory emphasizes that humanity *as a whole* is becoming a vastly more closely knit (if still largely contentious) community:

From our living rooms we see Chinese students and Polish babushkas, and our media and lifestyles cross their borders. History-in-the-making happens before our eyes. We celebrate the good news and suffer the bad, together, as a family, in ways that have no precedent.<sup>10</sup>

In addition, we now face the realization — again, *in ways that have no historical precedent* — that environmental problems are global in scope. Issues such as rainforest destruction, the greenhouse effect, ozone depletion, chemical and radiation leakages, and the elimination of thousands of species transcend national and cultural borders; they are planetary issues, and their solution requires global cooperation. So too with the massively destructive power of modern warfare; in the past, alliances of nations could pummel each other with guns and artillery, without threatening the existence of all of humanity, but this is obviously not the case with the weapons of today. What is indicated for the survival of humanity is a cooperative *global* alliance of nations.

### The cosmos

Here at last we come to the most grandiose, controversial, yet *vitaly essential* characteristic of holistic theory — its profound respect for the spiritual dimension of human existence. We need to be very thorough in our description and interpretation of this realm, for it is an unending source of misunderstanding, dichotomizing, and conflict. By its very nature it is *ineffable*; that is, we cannot, with the tools of rational thought and language, adequately convey the full reality of it. Spirituality transcends all our intellectual efforts, all our theorizing, all our ready-made categories and classifications. Whatever we attempt to say about it can represent only a partial view. But holism asserts that it is desperately important at least to attempt

to gain this partial view — at least to point a way toward the spiritual region of existence. For here is the ultimate and genuine source of our identity — the primary Whole, the complete context that gives meaning to our being.

Anna F. Lemkow, in her definitive study of holistic thought, associates holism with “the perennial philosophy,” a phrase coined by Leibniz and

we cannot completely fathom it. But holism asserts that we cannot simply ignore metaphysical questions, either, and still hope to say much that meaningfully addresses our most pressing existential questions. Philosopher Huston Smith calls contemporary thinkers back to the consideration of metaphysical questions. In his writings Smith refers to the holistic worldview/perennial philosophy as

as though detached from this context (this is, of course, the essential approach of modern, utilitarian consciousness), then we will succeed only in *severing* the existential connections between ourselves and the world, alienating ourselves from nature, from community, from wholeness. According to the holistic perspective, the characteristic problems of modern life — personal neurosis and heart disease, family and community breakdown, drug and alcohol addiction, crime and violence, and degradation of the environment — are direct manifestations of the “de-enchantment of the world,” which we have brought about by suppressing our awareness of the Whole. Modern life produces ingenious technological gadgets and promises exciting opportunities for personal and professional success (for some, anyway) — but to an astounding degree, our lives are devoid of *meaning*. Modern culture, quite literally, is starving the human spirit.

I use the word *spirituality* to refer to this realm of ultimate meaning. Of course it is a loaded word, associated with conventional religious concepts, and it is guaranteed to annoy many scholars.<sup>14</sup> But I do not know of a better term to capture the fullness of this cosmic wholeness. Through the ages, the religious sensibility has been the primary keeper of the holistic vision. Despite the superstitions, dogmas, and violence associated with many religious institutions (which is what secular scholars find so repugnant, and rightfully so!), the *core* teachings of religion — the mystical or so-called “esoteric” heart of the world’s religions — point toward the ultimate wholeness and meaning of the cosmos, and our place in it.<sup>15</sup> Spirituality is not superstition, but an orientation to our existence that recognizes wholeness, relationship, context, meaning — including the ultimate source of meaning. In terms of the “levels of wholeness” model, cosmic wholeness is *not* to be seen as “supernatural,” even though it is, to our limited point of view, ineffable. *Wholeness is an inherent attribute of nature*, and absolute wholeness is the ground upon which nature exists — the ground of being, the Tao.

Since spirituality is vitally concerned with wholeness and relation-

---

***Every phenomenon, at every level of complexity and wholeness (except the cosmos itself), requires a larger context to give it meaning — to make it fully real.***

---

popularized in this century by Aldous Huxley. It refers to “a core wisdom tradition” that is found in *every* major religious and mythological tradition throughout recorded history. Lemkow identifies its principle teachings as these: “the oneness and unity of all life; the all-pervasiveness of ultimate Reality or the Absolute; the multidimensionality or hierarchical character of existence.”<sup>11</sup> In terms of holistic theory, this tradition appears to be pointing to the *total* pattern of relationships throughout the universe, the all-inclusive context within which everything is related, connected, and ultimately united. By *hierarchical*, Lemkow refers to the relationship between the “levels of wholeness,” as I am describing them here.<sup>12</sup> An individual person is a whole system, but is contained in community, which is a more inclusive (more whole) system. But then community is surrounded by, and infused with, and given meaning by, the affairs of the larger society; and any given society is but one member of the global family of humanity; and finally, even the human species as a whole, along with its host planet, is contained in the all-embracing wholeness of the cosmos, the Absolute, the scope of which we cannot fathom.

Of course, it is a central tenet of modern (and “post-modern”) thinking that metaphysics — that is, speculation on the ultimate nature of reality — is to be avoided, precisely because

the “primordial tradition,” and points out that it has always been seriously concerned with the hierarchy (or “holarchy”) of existence. According to this tradition, phenomena are considered to be more *real* to the extent they “possess more of the properties of being per se,” properties such as power, duration, unity, and importance.<sup>13</sup> In considering my proposed “levels of wholeness,” we might say that each “higher” level is characterized as demonstrating each such property to a higher degree. The cosmic or “spiritual” level is that which holds *maximum* or *absolute* power, duration, unity, and importance. As Smith observes, these are the qualities ascribed to God.

Whether we retain traditional religious language and refer to this Absolute source of being as God, or use the terms of other traditions (e.g., the Tao), or adopt the more modern-sounding language of depth psychology (e.g., collective unconscious, higher self) or even physical science (e.g., David Bohm’s “implicate order”), the point is this: Every phenomenon, at every level of complexity and wholeness (except the cosmos itself), requires a larger context to give it meaning — to make it fully *real*. Beyond all phenomena that we can experience directly — from person to planet — there is an *ultimate* source of meaning and reality, an all-encompassing context. If we refuse to consider this cosmic whole, and continue to approach phenomena

ship, it engenders our highest moral values — compassion, humility, altruism, peace, justice, and love. Indeed, each of the traditions within the perennial philosophy instructs the novice to cultivate these values diligently. The perennial philosophy — holism — is not a dogmatic theology, not an intellectual weapon with which to beat unbelievers over the head; it is an inward discipline, a cultivation of the finest qualities of the human spirit. The “core wisdom” of the world’s religions teaches that it is not the intellect acting autonomously, but the *heart*, that can truly perceive the sources of wholeness. This is bound to be frustrating (or ridiculous) to the intellectual — but there it is. Even as we work to give holism a coherent theoretical basis, here is where our effort can go no further; we can point the way toward wholeness with intellect and theory, but it can be fully experienced only inwardly, in the soul.

### Finding the appropriate level

For holism, spirituality *informs* our understanding of all other levels of being. The absolute context is not “above” the experienced world, but present within it, as meaning. This is a rough translation of the perennial philosophy’s teaching that “the Kingdom of God is within you.” At the personal level, for example, the holistic educators I interviewed would not be able to talk about the spiritual aspect of personality without the context of ultimate wholeness. We cannot fully describe personhood in personal or social terms alone; the “immutable and mysterious” core self *is* the cosmic context of the person’s life.

Similarly, at the level of community or even society, we could not convey the full meaning of such values as mutual concern, compassion, justice, or peace without their universal context. To be sure, many people fight for such ideals all the time without invoking spirituality. But it is useful to consider the difference between *ideology*, which may be described as intellectual concepts inflated by passions into politics and violence, and *spirituality*, which starts with wholeness and seeks to infuse it into all personal and social relationships. For example, although they both profess pacifist

ideals, there is a profound qualitative difference between a leftist or anarchist angrily denouncing imperialism, and a Gandhian practicing nonviolent resistance to it. (This difference, by the way, accounts for much of the anguish within the Green movement.) Holism is not an ideology. Like religion, it may become one if theorizing replaces gentle cultivation of the soul, but at its best, holism is thoroughly infused with its spiritual sensitivity.

However, by the same token, spirituality must not replace critical analysis at specific levels of interpretation. This is the crucial point in developing a coherent holistic theory. It is not appropriate to use spiritual, metaphysical, esoteric approaches to comprehend issues that are existentially personal, communal, social, or global. To do so is to perpetrate the misty idealism that has come to be associated with “New Age” approaches and, unfortunately, with holism itself. Spirituality emphasizes the “oneness” of creation, and virtues such as acceptance and forgiveness. Clearly these are important — indeed ultimately important — values; but just as clearly, they do not address specific issues in our daily life and work, which often involve difficult choices, conflict, and political struggle. As I said above, the attitude that “everything is connected to everything else” is not directly relevant to such specific issues. It forms the background (again, the *context*) of holistic theory and practice, but it does not provide specific applications. For these we need a more *critical* understanding of the challenges confronting us.

The kind of analytical flexibility that I am advocating — critical theorist as *bricoleur* — requires a delicate balance between spirituality and critical thinking. In an earlier paper I described this as a tension, inherent in genuinely holistic theory, between a “personal/consciousness” interpretive style and a “concrete/historical” style.<sup>16</sup> If applying more inclusive levels of wholeness indiscriminately will result in naive “New Age” idealism, then applying less inclusive levels inappropriately must be seen as the essence of reductionism. Modernism (and “post-modernism”) tends overwhelmingly toward reductionism, which is why many holistic thinkers gravitate

toward spiritual, right-brain styles, as a corrective. The mechanistic worldview we associate with Bacon, Newton, and Descartes is essentially *dualistic*; it categorically separates the natural world from the spiritual and therefore robs all levels of existence of their inherent integrity and meaning. All theorizing based on this foundation, whether in natural science, psychology, sociology, or political theory, is therefore handicapped by reductionism from the start, no matter how integrative it might otherwise be. The naturalistic thinking of Karl Marx and John Dewey are prime examples of this, as are Freudian and neo-Freudian psychologies. Indeed, most critical theories are reductionistic because they interpret human existence in terms of biological and social realities, completely neglecting the global and cosmic.

### Relative values versus universal values

Another way to express this vital difference between reductionistic and holistic critical theory is in terms of relativism versus universalism. Post-modern theorists, especially, pride themselves on their *relativist* perspective; that is, presuming that “reality” is constructed socially, through shared meanings as contained in a dominant language, they argue that there is no ultimate unity, no reality-as-such beyond our social/linguistic perspective. Or, they assert, even if such a reality does exist, we cannot possibly know it, because we are essentially creatures of culture and language. These theorists consider relativism to be a liberating and democratic approach, because it opposes all forms of dogmatism, all efforts by elite and powerful groups to impose *their* version of reality as the one true definition of it. To them, even holism is an attempt to define social reality and hence gain cultural power.

Holistic thinkers can appreciate, and need to emulate, this endeavor to liberate suppressed ways of defining reality (which include women’s consciousness as well as ethnic, racial, and other minority subcultures). We have a great deal to learn about how a culture’s “dominant discourse” shapes people’s perceptions, beliefs, values,

and feelings. But holism does not accept that humans are essentially creatures of culture and language. What relativism (especially in the form known as *deconstructionism*) utterly fails to acknowledge are the global and spiritual levels of wholeness. *Coexisting* with socially/linguistically constructed realities is a universal reality, which cannot be “deconstructed” without being eviscerated. Humanity as a whole does have an identity, an integrity, that transcends cultural boundaries; Earth with its teeming life, in both an archetypal and literal sense, is our common home, and this indisputable fact provides a universal context of meaning to any and all particular cultural realities.

Beyond this, as I have described at length, is the all-encompassing wholeness that infuses all reality. There is no intention here to impose an authoritarian holistic discourse onto diverse human communities. I repeat an important point: Holism is not an ideology but a spiritual quest for compassion and peace. Certainly absolute wholeness can be distorted into an exploitative ideology, as various religious leaders and institutions have done. But the perennial philosophy is an inward experience that a genuine holistic theory would never presume to impose. As I indicated in my description of community, holism treasures diversity, variety, uniqueness. No single intellectual or social construct can exhaust the scope of the global or spiritual contexts. Each view of reality provides a unique piece of the vast cosmic puzzle, a particular path through the enchanted forest. Each one offers an important perspective on the whole. Holism, then, honors unity-within-diversity, or universal reality as expressed through relative points of view.

### Educational examples

At this point, let me illustrate this discussion with examples from various educational movements. Since I have mentioned John Dewey, I will start with progressive education. It is clear that the progressive educators of the 1910s and 1920s were deeply concerned with the personal wholeness of their students. Their writings are filled with references to “the whole

child” and similar phrases, and their educational practice emphasized affective, social, and aesthetic development alongside intellectual discipline. Although most of these educators did not explicitly recognize a “spiritual” element of personality, some of them came very close. Margaret Naumburg, an educator and pioneer in the field of art therapy, was influenced by Maria Montessori and Carl Jung, both of whom held a spiritual view of human nature. Naumburg asserted,

About 90 per cent of what we really are is pushed out of sight by the time we’re seven years old! The standards of education and society force back below the surface the most living and essential parts of our natures.<sup>17</sup>

Naumburg was a leader, in the 1920s, of the “child-centered” wing of the progressive education movement. Although this group claimed direct inheritance from Dewey himself, Dewey’s own understanding of progressive education was far more oriented to the *community* and the *society* within which the child develops, and he found it necessary to write an entire book (*Experience and Education*, 1938) to balance out the naive individualism of the child-centered progressive educators. Indeed, Dewey was one of the premier theorists of democratic communal and social life; he saw the school as an experimental community, a laboratory for designing democratic society from the roots on up. During the 1930s, as the Depression caused a few thoughtful people to question the apparently rotting social order, he and his more radical colleagues launched the “social reconstructionist” wing of progressive education. These theorists, particularly George Counts, provided progressive education with a perceptive and critical social theory to complement its concern for personal development. Progressive education, then, encompassed three of my proposed “levels of wholeness” — person, community, and society; it did *not*, however, address the global or spiritual levels in any significant way.

Next, consider the libertarian educational thinking of people like A.S. Neill, John Holt, and both of the “free school” and home-schooling movements that they inspired.<sup>18</sup> Here we

have a very deep concern for wholeness in community (or family) life. These educators emphasize freedom and equality, and strongly de-emphasize hierarchical roles; they devote extraordinary efforts to making group decisions by consensus and solving personal and group problems through open dialogue. These are all commendable achievements, going against the grain of an authoritarian and hierarchical culture. Yet, when we ask how such educators address the *other* levels of wholeness, we find that these are often not dealt with in any sustained or coherent fashion. Although libertarian educators, for the most part, are sympathetic to concepts of personal wholeness, a decentralized social order, global/ecological wholeness, and some version of spirituality — indeed, many individuals in these movements are actively engaged in work at one or more of these levels — their educational thinking and practice do not consistently address such issues. With an overriding concern for personal freedom and democratic community along the lines of *laissez-faire*, libertarian educational theory tends strongly toward relativism.

This is an important challenge to the “dominant discourse” enforced through conventional schooling, yet there is a need here, I believe, to devote more attention to the multiple contexts within which the concept of “freedom” has a far richer meaning. Exactly who is it that is free — a rational decision maker, a bundle of unconscious impulses, a culturally shaped persona, a being who is deeply creative, or some complex combination of all of these and far more? What kinds of sensory, intellectual, and moral environments best stimulate an integrated development (assuming that this is our goal) of these potentials? What social and global realities impinge on a person’s development, indeed, on one’s perception of the world? How might a person experience and conceive of one’s relationship to the wholeness of life and of the cosmos? These are the central questions of education, and they are not sufficiently answered with an all-purpose prescription of “freedom” or “democracy.” Other levels of wholeness, besides family or community life, are appropriate and necessary for

exploring these deeply existential problems.

Finally, let us apply the multiple-level theory to the brain-research movement in education. By this I mean work on learning styles, brain hemisphericity, accelerative learning, critical thinking, and multiple intelligence theory — approaches derived from recent exciting and significant discoveries in neuroscience and cognitive psychology. These approaches challenge the one-dimensional, Lockean empiricism that underlies conventional educational practice. They declare, quite powerfully, that the human brain/mind actively processes sensory and conceptual information; the learner *constructs* knowledge, as Piaget would say, through a holistic synthesis of various mental and affective functions. Furthermore, as learning style and multiple intelligence theorists point out, the specific quality of this synthesis varies from individual to individual. Each learner has an integrity of his or her own.

We are dealing here with wholeness at the level of cognition, which clearly is a less inclusive level than any we have considered so far; it is only a subset of the whole person. It may involve several elements of the whole person — primarily the intellectual and affective, though also the social, physical, and aesthetic — but not in all their fullness, only as they pertain to issues of cognition and learning. These approaches deal with *how* educational offerings are learned, but usually not with *what* is to be learned, why it was included in the curriculum and by whom, or for what kind of society it is preparing the learner. The literature of these educational movements does not seriously address issues of democratic community life, cultural discourse, global/ecological awareness, or spirituality. Brain-research approaches are appropriate to the phenomena — cognition and learning — with which they are primarily concerned. But we must recognize that it would be reductionistic to apply their holistic insights directly to other levels of being; if “freedom” is not the answer to all existential questions in education, then surely “whole brain” is not, either.

This discussion is not intended to heap criticism on these pioneering

movements in education. Each of them, in its own sphere, has made an important contribution to a comprehensive holistic educational theory. Each of these movements has advanced a liberating vision that challenges the stale reductionism of most modern schooling. The point here is that in order to have a coherent theory of holism, rather than a scattered assortment of radical, romantic, and research-based innovations, we need to develop a philosophical approach that encompasses the whole. All of these movements may rightfully claim to be part of the larger holistic education movement, because all recognize the importance of wholeness at some level — and this sets them apart conspicuously from the technocratic, bureaucratic, and essentially authoritarian culture of public schooling. But holism as such, as a coherent theory and an inspiring ideal, is much broader in scope and much richer in content than any of its diverse constituent parts.<sup>19</sup>

### Conclusion

Where critical theorists might describe their “thesis” or “project,” holistic thinkers talk about their “vision.” What defines holism is that it starts with a vision of the all-encompassing Whole, with wholeness as such, and only then attempts to translate this into intellectual, conceptual terms appropriate to particular social and personal realities. The reductionist disdains the visionary, seeing him or her as a romantic, irrational idealist unconcerned with the gritty problems of everyday life. “Of what use is it,” a critical reductionist might ask, “to worry about a child’s aesthetic sense or spiritual aspect — whatever that means — when the real problems of our society are racism and injustice?” A more conservative reductionist (which means most political, business, and educational leaders) would wonder how we can be concerned with such ethereal things when our economy needs well-educated workers in order to compete with the Japanese.

I am arguing in this paper that if holistic thinkers do not translate their vision into concrete solutions to pressing moral, social, and cultural prob-

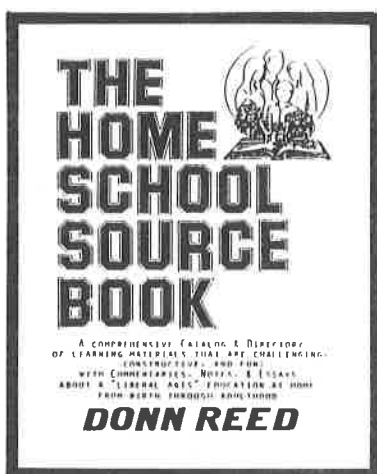
lems, then we deserve to be dismissed as dreamy romantics. But I am also arguing that *without* a vision of wholeness, all social theories, and all social institutions, are soulless and technocratic. Without a vision of wholeness, the human mind is reduced to a stimulus-response machine; the person is reduced to a statistic in public opinion polls; the community is reduced to a well-managed organization; the society is reduced to a competitive marketplace, the planet is reduced to an economic resource; and the human spirit is starved unto death. Holism restores to modern culture what it has lost in its obsessive pursuit of technological mastery and bureaucratic control: the realization that there is meaning and purpose in our existence that transcends all of our violence, greed, and despair.

The vision of holism is a vision of healing. It is a vision of atonement between humanity and nature. It is a vision of peace. And it is a vision of love. If critical social theory or sophisticated “post-modern” philosophy cannot find a place for such things in their conceptual worlds, then they can never address the most crucial and essential questions of human existence. But if they are at least willing to consider this vision, then it is up to holistic thinkers to articulate it thoughtfully, intelligently, and coherently.

### Notes

1. Fred R. Reenstjerna, “Some Critical Questions about Holistic Education,” *Holistic Education Review*, 4, no. 1 (Spring 1991); David E. Purpel and Ron Miller, “How Whole Is Holistic Education?” *Holistic Education Review*, 4, no. 2 (Summer 1991); and Steven Gelb, “Not Necessarily the New Paradigm: Holism and the Future,” *Holistic Education Review*, 4, no. 2 (Summer 1991).
2. Edward T. Clark, Jr. “Holistic Education: A Search for Wholeness,” *Holistic Education Review*, 3, no. 2 (Summer 1990).
3. From a paper entitled “Structuralism and Popular Culture,” published before 1984, but I could not determine where.
4. Ron Miller, “Conversations with Holistic Educators,” *Holistic Education Review*, 3, no. 2 (Summer 1990).
5. John Wolfe, “The Presence of the Child,” *Holistic Education Review*, 2, no. 1 (Spring 1989).
6. One model that is especially relevant, though, is the Trust-Openness-Realization-Interdependence (TORI) theory of humanistic organizational psychologist Jack Gibb.

- This model proposes that, if properly nourished, a community will naturally develop from "punitive" and "authoritarian" levels of functioning to "holistic," "transcendent," and even "cosmic" levels of intense human engagement. While it is rarely possible in our culture to attain these highest levels, this model clearly expresses holistic thinkers' vision of future development. See Jack Gibb, *Trust: A New View of Personal and Organizational Development* (Omicron Press, 2277 Lagoon View Dr., Cardiff, CA 92007, 1978). One popular writer who holds a similar vision of community is M. Scott Peck; see his *The Different Drum: Community-Making and Peace* (New York: Simon & Schuster, 1987).
7. This is the concern of "deconstructionist" thinkers, following the work of Michel Foucault, and of the sociology of knowledge, after the work of Alfred Schutz, Peter Berger, and Thomas Luckmann. One educational theorist who has explored this area within a generally holistic framework is C.A. Bowers. See his *The Promise of Theory: Education and the Politics of Cultural Change* (New York: Teachers College, 1984) and *Elements of a Post-Liberal Theory of Education* (New York: Teachers College, 1987).
  8. See James Lovelock, *Gaia: A New Look at Life on Earth* (New York: Oxford University Press, 1979).
  9. The astronauts' experiences are especially remarkable when we keep in mind that they were highly rational, efficient military officers and test pilots. Yet Edgar Mitchell was moved to establish the Institute for Noetic Sciences to advance holistic research into transcendent human potentials, and Rusty Schweikert has become involved in citizen diplomacy and other global activities. See Kevin Kelley, ed., *The Home Planet* (New York: Addison-Wesley, 1989).
  10. Joel Beversluis, "A Global Framework for Local Education," *Holistic Education Review*, 4, no. 1 (Spring 1991).
  11. Anna F. Lemkow, *The Wholeness Principle: Dynamics of Unity Within Science, Religion and Society* (Wheaton, IL: Quest Books, 1990).
  12. Perhaps *hierarchy* is not a useful term, because it has negative ideological connotations that do not apply here. Arthur Koestler proposed the term *holarchy* (in his *Janus: A Summing Up* [1979]; cited in Huston Smith, *Beyond the Post-Modern Mind* [Wheaton, IL: Quest Books, 1982, 1989], p. 52).
  13. Huston Smith, *Beyond the Post-Modern Mind*, p. 56.
  14. For example, Raymond Corsini, an Adlerian psychologist who has developed the innovative "4R" educational method, associates "spirituality" with "angels, saints, and demons" and other such supernatural phenomena. He proposes a more academically oriented term — "panima." I am not sure what that means. See "What Is Holism in Education? Correspondence Between Miller and Corsini," *Holistic Education Review*, 3, no.1 (Spring 1990).
  15. The leading modern interpreter of core religious teachings is the Catholic theologian Matthew Fox. His "creation spirituality" is grounded in Biblical sources and classic medieval mysticism, yet he infuses it with other spiritual traditions, including several from traditional and non-Western cultures, and also with modern insights including deep ecology, feminism, liberation theology, and post-Newtonian physics. He has written numerous books; see, especially, *Original Blessing* (Santa Fe, NM: Bear, 1983), *The Coming of the Cosmic Christ* (San Francisco: Harper & Row, 1988), and *Creation Spirituality: Liberating Gifts for the Peoples of the Earth* (San Francisco: Harper & Row, 1991).
16. Ron Miller, "Some Thoughts on this Discussion..." *Holistic Education Review*, 4, no. 2 (Summer 1991).
  17. Margaret Naumburg, *The Child and the World* (New York: Harcourt, Brace, 1928), p. 311.
  18. The home-schooling movement, of course, is highly diverse, and a good portion of it comprises fundamentalist Christians whose educational thinking is hardly libertarian. I am not dealing with these people here.
  19. It would take another entire paper — which I probably will in fact write before long — to explore the educational theories of Maria Montessori and Rudolf Steiner in light of this levels-of-wholeness thesis. Let me give a preview here by asserting that both of these movements are closer to embracing the full spectrum of wholeness than the approaches already reviewed. Both Montessori and Steiner dealt extensively with global and spiritual wholeness. But since these theories are quite complex, and their translation into educational practice involves numerous issues, such a discussion will require an extensive paper of its own.



"...If you leave kids alone, and let them study when they want to, they'll educate themselves. It worked for Mowgli and Tarzan, and sometimes it has worked for us. Other times we've wondered why so few of the great educators have children of their own."

#### THE HOME SCHOOL SOURCE BOOK

is a Catalog & Directory with reviews of thousands of books and other materials which readers may order directly, and thousands more from hundreds of other companies, as well as more than 300 sources of educational items that are free or almost free (most are not more than \$1 or \$2).

#### THE HOME SCHOOL SOURCE BOOK

has Commentaries, Notes & Essays about a common-sense, "liberal arts" education at home, from birth through adulthood, including what our kids really need to know -- and how we can help them learn it.

#### THE HOME SCHOOL SOURCE BOOK

is the only major home education resource guide with a strong emphasis on global awareness, comparative religions, cultural literacy, ecology, and conservation.

#### THE HOME SCHOOL SOURCE BOOK

is interesting, informative, provocative, opinionated, and often humorous -- but always very serious about learning that is challenging, constructive, and fun.

#### THE HOME SCHOOL SOURCE BOOK

may be the most exciting home-school book you will ever read. There is no other book like it.

#### THE HOME SCHOOL SOURCE BOOK

260 pages, approximately 8½x11", hundreds of illustrations

**\$15.00 plus \$1 postage**

**BROOK FARM BOOKS**  
P.O. Box 246, Bridgewater, ME 04735



# A New Wineskin for Holistic Vintage

by E.M. "Mac" Swengel

*Neither is new wine put into old wineskins; if it is, the skins burst, and the wine is spilled and the skins are destroyed; but the new wine is put into fresh wineskins, and so both are preserved.*

(Matthew 9:17)

As Ron Miller detailed in *What Are Schools For?*, the ideals and some of the methods of holistic education are over 150 years old, if traced back to the Transcendentalists of the 1830s.<sup>1</sup> Why have attempts to put holistic theory into practice generally been so unsuccessful and short-lived, or so limited when successful, as are the Montessori and Waldorf schools?

My answer (hopefully not too simplistic) is that holistic wines have been poured into old wineskins: teacher- and/or curriculum-dominated programs that group children, usually by age, cutting them off from nurturing contact with others of all ages and varied interests. The traditional school community

unnaturally restricts free and wide contacts among students and teachers. (This is a far more radical and comprehensive criticism than it may at first appear.<sup>2</sup>)

If we accept the concept that holistic education aims primarily at spiritual development, which includes an intellectual and intuitive sense of the interconnectedness of all things and a reverential awe toward the mystery of Creation, then we need a school system that combines maximum individual freedom to learn with maximum opportunities to learn. This requires removing all artificial barriers to learners' freedom to explore matters of interest when they blossom and are ready to fruit.

For children and youths to develop their unique potentials, they must be free to choose what to learn, how and when and with whom, and to what level of proficiency. Although this may sound like Summerhillian nondirectionality, it is not — not if the school provides a rich smorgasbord of attractive, meaningful learning opportunities (which Summerhill failed to do).<sup>3</sup> By implementing the Montessori concept of the "prepared environment" — identifying what children can and need to learn and then providing optimum opportunities and well-designed learning materials and methods — a holistic school can assure optimum development of *every* person's innate capacities, including the spiritual dimension.

*E.M. "Mac" Swengel, now retired, has taught at all levels from Montessori preschool through graduate courses in education. Although his specialty is reading, his main interest is in reform of the entire educational structure to involve all students responsibly in peer-tutoring programs. He lives with his wife in San Diego.*

---

**The "new wineskin" is a totally different school structure that eliminates lock-step curricula, freeing teachers and students to learn as individuals in a caring community. The unique ingredient that can give the holistic vintage an especially delightful body and flavor is Mutual Instruction — students helping one another in one-to-one and small-group cooperative learning.**

---

### The autonomy element in spiritual development

Educators generally do not advocate including early childhood in the total school system. By contrast, holistic educators must understand the critical importance of these early years, for the whole person grows from these roots.

According to conventional early childhood theory and practice, the primary developmental task of early childhood is socialization: learning to get along with other children and to obey adult instructions — boot camp to toughen youngsters for the rigors of school and community life. Maria Montessori posited a quite different task for these early years: to achieve *autonomy*, to take responsibility for directing one's life.<sup>4</sup>

Montessori averred that children who fail to develop autonomy by the age of six or seven will adopt either an antagonistic, a rebellious, or a dependent attitude toward others. She postulated that the drive for autonomy is a dominant dynamic in young children, who strive to be as omniscient and omnipotent as adults appear to be. The basic frustration of young children is the conflict between their desire for autonomy and their relative helplessness, leading to their plaintive plea: "Help me do it *by myself!*"

In my view, Montessori translated her theories into practice better than any other educator. The "prepared environment" is kept orderly *by the children*, so that they know where everything is; they get materials, use them, and put them back without having to ask others for help. Montessori-designed materials are largely self-instructional and self-correcting, needing minimal instruction for their use. Freely choosing to work with such materials reinforces a child's sense of his/her own powers to make decisions and to figure things out autonomously.

If children in a Montessori school fail to achieve autonomy, it will most likely be the result of teachers who regard the highly structured Montessori materials and their traditional use as a ritual that must be religiously imposed on children. Montessori teachers are supposed to be almost

invisible, outside of children's consciousness until needed. Unfortunately, "lion tamer" and "mother hen" types of teachers are fairly common in Montessori classrooms, where their personalities dominate. After five intensive years in the Montessori movement in the mid-1960s (during which I took the training, helped set up a school in which I taught, and was principal of three large Montessori schools), I finally arrived at what I consider a valid criterion by which to judge a Montessori school: Watch a child who spills or breaks something. Does the child freeze and look guiltily around for the teacher? or cheerfully and confidently head for the clean-up material?

A teacher of the lion-tamer type one day dragged a student by the arm into my office. I literally had to pry her hand loose, finger by steely finger, from the boy's wrist. A board member of another Montessori school, in responding to my recommendation to hire a certain teacher, asked only, "Can she control the kids?" A classmate from our training course told me that in her school (which prided itself on the "perfect behavior" of the children, achieved by strong-willed

the lay boards would summarily fire, although their children were gradually achieving the autonomy that is the Montessori primary goal. As a perceptive custodian sadly remarked to me when I told him of one such dismissal, "They always get rid of the *good ones!*"

Youngsters cannot possibly achieve autonomy if they believe that their main task is to obey others, or, as conventional practice demands, to cooperate with other children, mostly in groups. Both require the child to focus attention on outside forces and respond primarily to them. However, in Montessori classrooms quietly managed but *not* dominated by a teacher (happily, I have seen many such), social relationships among children are ideal. Autonomously secure in their own rights and abilities, they respect others' rights and accomplishments, in an almost instinctively democratic manner.

What is lacking holistically in Montessori pedagogy (from my perspective) is contact with older children and different adults in their school life. The Montessori classroom, although multi-age, is essentially the old wineskin. The negative effects of a

---

***Youngsters cannot possibly achieve autonomy if they believe that their main task is to obey others, or, as conventional practice demands, to cooperate with other children, mostly in groups.***

---

teachers who subtly coerced children into going quietly through the exercises), many of the children were dragged screaming in protest into the room; then, after taking off their shoes, submitted meekly to the lion-taming.

In contrast to these pseudo-Montessori examples were classes run by teachers with a sense of humor, tolerant of breaches of strict Montessori discipline, with genuine affection for the children as individuals without any mother-hen need to brood them. But since their classrooms were noisier and not always a model of neatness, these were the teachers whom

children-only environment, even when as well-prepared as a Montessori classroom, were evident to Margaret Mead in her six months' observation (in the late 1920s) of the Manus, a primitive New Guinea tribe. Manus children had free run of the community — their "prepared environment." They learned early to swim, walk, propel, and guide their boats, and to speak pidgin with no formal training. But they were cut off from understanding the complex interfamily relationships of the adult society; did not learn the meaning of rituals; and had no encouragement to

do anything very creative. They achieved a high degree of autonomy. Mead wrote about fourteen-year-old boys:

They are attractive, self-sufficient children, without feelings of inferiority, afraid of nothing, abashed by nothing. [She had five of them run her household for a time.] With hardly any directions or advice — for I wished to see what they made of the strange situation — they ran the house, divided up the work, scrupulously parcelled out tasks and rewards, with a minimum of quarreling. Primitive children, unused to regular work, they came regularly day after day, learned to handle lamps, take temperatures, handle a stop watch, wash negatives, expose the printing frame for sun prints, fill and light a tilly lamp.... Emotionally they were warped in early childhood to a form of egocentricity ... but in active intelligent adjustment to the material world, they have had years of excellent training.<sup>5</sup>

Their "emotional warping" was from being spoiled by indulgent parents — fathers primarily — and from being given no responsibility to contribute anything:

The child in Manus is lord of the universe, undisciplined, unchecked by any reverence for his elders, free except for the narrow thread of shame which runs through his daily life. No other habits of self-control or of self-sacrifice have been laid. It is the typical psychology of the spoiled child. Manus children demand, never give. The one little girl in the village, who, because her father was blind, had loving service demanded of her was a gentle generous child.<sup>6</sup>

When she wrote that (before 1930!), Margaret Mead drew parallels:

Because Manus society is so like our own in its aims and values, we may compare its methods of education with ours.... The Manus teach their children very young the things which they consider most important — physical skill, prudery, and respect for property. They teach them these things firmly, unrelentingly, often severely.... They develop from overbearing, undisciplined children into quarrelsome, overbearing adults who make the lagoon ring with their fits of rage....

In many ways, this picture is like our society today. Our children are given years of cultural non-participation in

which they are permitted to live in a world of their own.<sup>7</sup>

Have American educators learned the lesson that Margaret Mead suggested over 60 years ago? More technological advances have eliminated household chores that children once could help with — dishwashing, garbage disposal, housecleaning, yard work (pushing a non-power mower), stoking a furnace. Our children and youth are forced into an essentially parasitic existence, receiving much — except in impoverished homes — but giving little in return. The adult world they live in is dominated by television — increasingly materialistic, violent, and sex-oriented.

Traditional child psychology asserts that children feel secure according to how much they are loved and cared for. Loving involves doing loving acts *for* and *with* the beloved. However, *giving* material things easily may substitute for *doing* loving things. Even if children feel genuinely loved, a vital part of a love relationship is missing. Children may feel that the love they receive is an undeserved gift that they are unable to repay in kind. Ideally, love is unconditional, but we feel better if we have done something to deserve it. That something is doing something helpful. Loving means helping. If given few opportunities to help others, children are denied the

judgmentally on all events only as learning experiences. Persons of different ages, religious, and philosophical beliefs return from this experience convinced that the dual and equal purposes of life are love and learning.<sup>8</sup>

*Learn to love and love to learn.* Is this a satisfactory working definition of spiritual development, which holistic education should be designed to nurture? Can these two objectives be integrated, so that they develop simultaneously in a natural, synergistic interrelationship?

### A new wineskin for holistic education

What are the most powerful external forces that motivate and sustain learning? *Not* workbooks and teacher-directed lessons for a whole class. Very simply, *competent schoolmates* — peer models (*peers* meaning schoolmates of all ages).

Of primary importance is that children have free access to a wide range of personalities. My model for the ideal holistic school eliminates age-grouping both in age-graded classes (even when they span several years, as in Montessori and public school multi-grade classes) and the K-6, middle-school, junior high, and senior high schools on different cam-

---

***If given few opportunities to help others, children are denied the experiences they need to become loving. Insecurity stems more from feeling unloving than from feeling unloved.***

---

periences they need to become loving. Insecurity stems more from feeling unloving than from feeling unloved.

Herein lies the secret of holistic education, of spiritual development.

Raymond A. Moody, Jr., has interviewed more than 1,000 persons who have had near-death experiences. They commonly report that a "Being of Light" shows them a panoramic replay of their lives, commenting non-

uses. Students, from infants through middle and late teens, learn together on the same campus. The school is a real-life micro-society, a reasonable facsimile of the larger adult society with which students maintain close contact and free interchanges.

The school operates year-round as a community educational center, open six days a week (Sunday if desired) from 7 A.M. to 6 P.M. for students, and evenings for community activities.

---

Economics and women's rights are combining to put most women full-time into work outside the home, so that the school necessarily takes the place of the parents for working households. This need be no real loss — actually a golden educational opportunity. An enriched holistic program can provide a secure and stimulating day-long environment for children of working parents, solving the critical problems of latchkey children. Opportunities for creative activities before and after the regular school hours can keep children and youths from excessive television watching, and prevent them from getting into delinquent activities that commonly occur when children "have nothing to do" (that they want to do).

What is an optimum size for a school micro-community? Ideally, from 600 to 1,000 pupils, 60 to 85 adults. There are at least 20 distinct disciplines, including arts and crafts, dance, drama, music, and physical education (and early childhood) that require two teachers each, for the elementary and advanced levels, which should be continuous and coordi-

by name and occupation by the time I was ten years old. Kids who had free run of the community (as I did not) knew the townsfolk earlier and better than I. Learning to know 1,000 people, and finding one's way around a school of that size is a realistic challenge for all learners. A sense of security and belonging is nurtured by knowing and being known by *all* members of one's larger community, especially when they are known to be friendly and caring. (A smaller community unit, the school "family," is described later.)

As a cultural center for the surrounding community, the school should be within walking distance for students and adults, eliminating the cost (and pollution) of bussing. A bus ride is seldom a positive educational way to begin and end the school day.

This model school would eliminate all kinds of enforced grouping by age, ability, sex. It would have no prescribed curricula to be followed in a linear order. The school day would not be divided into periods. There would be clocks, but no bells. (And no intercoms!) No ABCDF grades; no normative grading of any kind. Tests,

dents' "inner needs and desires" lead them to waste time on frivolous pursuits, do only the easy stuff, barely get by, and develop no serious sense of purpose? Wasn't this "child-centered freedom" a major theme of the failed progressive programs a half-century ago?

Such fears and questions arise from observing the behavior of children and youths whose natural curiosity, creativity, energy, and autonomy have been squelched, diverted, and deformed by an educational system (school, home, and community) that does *not* provide them with adequate quantity and quality of opportunities for holistic growth. We have yet to see how children will develop under genuine freedom of choice in a richly motivating environment. All indications are that they will learn much more, far faster, and to higher levels under internally motivated self-direction (with individual help as needed) than they will under any type of externally directed program.<sup>9</sup>

Perhaps the concept most difficult to give up (even for holistic educators) is the deeply ingrained one of teacher-and-class, with its concomitant ideas of the teacher "giving" instruction, "motivating" students, "rewarding" them for learning — the teacher "in control" of the students, "directing" their progress, "assessing" their competence, "assigning" their tasks — always present and dominating even when hovering in the background, ultimately in judgmental control.

Ideally, professional teachers' duties are *none* of the above. They should be mainly to prepare enticing environments that provide learners with all they need to learn. And then almost literally turn students loose, trusting the "Cracker Jack effect": "The more you learn, the more you want" (to learn) to direct and sustain growth according to each student's individual developmental pattern. Jean Piaget and other cognitive theorists posit that intellectual hunger is as psychologically and neurologically real as physical hunger for food. Traditional schooling dulls intellectual appetites by force-feeding so much unpalatable pap.

What learners need most to tackle and stay with new learning are interested schoolmates. The most powerful

---

***All indications are that children will learn much more, far faster, and to higher levels under internally motivated self-direction ... than they will under any type of externally directed program.***

---

nated. Thus the 40 teachers (and at least 20 trained aides). At a teacher/pupil ratio of 1 to 25, this calls for 1,000 students, including preschoolers. These numbers provide a sufficiently wide range of personalities so that every student can find special friends *not* limited to same- or near-age schoolmates. This school population, adults and students, is large enough to provide a sense of adventure in making new friends, and large enough not to become an ingrown, homogenized community, but not so large that anyone will feel lost or alienated.

I grew up in a Midwestern town of 1,100 persons, most of whom I knew

yes, such as Scouts must pass to earn a merit badge, and professionals to become certified. Other testing would be formative — spot checks on progress, immediate reinforcement of success, necessary feedback — but without grades entered into students' permanent records.

With the traditional school structure thus demolished, what do we erect in its place? Without classes to teach and students to grade, what do teachers do? How will parents be assured that their children will learn what they need to know to get and hold a good job, or to go on to college? Won't turning learning over to stu-

external motivation to learn is to see one's peers doing something they enjoy and do well. Although we are all different, we are sufficiently alike to feel that, "Whatever you can do, I can do, too." Our wanting to be a distinct personality — to be different — is counter-balanced by the need to feel equal or at least similar to our peers, to enjoy what they like. This benign peer pressure reinforces and directs children's internal motivation to learn. In time, these complementary inner and outer forces lead every student to learn most of what the school offers —

to master the basic curricula, certainly.

Teachers should not be assigned to classes. (It is very hard to eliminate those two basic words and concepts: *class* and *classroom*. How about simply *study rooms* and *learning labs*?) As do other professionals, teachers would work largely on a one-to-one basis. They have their own comfortable private offices adjoining a study room (see fig. 1). Students meet with them singly, in pairs, or in small groups when they choose to learn cooperatively, as they frequently will, learning being basically a social activity. They

discuss what they have done, what problems they are having, what needs to be improved, what additional work is yet to be done, what resources should be consulted.

In this model school, teachers have time during the day to stay abreast of developments in their fields. They do *not* take home armloads of papers to grade and lesson plans to prepare. Teachers have time to talk to other teachers about integrating their disciplines, overall and in specific cases for students working on a project. For example, in science, students would be urged to study the history of a particular division of the science they are researching, to read biographical material on former researchers and some history of the scientific atmosphere of the times, and to examine political and economic pressures on scientists, as well as lay attitudes. They would study science in its long-term human development, paying attention to the process and progress of scientific thinking and its acceptance (and rejection, often) by other scientists and the public. Teachers would try with their mature students to form a holistic picture of the interaction of economics, politics, sociology, psychology, religion, and technology that affected a scientific development; they would then attempt to determine its counter-effects on all those elements of society. Once students begin to understand this holistic interconnectedness, they will look for it themselves. Their intuitive sense of and need for unity (which holistic thinkers postulate) will henceforth influence all of their study and conceptualizing.

Teachers are responsible for judging the concepts that are appropriate to introduce in their subjects at different levels and for individual students. However, this is *not* to be done according to any theory of a rigid, linear progression through stages, which if blindly followed can hinder an individual's progress. All children do not progress through stages at the same time or rate. For a teacher to state, "Oh, Jeremy is too young for that concept — he's still in the operational stage," could hinder Jeremy's progress. If Jeremy wants to take a crack at it, then let him. Teachers (and parents) can seldom determine how far from

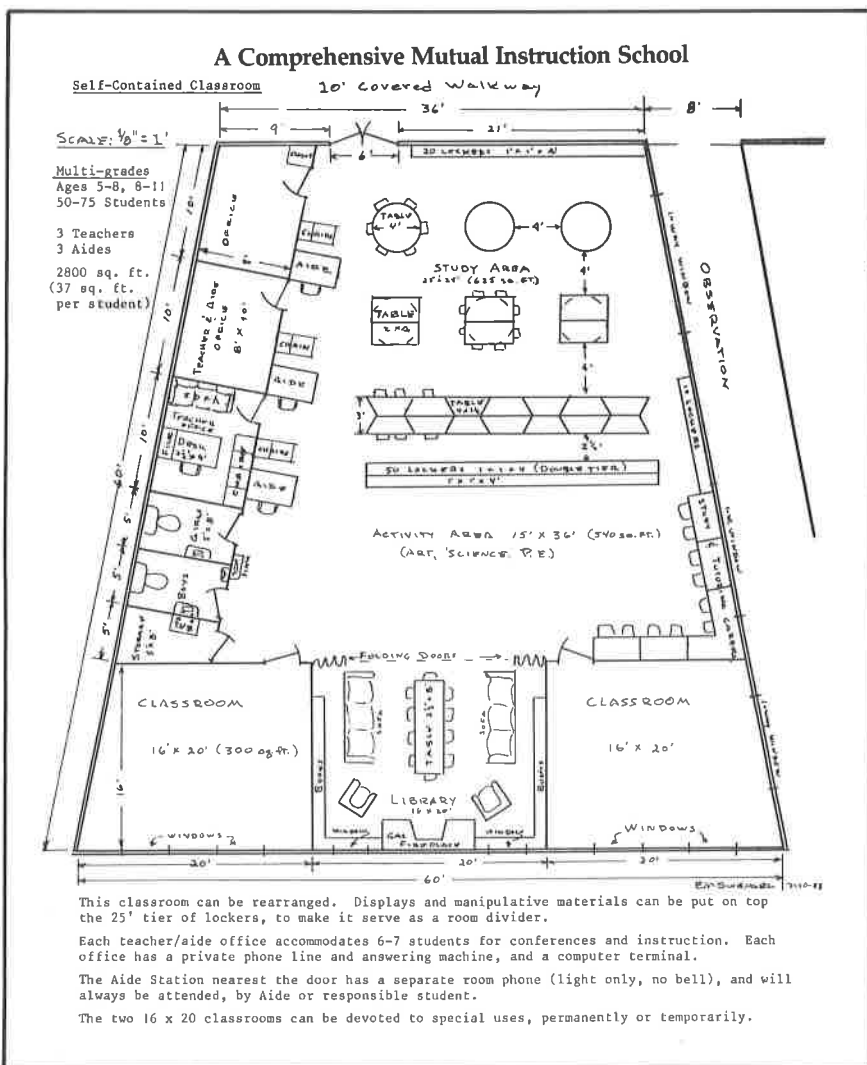


Figure 1. A self-contained learning lab in a comprehensive Mutual Instruction school. Note: This learning lab can be rearranged. Displays and manipulative materials can be put on top of lockers, to serve as a room divider. Each teacher/aide office accommodates six to seven students for conferences and instruction. Each office has a private phone line with an answering machine, and a computer terminal. The aide station nearest the door has a separate room phone (light only, no bell) and will always be attended by an aide or a responsible student. The two 16 x 20 classrooms can be devoted to special uses, permanently or temporarily.

the norm a child may be. A learner who tries and fails in a too-ambitious project is not damaged. Failure is only relative, and it can be educative if used to help a child to assess his or her abilities more realistically in relation to the requirements of a task.

Self-initiated effort often surprises adults who have preconceived notions of children's abilities. Montessori reported that when she presented new material designed for older children, usually it was the younger ones who most eagerly took to it and mastered it. In one-room schools and multi-age classes, younger children typically pay more attention to lessons given to older children than to their own — and often master material allegedly beyond their years.

The floor plan of an entire school shows learning labs and study rooms for the disciplines in which society expects its members to become competent (see Fig. 2). Each room is managed by two teachers, each specializing in how best to present their material to younger and older students. One or two trained aides supervise room activities. Students of all ages intermix in these rooms, including preschool toddlers accompanied by mentors who help them to get the feel of the rooms, and engage them in some simple activities in the area equipped for beginners.

Free to pursue their own interests, children reveal their special abilities by getting deeply involved in a subject, not limited by class periods and

lock-step curricula. (This is a distinctive element of Montessori pedagogy which accounts for some of its success: Children can spend as long as they wish on a self-selected activity, often to an extent that impatient adults regard as neurotic perseveration.) Children and youths have their own internal sense of fulfillment and completion, which teachers and parents must respect, hard as it is to "trust the inner child" and to suppress the adult urge to intervene and hurry along the growth process — haste that is sure to make waste.

### The dynamics of Mutual Instruction

The hitherto largely untapped resource essential for this unique holistic concept is *Mutual Instruction* (MI): learners learn to help one another, to their mutual benefit.

Mutual Instruction — a holistic system par excellence — has a history beginning about the same time as one of the first holistic teachers — Johann Heinrich Pestalozzi.<sup>10</sup>

In 1791, Andrew Bell, a Scottish minister, was appointed head of the Military Male Orphan Asylum in Madras, India. He developed a system in which his 300 boys (originally described as "in general, stubborn, perverse, and obstinate") learned to teach one another, the more competent teaching the less able until they in turn became proficient enough to take on the tutor role. In the early 1800s, Bell's "monitorial method" was adopted and further developed by a Quaker schoolmaster in London, Joseph Lancaster. In his highly regimented system, a single headmaster taught the brighter students to drill ten others in the three Rs, thus enabling a school of 500 to 1,000 students to operate with a single paid headmaster — an economy most appealing to the philanthropists who supported the church-sponsored English "public" free schools, largely for the poor. Lancaster took his system to France, the United States, and South America, where it powerfully influenced the development of universal, publicly funded schooling.<sup>11</sup>

The fiscal economy of Lancaster's system was its main selling point. However, in 1821, a young and inex-

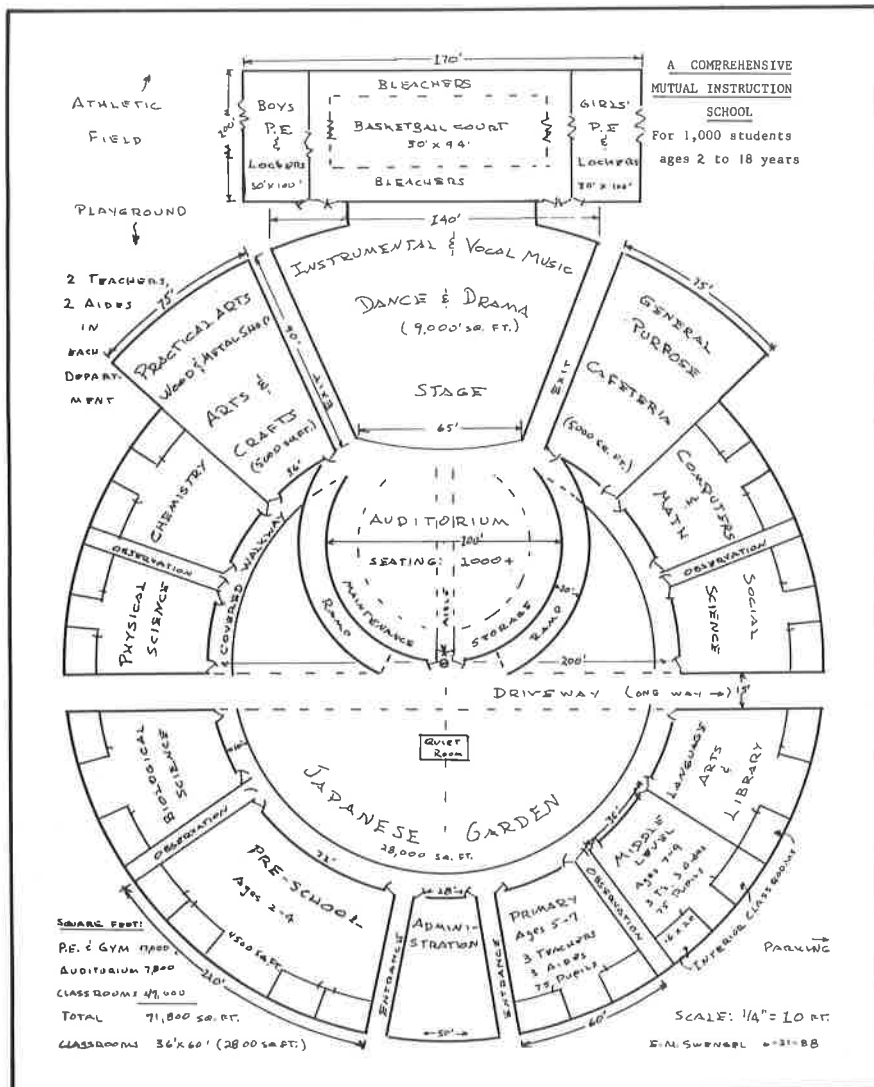


Figure 2. A comprehensive Mutual Instruction school.

perienced Boston schoolmaster, William Bentley Fowle, discovered the essential *educational* value of tutoring, first in a school for 180 boys and girls too old for primary and considered too ignorant for higher level schooling. From a neighboring school, Fowle imported some girls (potential dropouts), whom he used as tutors. *All* students became involved in tutoring, so successfully that they all were ready for regular schooling after two years — and the school (known then as the Mutual Instruction School) was closed!

Fowle did not use Lancaster's rigid, mechanistic rote-drill methods. Having seen the value of comprehensive mutual instruction, Fowle used it in a private girl's school he headed from 1828 to 1841. His plea for its general adoption:

Teaching is learning, and learning of the very best kind ... it is the true democratic one.... Being sometimes governed (by other children), children are less likely to become imperious; and sometimes commanding, they will not too easily become servile.... No child, but the very lowest, was so low she could not teach something, and that something I always required her to teach.<sup>12</sup>

Unfortunately, Horace Mann and other public school promoters of the time were more impressed by Prussia's military-industrial mode of schooling. Fowle's simple mutual instruction, "the true democratic one," was passed over.

hour several times a week. The results are almost always highly beneficial to both tutor and "tutee," academically and in improved attitudes toward school and enhanced self-concept.<sup>13</sup>

Administrators generally fail to see the value of such pupil-to-pupil interaction, so they do not restructure the daily program to give adequate time for teachers who send tutors and those who receive them to plan with each other and to meet regularly with tutors for ongoing training and supervision. Valuable as the tutoring is to the few students involved, the hassle of exchanging students while trying to run the usual classroom group program often proves to be more burden than benefit to the cooperating teachers, who reluctantly opt out of voluntary tutoring programs.

However, the results from a wide variety of tutoring programs, accumulating from over 30 years and more than 20,000 programs, demonstrate beyond all doubt that the tutor-tutee relationship nurtures communication skills involving heart as much as head. The evidence — subjective, personal testimony of the kind accepted as valid and credible by juries sitting in trials involving life and death, as well as statistically significant results from formal experiments — supports the basic mutual instruction thesis: *Teaching (tutoring) should be an essential part of the learning process for all students throughout their school lives.* It should be

anything that other students can teach should be taught by them, for the mind-heart benefits that teaching confers. In a holistic MI school, teachers teach teaching. They teach students how to help other students learn.

In the tutorial relationship, both tutor and tutee have to rethink what they know. Tutors have to reshape their concepts repeatedly to fit the mind sets of their different tutees. To understand how others think, tutors must listen carefully, devise questions to determine their tutees' level of knowledge and comprehension. Repetition and review are necessary for long-term memory. Ideally, repetition should be creative, not rote drill. Tutoring requires inventive reconstruction by the tutors, stimulating insight into their own thinking processes — a giant step toward self-knowledge ("metacognition" in current educationese). This self-discovery facilitates exploring others' minds, leading to better communication.

Tutors also learn to listen with their hearts for the feelings of their tutees — their level of confidence, timidity, need for encouragement (or perhaps overconfidence and brashness), reluctance to admit ignorance, bravado — common garden-variety psychological problems that affect learning.<sup>14</sup>

Tutoring provides immediate meaning and relevance to learning. Although it is a self-rewarding experience, learning is more meaningful when immediately useful. Very little of the school curricula is, or can be, of immediate practical use for students of any school age. However, when they soon use what they have learned to help others, they see real meaning and purpose, both for themselves and for those they help. Since *all* children learn to be tutors, they all experience this social relevance. Aware that they will use what they learn to help others, students conscientiously master subject matter so that they will not mislead or confuse their tutees. Using one's expertise in responsible one-to-one tutoring relationships gives the whole educational process an especial appeal that group learning, even in small cooperative groups, cannot duplicate. Taking personal responsibility for one person, especially in cross-age tutoring, is qualitatively dif-

---

## ***The results from a wide variety of tutoring programs ... demonstrate beyond all doubt that the tutor-tutee relationship nurtures communication skills involving heart as much as head.***

---

Tutoring was reintroduced into American schools during the experimental 1960s and 1970s, but almost exclusively as supplemental programs, tacked on to the traditional teacher-dominated, lock-step, group instructional system — as they still are. In cross-age tutoring, a few upper graders tutor lower graders, usually in reading or math, for a quarter- to half-

the central organizing principle of education. Schools should be restructured to give *all* students continuing experience in both roles, tutor and tutee.

This does *not* mean that professional adult teachers never do any direct teaching. They do, but mostly for students who have no other source available for instruction. However,

ferent, both intellectually and socially, from cooperating with same-age peers in small group projects. Both kinds of social interaction are valuable, and both are included in the MI concept.<sup>15</sup> The failure to use *all* students' knowledge and social skills can account for the failure of most reform efforts, which have been poured into the old teacher-and-class wineskin, in which personal responsibility and eagerness to share cannot ferment into the heady wine of love of learning.

Children are naturally sensitive to others' feelings. The tutoring relationship provides both tutor and tutee with ample opportunities to refine their sensitivities and learn to use them creatively. Tutoring integrates left- and right-brain activity that leads to a quality of head/heart communication which gives both parties a holistic sense of unity, within themselves and with each other. *All* students deserve the benefits from this essential holistic experience. Tutoring is basically a spiritual exercise and discipline, leading both inward to expanding self-knowledge and outward to deepening appreciation and understanding of others, and a sense of community.

A main responsibility of teachers in an MI program is to pair tutors and tutees for mutually productive interchanges at both the intellectual and affective levels. Teachers supervise some tutoring, get reports on progress and problems from both tutors and tutees. Sensitive management of tutorial relationships is of central importance. However, the extensive literature on tutoring attests that matching tutors and tutees is *not* a major problem.

### Summary of basic holistic MI concepts

Three basic concepts are the foundation of this model holistic system:<sup>16</sup>

1. Eliminate all arbitrary groupings; create a model school community with all ages from two to eighteen years on the same campus; all learners have free access to all facilities, school personnel, and other students.
2. Teachers prepare stimulating learning environments and self-study and "tutorable" materials that pro-

vide varieties of ways for students to learn, according to their unique developmental patterns and learning styles. Teachers work with students mostly on a one-to-one basis and in small self-formed groups.

3. *All* students learn how to tutor and be tutored in all subjects, so there is always competent one-to-one tutorial help available when needed. Students take main responsibility for their own learning and helping others.

### Notes on other features of a holistic MI school

#### *Students' four-quarter time investment.*

Student's school lives are divided about equally among four different types of learning. (These proportions will vary somewhat, student by student, and at different stages of development.) A fourth is spent in being tutored in new learning, including cooperative learning in small groups. Another fourth is devoted to tutoring, mostly in subjects in which tutors have special interest and expertise. Tutors will be paired with tutees to work on projects that challenge tutors as much as their tutees, providing tutors with enrichment and creative review, a type of "overlearning" essential to developing high-level expertise.<sup>17</sup> A fourth of school time is spent in group activities — music, sports, drama, and the like.

The remaining fourth is reserved for projects of students' own choosing, with no academic responsibility or credit — free time for pure pleasure and self-satisfaction. This is intended to further develop autonomy, to nurture creative interests to fill leisure time. Creative hobbies should be students' *home-play*, replacing homework that will *not* be assigned in an MI school. Hopefully, students will become interested enough in many subjects to study them at home *voluntarily*. (The cross-age tutoring literature is replete with reports of the creative work that tutors, on their own initiative, do at home to prepare special lessons for their tutees.)

*Covering the required subjects.* Most observers agree that students under traditional group instruction waste at least 50% of their time. In an individu-

alized MI program, students tackle required subjects when they are fully ready and able to handle them successfully, and are on task 90% of the time. By not wasting time on unnecessary work sheets and drills and often meaningless recitation periods, students can master state-mandated course work in half the usual time or less, leaving ample time for enrichment activities. As students decide on possible careers, they prepare for whatever further training is needed.

*The quiet room.* With freedom to choose their areas of study (beyond required course work), students are likely to investigate paranormal phenomena, yoga, depth psychology, and mind-expanding disciplines involving meditation and spiritual development. Most psychologists recommend that students have occasional quiet respite from intense activity. A holistic school should provide a facility insulated against sound (although a holistic school should not

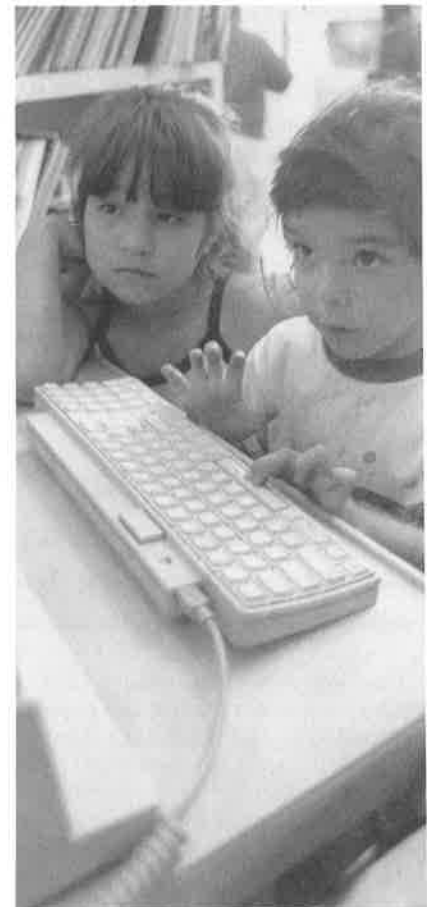


Photo © Joel Brown



be noisy), with cells for private meditation and individual instruction, and a larger room for group exercises.

**The MI "family."** Each teacher and an aide (of the opposite sex, ideally) act as mentors (*mentor* is dictionary-defined as a wise and trusted teacher, friend, and counselor) and adult role models for a group of about 25 students, ages 5 to 16 or 18 years. This group — a "family" — stays together throughout their school lives, except for reassignments as advisable. The teacher serves as major adviser, helping each student, in concert with parent(s) or guardian(s), to plan and carry out a balanced personalized program. The "family" meets daily for 45 minutes or so, for group activities that have common meaning — singing, hearing reports of members' special events, "show and tell," meeting parents and relatives and hearing about their lives — in short, providing large-group experiences to supplement and complement the diverse relationships students have in their individualized programs, which offer no ongoing special group or long-term teacher. (This special grouping aims to recapture the atmosphere of humanely run one-room country schools, whose graduates fondly remember the "family feeling" in their little school community.) All but the youngest and oldest members are both big and little sister/brother to other members. By providing unbroken continuity in close friendships, this family-like grouping should prevent feelings of alienation and loss, as is common in traditional schools that yearly reassign pupils to a new class and teacher, cutting off meaningful relationships a year in the making. In MI, new students receive a warm and concerned welcome from their school "family," who give priority to getting newcomers comfortably, securely, and quickly acclimated.

**Parent involvement.** Parents are urged to participate actively in planning and supporting their children's programs. They have access by phone or in person to teachers whenever necessary; they are welcome to contribute to school activities. With no required texts and reading lists, students do not have to read *Catcher in the*

*Rye* if they or their parents object. With no large-group required activities, children from families of minority cultures and faiths will not feel embarrassed or persecuted by being left out of large-group activities contrary to their beliefs.

A holistic school should be essentially a classless society, diverse and heterogeneous, but cohesive because it engenders respect for individuality and differences. Tutoring typically develops mutual affection and respect, so that students increasingly

Each room has a cozy area for relaxed reading and study. Group lessons and activities take place in the two interior rooms.

Toilets are included in each study room, to avoid the difficulties and abuses common in group toileting. Each room has its own cleaning closet, stocked with supplies and equipment. Instructed by maintenance staff, students do the standard housekeeping and landscape work; they also help in the kitchen. Through these domestic activities, students learn to care for

---

## *A holistic school should be essentially a classless society, diverse and heterogeneous, but cohesive because it engenders respect for individuality and differences.*

---

accept, understand, and appreciate personal differences as they develop the sense of their common humanity.

**Physical education.** The gym and playgrounds are in use all day. Students coach individuals and teams; matched teams have time to play a full game, in contrast to the typical high-pressure, mass recess or physical education class in which a crowded mass of undifferentiated players scramble more or less lawlessly through a too-short period, producing more frustration and tension than restorative recreation. Physical education should include in-depth study of nutrition, sleep, exercise, and human biology to stimulate a creative commitment to a healthful lifestyle that integrates activities needed by body, mind, and spirit.

**Flexibility.** As school is in session year-round, students need only attend the required number of state-mandated days, but may attend more. They take vacations as desired, without missing class work; they resume their own individualized programs on return. Teachers likewise take their vacations when and in whatever time segments they wish.

**Room arrangements and upkeep.** The study rooms accommodate 40 to 50 students — a pupil-teacher ratio of 20 to 1 or 25 to 1 (a pupil-adult ratio of 10 to 1 or 12 to 1, counting teacher aides)

and take pride in public property, and to appreciate the value of menial labor.

**Literacy.** With preschoolers on campus, older children can help them develop verbal skills fundamental to reading and writing. As children show interest, tutors lead them *without pressure* individually and in small groups through literacy programs. Receiving as much personal attention as needed, no child will fail to learn to read and write, competently and enjoyably.

(The first encouragement I received when initially exploring MI was from a university professor fondly recalling his first teaching in a one-room school: "We had never heard of a 'non-reader.' The older kids would take the little ones into their seats, and simply would not give up 'til they taught them to read."<sup>18</sup>)

After children learn to read, they can do much of their learning through self-instructional materials. Tutoring then becomes mostly reviewing a self-taught lesson — the tutee explaining how he or she worked through the material, and the tutor asking questions that lead beyond the lesson — in general, providing immediate external confirmation of success to reinforce the student's personal satisfaction with a job well done. However, competent students often need help even with good self-instructional materials,

so having tutors available prevents learners from becoming frustrated and wasting time while hung up or derailed.

**Hands-on parenting experience.** All teenage students should regularly spend time with infants and preschoolers, learning first-hand how to care for them. This practical internship is accompanied by formal study of child development under direction of specialist teachers in the preschool — which should be incorporated into the public school system. (The public must be convinced that adding these early years to the public school program is a wise investment. By getting children off to the right start and continuing their growth unimpeded, the waste of human resources from illiteracy, sexual irresponsibility, drug use and abuse, crime, unemployment, and civic irresponsibility could possibly be erased in one school generation — sixteen years at most. MI achieves remarkably solid results very quickly.)

However, if this early childhood foundation is not solidly laid, then subsequent schooling becomes heavily remedial. Early schooling need not be mandatory, but it should be so attractive and effective that all parents will take advantage of it. Very few homes and parents can offer all of the developmental opportunities children need for optimum growth. A school community as herein described can provide a healthful, protective, stimulating environment for unfortunate children without a decent home. It can enrich the lives of children who do have a good home life. With about 50% of marriages broken or breaking, at least half the school population needs the kind of supplementary, supportive care that a comprehensive holistic school can provide, for all ages.

All of the ideals of holistic educators can be achieved in an MI school. Furthermore, such a school conforms to the most stringent criteria that more and more reformers are setting forth for fundamental restructuring, notably the empowerment of students and parents as well as teachers in planning and implementing truly individualized programs. The most perceptive critics of traditional education affirm that the entire system must

be redesigned, instead of the piecemeal, cosmetic tinkering that has characterized reform efforts for centuries.<sup>19</sup> The most noticeable change so far is that desks are no longer screwed to the floor — but (beyond the primary level) they are still in rows facing the teacher's desk and chalkboard. Schools still run about as they did a century ago: teacher and curriculum-dominated, age-grouped, competitively graded on some kind of ABCDF curve, with only lip service to the ideal of individualized instruction aimed at "helping every learner achieve his or her potential" (a pious statement found in every school district's statement of goals). On the basis of results from thousands of peer tutoring and counseling projects over the past 30 years, we can confidently predict that a comprehensive, uninterrupted MI program stretching from early childhood to the late teen years will produce students with factual knowledge and analytical skills, coupled with a holistic attitude toward life, needed to solve the problems of war, injustice, pollution, and all activities that threaten the welfare of humankind.

We need not postulate the type of politico-economic system that MI alumni might devise. However, we may assert with confidence that they will approach humanity's problems using head and heart to solve them so as not only to assure material well-being for all, but also to advance spiritual development — autonomy directed toward a lifetime of learning to love and loving to learn.

## Notes

1. Ron Miller, *What Are Schools For? Holistic Education in American Culture* (Brandon, VT: Holistic Education Press, 1990), pp. 81-87. Miller's well-researched and readable history of holistic education is worth any educator's time and attention.
2. Critics of traditional education abound. See Lynn Stoddard, "The Three Dimensions of Human Greatness: A Framework for Redesigning Education," in the Spring 1990 issue of *Holistic Education Review* 3, no. 1, and included in *New Directions in Education: Selections from Holistic Education Review*, edited by Ron Miller (Brandon, VT: Holistic Education Press, 1991), pp. 219-232. Stoddard's critique: "It is impossible to reform education within the prevailing frame of reference, which is characterized by a mental fixation on curriculum development instead of human development" (*New Directions*, p. 220). Stoddard's redesigned school has much in common with the "new wineskin" herein proposed.
3. Seymour B. Sarason, a life-long reformer, takes a pessimistic look in a little book of trenchant criticism: *The Predictable Failure of Educational Reform* (San Francisco: Jossey-Bass, 1990). Sarason considers the traditional school structure "intractable" to piecemeal reform because of power relationships that must be dealt with in a holistic way. Sarason wrote more fully on the subject in his *The Culture of the School and the Problem of Change*, 2nd ed. (Boston: Allyn & Bacon, 1982). The psychological problems in making radical changes are the focus of Michael Fullan's *The Meaning of Educational Change* (New York: Teachers College, 1982). "All real change involves loss, anxiety, struggle ... changes in goals, skills, philosophy, beliefs, behaviors ... experienced in a diffuse, incoherent manner" (p. 29). Reformers must pay as much attention to *how* to make changes as to *what* changes they wish to make. An especially caustic criticism is Frank Smith's *Insult to Intelligence: The Bureaucratic Invasion of Our Classrooms* (New York: Arbor House, 1986).
4. A.S. Neill, *Summerhill: A Radical Approach to Child Rearing* (New York: Hart, 1960). A classic that helped launch the "free school" movement of the 1960s. However, all opinions were not as positive as Neill's, as collected in *Summerhill: For and Against* (New York: Hart, 1970). "Outstanding writers in education, sociology, and psychology evaluate the concepts of A.S. Neill." Negative opinion from Dr. Ernest Papenek, child psychologist specializing in juvenile delinquency: "We learn a lot from [Neill] as to what is bad in education. We do not learn enough from him as to what we can do to better the situation" (p. 172).
5. See E.M. Standing, *Maria Montessori: Her Life and Work* (1957; reprint, New York: Mentor, 1967). Standing was a personal friend of Maria Montessori and himself a Montessori teacher. His book is an accurate but uncritical description of the Montessori method and its development. For a scholarly and critically objective view of both Maria Montessori and the worldwide spread of her method, see Rita Kramer, *Maria Montessori: A Biography* (Chicago: University of Chicago, 1976; paperback ed., Menlo Park, CA: Addison-Wesley, 1988).
6. Margaret Mead, *Growing Up in New Guinea* (New York: Mentor, 1953), p. 93.
7. Mead, *Growing Up*, p. 38.
8. Mead, *Growing Up*, pp. 127, 128.
9. Although Raymond A. Moody, Jr., and other researchers in the field of near-death experience (NDE) focus on the question of life after death, the consistent testimony that we take with us to an afterlife only love and learning, undergirds holistic philosophy about life's essential values and purpose. In his last book, *The Light Beyond* (New York: Bantam, 1988), Moody comments that young children who have had an NDE are "kinder and more patient" (p. 66). "They are happier and more hopeful than those around them" (p. 77).

9. The sources of my information on peer tutoring and counseling are diffusely based on over 30 years of interested investigation. I am a charter member of the National Peer Helpers Association (NPHA), which has conducted five national conferences. For information, contact the Association at P.O. Box 335, Mountain View, CA 94042. NPHA publishes the *Peer Facilitator Quarterly*.

I have sat through hundreds of hours of workshops conducted by practicing peer tutors and counselors, and read countless reports, subjective and objective. Much of the literature is in the ERIC data base, to which I have access and search regularly for current developments.

The single-best published volume on tutoring (that I have found) is by two British practitioners and researchers, Sinclair Goodlad and Beverly Hirst, *Peer Tutoring: A Guide to Learning by Teaching* (London: Kogan Page; New York: Nichols, 1989). The authors have thoroughly researched the literature, and succinctly summarize it. Their 23-page bibliography lists about 500 references, mostly American.

Another British proponent, Keith Topping, produced an excellent how-to-manual, *The Peer Tutoring Handbook: Promoting Cooperative Learning* (Cambridge, MA: Brookline, 1988). Topping's specialty is reading. See also his "Peer Tutoring and Paired Reading: Combining Two Powerful Techniques," *Reading Teacher* 42, no. 7 (March 1989), pp. 488-494.

10. Miller, *Schools*, pp. 76-80. Pestalozzi (1746-1827) follows Jean-Jacques Rousseau in Miller's procession of holistic pioneers.

11. Most American historians of education ignore Andrew Bell, Joseph Lancaster, and William Bentley Fowle. My information comes piecemeal from a variety of sources, including Goodlad and Hirst, *Peer Tutoring*; Topping, *Peer Tutoring Handbook*; and *Reading Teacher*. A doctoral colleague, Ann C. Prindeville, produced a valuable study, unpublished: "Mutual Instruction Comes to America: A Brief History of the Lancasterian System of Education" (UCLA, 1967).

12. William B. Fowle, *Teachers' Institute or Familiar Hints to Young Teachers* (Boston: Fowle, 1847), p. 33.

13. See Peter A. Cohen and James A. Kulik, "Synthesis of Research on the Effects of Tutoring," *Educational Leadership* (December 1981), pp. 227-229. Their summary: "Students who participate in tutorial programs — both as tutors and tutees — show greater cognitive growth and attitudinal gains than do students who are not involved in such programs.... Tutors not only develop more positive attitudes toward the subjects they are teaching, but they also gain a better understanding of these subjects." The authors' detailed report, "Educational Outcomes of Peer Tutoring: A Meta-analysis of Findings" was published the following year in *American Educational Research Journal* (Spring 1982), pp. 237-248.

14. Peer counseling currently dominates the peer helping movement. Professional school counselors organize highly effective peer counseling programs. Psychologist Barbara Varenhorst, one of the founders and a leader

of the national movement, wrote a handbook for peer counseling training, *Real Friends: Becoming the Friend You'd Like to Have* (San Francisco: Harper & Row, 1983). "There is no time in life when a person is more vulnerable to the treatment of peers than during adolescence.... You can help in ways adults can't, no matter how much we care" (p. 17).

15. One of the strongest arguments in favor of comprehensive peer tutoring comes from a researcher outside the peer helping movement: William Damon, "Peer Education: The Untapped Potential," *Journal of Applied Developmental Psychology* 5 (1984), pp. 331-343. Damon bases his recommendations to involve all pupils in both tutor and tutee roles on the psychological theories of Lev Vygotsky, Jean Piaget, and Harry Stack Sullivan. "The child's switching from expert to novice can impart to the child a deeper understanding of the educational endeavor."

Damon's book, *The Moral Child: Nurturing Children's Natural Moral Growth* (New York: Free Press, 1988), reviews studies of moral growth in very young children, beginning with what seems to be an instinct for empathy, leading to altruism, sharing, and cooperation. These studies suggest that holistic education works *with*, not against, human nature.

16. For another view of Mutual Instruction, see E.M. Swengel, "Cutting Education's Gordian Knot," *Phi Delta Kappan* 74, no. 9 (May 1991), pp. 704-710. A much more detailed description is in a paper based on a presentation at the 1990 conference of the National Peer Helpers Association, "Restructuring the School System to Involve ALL Students in Peer Helping," available on ERIC microfiche ED 324 744, or from me at 4875 San Joaquin Drive, San Diego, CA 92109.

17. Benjamin Bloom made an intensive five-year study of highly talented individuals in art, sports, and research: *Developing Talent in Young People* (New York: Random House, 1985). He found that repeated drill on the fundamentals is essential to the development of talent.

18. When I taught a graduate course in reading, my students — experienced elementary teachers — could not identify a single child with reading problems who had been read to as a preschooler. These teachers agreed unanimously that being read to is an essential prereading experience. Television's "Sesame Street" and Saturday cartoons are no substitute for a child snuggling up to a live reader.

19. School restructuring has been a major theme in professional education journals for several years, and continues to develop toward really fundamental, radical redesign of the school system. Recent issues of *Educational Leadership* 48, nos. 7 and 8, the journal of the Association for Supervision and Curriculum Development, focused on "Strategic Planning" (April 1991) and "Restructuring Schools: What's Really Happening?" (May 1991).

Reformers are taking a broader, all-pupil, system-wide view, without being bound by

traditional views. They are moving rather cautiously, on the whole, but trending toward what a U.S. Department of Education brochure calls "breaking the mold." The language of a remarkable little pamphlet, *America 2000: An Education Strategy*, is downright revolutionary in section II: "For Tomorrow's Students: A New Generation of American Schools." It states: "R & D Teams can be expected to set aside all traditional assumptions about schooling and all the constraints that conventional schools work under." Although the involvement of the business community in the R & D work may rouse questions about the holistic possibilities in this government-with-business attempt to restructure the system, the brochure does state: "Education is not just about making a living; it is also about making a life." That lets holistic educators get a foot in the door. How much wider we can pry it open depends on how specific and practical *our* plans are to "break the mold," and offer a new wineskin. The pamphlet is available free from the U.S. Dept. of Education, AMERICA 2000, 400 Maryland Ave., S.W., Washington, D.C. 20202. It may be ordered by phone: 1-800-872-5327.

## Country School Campus For Sale

Former elementary day & boarding school in rural setting in Canterbury, New Hampshire. 14 pristine acres, seven buildings designed to serve seventy students (20 boarding students), with three staff residential units. Located next to historic Shaker Village and surrounded by 1200 acres of covenant protected land.

Contact :

Peter Marsh, 244 No. Main St.  
Concord, NH 03301  
(603) 224-1877

# Synergy, Holistic Education, and R. Buckminster Fuller

## Education for a World in Transformation

by Alex Gerber

*The most important fact about Spaceship Earth:  
An instruction book didn't come with it.*

— R. Buckminster Fuller<sup>1</sup>

In these complex times, many people are feeling an increased commitment to the preservation and evolution of humanity. Unfortunately, for decades we have ignored the environmental, economic, and cultural conditions that are now wreaking havoc on Spaceship Earth. As a species, we have been literally undermining our own planetary life-support systems.

Fortunately, it does appear that the world community is gradually becoming aware of itself as an inseparable whole. More and more people are beginning to recognize the need for a true transformation of consciousness, rather than the continued manipulation of statistics, symptoms, and intellectual concepts. But if we are to ensure humanity's future on Earth, this growing awareness must be translated into effective worldwide action. Earth's people, both individually and collectively, must become more harmonious — and quickly.

Yet what nondenominational, unifying ethic can inspire us to improve life throughout the planet? Of course we must enact a plan to save Earth — but which plan is best?<sup>2</sup> Consider this quotation by R. Buckminster Fuller (1895-1983; well-known for the geodesic dome and for the term *Spaceship Earth*): “To be optimally effective, undertake at outset the most comprehensive task in the most comprehensive and incisively detailed manner.”<sup>3</sup>

If this statement is true, what makes it so? When is something *optimally effective*? What would comprise a *comprehensive task*? What would comprise a *comprehensive and incisively detailed manner* for accomplishing such a task? To help answer these questions, let us first consider the phenomenon of synergy.

Alex Gerber, Ph.D., is an educator, consultant, writer, and musician living near Seattle, Washington. He is on the adjunct faculty of Western Washington University (where he teaches a graduate education course titled “Education for a World in Transformation: From Blackboards to Buckminster Fuller”) and Antioch University, Seattle (where he teaches “Dimensions of Holism: From Tao to Buckminster Fuller” in the Whole Systems Design Graduate Program). “The Educational Philosophy of R. Buckminster Fuller,” his 1985 dissertation (University of Southern California), has been reviewed in *Trimtab: Bulletin of the Buckminster Fuller Institute* and in the *Essential Whole Earth Catalogue*. This article contains excerpts from Alex's forthcoming book, *Tao in Education: From Blackboards to Buckminster Fuller*. Alex is available for workshops and consulting and can be reached through Gerber Educational Resources, P.O. Box 2997, Kirkland, WA 98083.

---

**Through the principle of *synergy*, educators can help create an entirely new alloy — a truly viable planetary society. Educators can evoke synergy — thus creating effects greater than the sum of specific actions — by cultivating a *holistic attitude orientation*. “What kind of world do we want?” “How should we be educating ourselves as we approach the year 2000?”**

---

## Synergy

*Synergy* is the principle whereby the behavior of a whole system is greater than the sum of its parts, a result that is not predictable from an examination of the individual parts. A good example of this is demonstrated in metallurgy. Individually the elements iron, chromium, and nickel have certain characteristics. But when combined with carbon, manganese, and other minor constituents, they make chrome-nickel-steel, an alloy much stronger and more durable than any of the original elements. Able to withstand enormous temperatures, this alloy has many practical applications, including the jet engine — a discovery that has profoundly changed the human reality, including our basic perception of time and space.<sup>4</sup> Fuller wrote:

It is a very popular way of thinking to say that a chain is no stronger than its weakest link. That seems to be very logical to us. Therefore, we feel that we can predict things in terms of certain minor constituents of wholes. That is the way much of our thinking goes. If I were to say that a chain is as strong as the sum of the strengths of its links, you would say that is silly. If I were to say that a chain is stronger than the sum of the strengths of all of its links, you might say that ... is preposterous. Yet that is exactly what happens with chrome-nickel-steel.<sup>5</sup>

There are many other examples that illustrate the power and potential of this fundamental principle of nature. For a visual example of synergy, consider the impact of the combined colors within a rainbow. A prime example in the classroom is cooperative learning — where children, working as a team, directly experience the value of synergy.

In theory, we could utilize this principle to help fulfill all of humanity's basic needs, including healthy food, affordable housing, health care, renewable energy sources, and effective transportation and communications systems (some of the parts). Fuller's work demonstrates the type of innovative thinking required. One specific example is the geodesic dome — an ideal form of affordable housing that has an extremely high strength-to-weight ratio and uses only 1/50 the

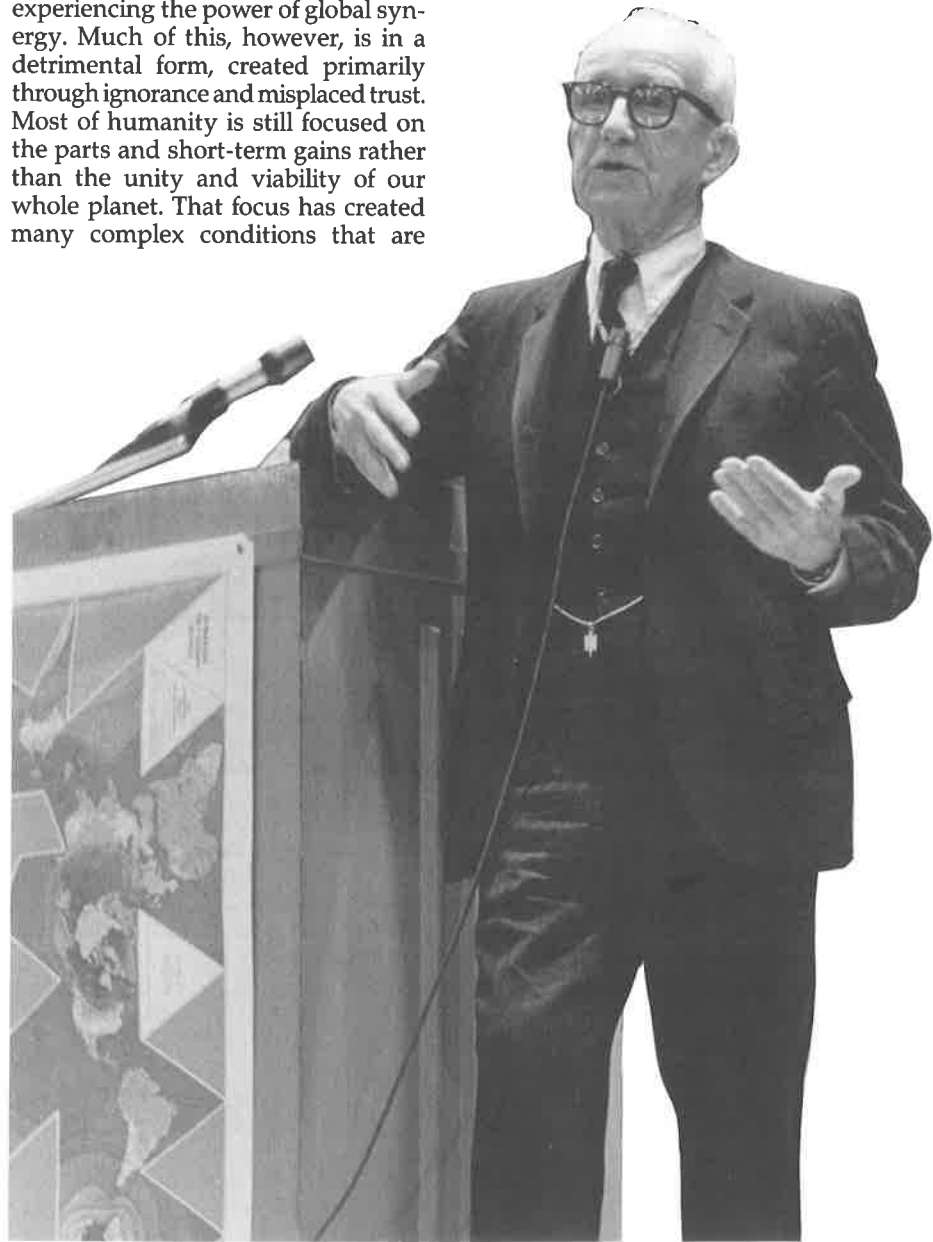
weight of materials needed for conventional cubicle buildings.

By planning and acting from a broader perspective, which includes the whole world's needs as well as our individual concerns, we waste less, recycle more, minimize duplication of efforts, and optimize our use of human and nonhuman energy sources. Thus, through the principle of synergy, humanity can create an entirely new alloy — a truly viable planetary society.

At the present time we are clearly experiencing the power of global synergy. Much of this, however, is in a detrimental form, created primarily through ignorance and misplaced trust. Most of humanity is still focused on the parts and short-term gains rather than the unity and viability of our whole planet. That focus has created many complex conditions that are

unfavorable not only to our environment but also to life itself.<sup>6</sup> Airborne chemicals are destroying the ozone layer. Clear-cutting rainforests contributes to the greenhouse effect while causing unprecedented numbers of plant and animal extinctions. Aimed only at maximizing short-term profits, many agricultural practices accelerate topsoil and groundwater loss while creating long-lasting toxic pollution. The list goes on and on.

Nature functions as a whole, integrated system. Since synergy is, by



*Buckminster Fuller lecturing with the Dymaxion Map on the lecturn. © 1991, Buckminster Fuller Institute. Courtesy, Buckminster Fuller Institute, Los Angeles.*

definition, "of the whole," we can align with nature most effectively by beginning with the whole and then progressing to the parts, not the other way around. This is why it is optimally effective to *undertake at outset the most comprehensive task* and to address tasks comprehensively as Fuller suggests.

Given the vast inertia of our negative environmental situation, humanity is fortunate to have the principle of synergy as a powerful ally — one that is directly applicable in education, government, business, and in our personal lives. Many educators may be somewhat familiar with synergy; however, they may not know how to take advantage of it in the classroom (or the boardroom) on a day-to-day basis. Just as one needs to understand (intuitively or otherwise) the generalized principle of leverage in order to move something heavy with a lever and a fulcrum, so we need to understand more about the generalized principle of synergy in order to work together most effectively.<sup>7</sup> We as a society have been creating and reinforcing our ecological and social catastrophes. But human values can change. *Improved education can make the difference.*

How can educators take best advantage of synergy? By first putting attention on the whole, and then the parts. This very process will *evoke* synergy and create effects greater than the sum of specific actions. One example of how teachers can deliberately use the principle of synergy is by integrating the curriculum so that the development of multiple skills (e.g., reading, math, history, spelling) occurs simultaneously. Life demands that education be interdisciplinary. When our focus is only the specific parts, there are often so many of them that we miss the wholeness.

### Holistic education

*Holistic* refers to the functional relationship between the whole and its parts. While this term may have already become a diluted buzzword (similar to the term *natural*), it is still the most useful description we have for this relationship. Holistic education is unfragmented, *living* education that integrates all aspects of life.

Rather than dwelling on statistics or historical debates, a holistic approach to education provides the integrated *conceptual base* necessary for answering the key questions "What kind of world do we want?" and "How should we be educating ourselves as we approach the year 2000?" It is precisely this comprehensive view of life that needs to be encouraged in educational settings.

Too many training programs are designed only to increase the teacher's database. In many cases, the *philosophical base*, which underpins every aspect of an educator's work, has not been clarified for some time, if ever. This omission is a fundamental problem in education today.

Our planet itself and much of humanity are crying out as never before for actions that are *optimally effective*. But what *comprehensive task* can be identified? Because so many other human activities are manifestations of our educational systems, educating ourselves comprehensively (holistically) is one such activity that is within our control.

Since holistic education is unfragmented, it encompasses the investigation of all subjects and issues in relationship to the whole of life. Not a particular philosophy, curriculum, or methodology, it helps develop an

*orientation, whole to parts* — are neither referenced nor defined objectively.

Of course the holistic approach encompasses rationalism, because there are indeed sound reasons for its use. However, in many cases it goes beyond rationalism by trusting intuition as being closer to the mark than logical reasoning. For example, by the time we have scientifically proven the limits of Earth's life-support capabilities, we may have already exceeded them. Forests, lakes, coastal waters, many soil-based ecosystems, and unprecedented numbers of species have already died. Our atmosphere is already severely imbalanced. On the other hand, if we could utilize our resources holistically, they need never become exhausted. Fuller's World Game, the geodesic dome, and "doing more with less" are excellent teachers of this principle.

Traditional Western education starts with the parts and rarely, if ever, progresses to the whole. One result of this approach is the infinitude of parts, the multitude of academic disciplines. In most college catalogues, human knowledge is dissected into such minute specializations that any of them could take a lifetime to master. This compartmentalization of knowledge is useful in some disciplines, but when it is the predominant approach

---

*In many cases the holistic approach goes beyond rationalism by trusting intuition as being closer to the mark than logical reasoning.*

---

intuitive attitude orientation. Instead of just adding more data, this conceptual shift creates an atmosphere of self-empowerment. Proceeding from whole to parts, rather than the reverse, it serves as a tool for discerning any issue.

To understand and practice holistic education requires a viewpoint quite different from that which has generally been encouraged in academia. It values "heart-knowing," the process of feeling and perceiving intuitively.<sup>8</sup> Thus, it is not accidental that certain terms used here — *whole of life, attitude*

(as observed, for example, in the physical sciences, social sciences, and most teacher education programs), we often fail to appreciate that all-important reality called "the whole." On a planetary scale this shortsighted human behavior has resulted in continuing fragmentation and environmental catastrophe.

Educators must come to see their work in the context of holistic and global realities. To many educators, however, this approach would not seem practical or concrete enough; they may resist when it comes to

examining such abstract philosophical concepts, preferring to look for external solutions in the form of traditional, practical approaches to curricula (e.g., canned lesson plans, going by the book). This is to be expected, since the quest for objectivity has been the foundation of our entire educational background.

However, it is becoming clear that developing a tolerance for and appreciation of the abstract, including the value of a *holistic attitude orientation*, is the most practical step! When educators reward only the "practical" solutions, they are, in reality, refusing to recognize the legitimacy and value of subjective, intuitively perceived realms. Fuller often addressed this situation. He taught that much of the physical technology and phenomena

spirituality, and love is felt rather than seen, the whole can only be perceived intuitively beyond the five senses.

I believe that the multidimensionality of reality must be explicitly recognized by the general populace before our planetary declines can be reversed. But how can educators and others get past their overdependency on solutions that are objective and easily quantifiable? This requires shifting to a *holistic attitude orientation* — a softer focus, an all-encompassing mode of inquiry that is intuitive, interdisciplinary, and cross-cultural.

Although it certainly encompasses day-to-day teaching activities, holistic education cannot be constricted into a particular curriculum or methodology.<sup>10</sup> But when educators shift to a *holistic attitude orientation*, many excit-

throughout history. We, as a functioning society, have become conditioned into an oppositional, partisanship-oriented mindset. Just look at any newspaper.

Yet, if this polarization continues to self-propagate and we continue fouling our planetary home, then human society will fail to maintain its viability. Before we can arrest the damage we are doing to Earth and begin to thrive as a global society, we must start focusing our attention on unifying and healing, rather than fragmentation. To accomplish this, a shift by educators to a *holistic attitude orientation* is essential.

Since holism intrinsically stands outside the oppositional mindset, this shift in attitude will reformulate our whole approach to solving the problems of education. The very nature of holistic education makes it undebatable; it is nonpartisan by definition because it implies a viewpoint that embraces every viewpoint. It is a simple but powerful way of examining all viewpoints, of learning how to *see*. Therefore, holistic education can be a powerful and compassionate pattern for common consensus and for personal and global evolution.

Recognizing the spiritual nature of life is the underlying basis of a holistic approach;<sup>12</sup> but for obvious reasons, spirituality has been largely ignored by mainstream educators who are focused primarily on objectively derived solutions. Thus, it is most fortunate that we now have objective, verifiable support for holism<sup>13</sup> as well as tools to help teachers increase their holistic awareness. This is vital for successfully resisting charges of desecularization when introducing holistic concepts into mainstream education. Placing value on the comprehensive (the whole), which is implicit in holistic education, will also provide us with nonpartisan values for education — creating a much-needed secular touchstone for distinguishing the relative merits of all teaching methods and curricula.

Some educators maintain that programs to enhance basic literacy should be the focus in educational reform, that teaching the three Rs must be given top priority. But in today's media-saturated society, and given our eclectic styles of family and

---

## ***Before we can arrest the damage we are doing to our planetary home and begin to thrive as a global society, we must start focusing our attention on unifying and healing... A shift by educators to a holistic attitude orientation is essential.***

---

that affect our everyday reality exists only in invisible realms.<sup>9</sup>

For example, synergy — although very real — is intangible; like gravity, we see only its effects. Likewise, processes that contaminate our food, water, and air are often imperceptible to all but the most sophisticated scientific instruments. So are processes leading to diseases such as cancer and AIDS. Often such processes seem invisible because they occur so gradually. For example, we know that greenhouse gases and ozone depletion exist even though we cannot see them and try our best to ignore them. The chemical reactions that result in super-high-tech alloys and microchip advances are also unseen. Unfortunately, some of the side effects of their manufacturing processes are not so invisible.

The whole electromagnetic realm is essentially invisible, but it is all-pervasive and certainly affects our lives. Just as the essence of healing,

ing developments ensue. Lesson plans and teaching methods start bubbling up from inside, becoming more intuitive and spontaneous. Education becomes more fun and exciting for everyone concerned. This is what a holistic paradigm shift is all about — growing numbers of people realizing that invisible and abstract factors are powerfully at work within themselves and in the external world.<sup>11</sup>

But how will shifting to a *holistic attitude orientation* help solve the tough education issues facing society today — illiteracy, dropout rates, teacher and student burnout, crowded classrooms, testing fairness, funding, bussing...?

First, it is essential for parents and educators to broaden their focus beyond the many specific issues. Most often, taking a firm stand on a particular issue brings forth an equally firm antithesis. The tendency for point to produce counterpoint — taking sides on issues — has occurred consistently

religious life, it is not always easy for children to learn that the "whole" exists. Learning the three Rs is necessary, but it is also hopelessly inadequate for ensuring or even encouraging the development of a comprehensive free will. The unity of life on Earth may not be self-evident — *but it can be learned.*

A crucial variable in determining whether learners experience holistic connections is the teacher's *attitude orientation*. When an authentic emotional connection is forged between co-learners — students, teachers, parents, administrators — education becomes exciting again. When education is interpersonal and relevant to real life, discipline problems and boredom are minimized. By exploring the connecting process, not just the individual fragments, the curriculum itself literally comes alive and student interest is spontaneously maintained. As more of our educators are beginning to discover, helping learners to link their inner world with the unity of life is tremendously rewarding.

### R. Buckminster Fuller

The author of more than 20 books, R. Buckminster Fuller dedicated his life to exploring our world from the whole to the parts and teaching about his discoveries. Despite the objective rationales to which he often referred, Fuller knew that "comprehensivity" comes only through intuition, that one must gain a sense of the whole to recognize the value of a part. Unlike learning by rote, true "comprehensivity" emphasizes the necessity to go beyond one's current understandings — to get outside the infinitude of the parts.

To Fuller, the exact opposite of a specialist is not a generalist; he considered "comprehensivist" to be a further step — a higher level of realization from which one can better perceive and shape reality. One thing that made Fuller's approach frustrating to some of his critics is that he worked "from the whole" — not inductively from within any particular context, but comprehensively from intuitive insight. His critics said, in effect: "This appears disconnected; he doesn't build on what came before. He is trying to reinvent the wheel and rediscover Einstein all at once." How-

ever, Fuller did invent a new wheel: Synergetic Geometry — Synergetics — and its multifaceted applications.<sup>14</sup> In fact, his discovery of certain practical applications of Einstein's work was acknowledged by Einstein himself.<sup>15</sup>

Although Fuller's artifacts and strategies for humanity's success — including the Spaceship Earth Dymaxion Map, the World Game, geodesic domes, and many others<sup>16</sup> — are of tremendous importance, perhaps his greatest contribution occurs on other levels. According to E.J. Applewhite, Fuller's friend and collaborator on *Synergetics* and *Synergetics 2*, "Fuller's primary vocation is as a poet. All his disciplines and talents — architect, engineer, philosopher, inventor, artist, cartographer, teacher — are just so many aspects of his chief

which synergetics is pertinent is a crisis of popular enlightenment, popular faith.... Metaphors, paradigms, these are our deepest needs...."<sup>20</sup>

Fuller's work illuminates the paradigm shift toward a more holistic conception of reality. This shift has already been felt by the mainstream in many areas, including "new" physics;<sup>21</sup> the use of visualization, biofeedback, acupuncture, and other alternative healing techniques; alternative birth centers; and motivational and nutritional programs in businesses.

In the field of mainstream education, the holistic approach is becoming more visible; it does, however, need greater emphasis. Given our pressing environmental mandate, the people of Earth must soon adopt education systems that reflect the holistic

---

*To be optimally effective, undertake at outset the most comprehensive task in the most comprehensive and incisively detailed manner.*

*— R. Buckminster Fuller*

---

function as an integrator."<sup>17</sup> "His philosophy was never a rationale for the domes, rather the domes were an attempt to explain his philosophy."<sup>18</sup>

Fuller gave us a unified conception of reality (with both objectively and intuitively derived rationales) and a vital goal — a vision of our potential success as voyagers on Spaceship Earth. He gave us an exquisitely coherent physical and metaphysical eyepiece for self-discovery, always centered around perceiving, thinking, and acting from "whole to parts." He gave this concept shape and he gave it voice — exemplified by his statement, "*To be optimally effective, undertake at outset the most comprehensive task in the most comprehensive and incisively detailed manner.*" When the world of education learns the meaning behind this single statement, it will vastly improve, synergistically.

Hugh Kenner, noted scholar and author, said that Fuller gave us a "system of coherencies ... for our space age navigating."<sup>19</sup> He wrote, "The crisis to

nature of life. Although we have been in a gestation period, I believe that holistic education and attitudes will be more widely understood and accepted within the very foreseeable future."<sup>22</sup>

I also believe that Fuller will become more recognized as a pivotal contributor in the world of contemporary education philosophy. He wrote:

Humans are coming swiftly to understand they must now consciously begin to operate their space vehicle Earth with total planetary cooperation, competence, and integrity. Humans are swiftly sensing that the cushioning tolerance for their initial error has become approximately exhausted.<sup>23</sup>

I am certain that none of the world's problems — which we are all perforce thinking about today — have any hope of solution except through total democratic society's becoming thoroughly and comprehensively self-educated. Only thereby will society be able to identify and intercommunicate the vital problems of total world society.

---



Only thereafter may humanity effectively sort out and put those problems into order of importance for solution in respect to the most fundamental principles governing humanity's survival and enjoyment of life on Earth.<sup>24</sup>

Your educational forces, if competently organized and instrumented, should stimulate the self clean-up. The politicians won't clean up; the only hope is through education.<sup>25</sup>

## Metaware

**meta-**, 1. from the Greek meaning "beyond," "behind," and often denoting change, used in the formulation of compound words: *metaphysics*.

**ware**, *n.* 1. usually **wares**. a. articles of merchandise or manufacture; goods: *a peddler selling wares*.<sup>26</sup>

A computer program is known as software. Educational software can be used in creating a curriculum (holistic or otherwise). Yet, in the classroom, a curriculum is really more like hardware: the vehicle on which the program rides. The true software — the real programming — is the quality of the teacher's *conceptual base*, manifested through the attitude and awareness with which she or he presents the material and brings it to life in the classroom or lecture hall. Since the terms *software* and *hardware* have already been universally defined, we can create a new label for this meta-program (this philosophical base which, articulated or not, always lies behind the software): *Metaware*.

Metaware is the "ware" that is missing from most educational settings as we approach the year 2000. Identifying this vital link underscores the need for educators to step back and reformulate their philosophical underpinnings.

In conclusion, as we analyze the questions posed at the outset, it is important to remember that holism is, by definition, nonlinear. Therefore, it should not be surprising that the information presented here overlaps or appears to reiterate the same guidelines using different words.

How do we know when something is *optimally effective*? This becomes self-evident when we learn about and align ourselves with synergy. What would comprise a *comprehensive task* that individuals might undertake? Educators and others can begin

approaching education in the context of holistic and global realities (thinking and acting from whole to parts). What would comprise a *comprehensive and incisively detailed manner* for accomplishing this? Let us begin by actively nurturing a *holistic attitude orientation* in educators, students, and policy makers — a practical measure that will help rekindle the lost vision for education.

What is a nondenominational, unifying ethic that could inspire people worldwide? *Valuing the whole*. One powerful starting point would be for us to learn more about R. Buckminster Fuller and his multifaceted options for humanity's success. His philosophy is a meta-philosophy, a wonderful vantage point for discerning the answers to the two key questions previously introduced: "What kind of world do we want?" and "How should we be educating ourselves?"

Finally, which plan is best? One's own individual creation. Personal integrity and self-education are key attitudes that must be present in order to create a common consensus with the power to effect vital change.<sup>27</sup>

We already live in the global age; there is no going back to the days of isolationism. It is essential that holistic ideas and attitudes be emphasized not only in our own country, but also throughout the world. Although holistic education, by itself, will not totally remedy our educational, planetary, or personal ills, it is a necessary and identifiable component of any long-term solution.

Holistic education is *education about education*; it is a golden key — a means of unlocking humanity's potential for self-empowerment. The call to educators and others is for a rapid transformation of consciousness on this planet, approaching ever deeper into "comprehensivity."

## Notes

1. R. Buckminster Fuller with Jerome Agel and Quentin Fiore, *I Seem to Be a Verb* (New York: Bantam, 1970), front cover.
2. Even the mass media has begun to feature the need to save Earth. For example, see the 2 January 1989 *Time* cover story, "Endangered Earth," or the late-1990 PBS television series, "Race to Save the Planet," hosted by Meryl Streep.
3. R. Buckminster Fuller, *Critical Path* (New York: St. Martin's, 1981), p. 251.

4. This example is from R. Buckminster Fuller in collaboration with E.J. Applewhite, *Synergetics: Explorations in the Geometry of Thinking* (New York: Macmillan, 1975), p. 6. (Also see note 14.)
5. *Ibid.*
6. "The Dark Side of Growth," a chapter in Fritjof Capra, *The Turning Point: Science, Society and the Rising Culture* (New York: Simon & Schuster, 1982), covers this well.
7. "Generalized principles" are described in *Critical Path* (see p. 432) and other works by Fuller.
8. Fuller recognized the crucial importance of intuition. This theme recurs throughout his work, especially in his book *Intuition* (1972; 2nd ed., San Luis Obispo, CA: Impact Publishers, 1983).
9. See Fuller, *Critical Path*, pp. 161 and 440, for examples.
10. However, there are many excellent holistic education resources for educators, including works by and about R. Buckminster Fuller (also the Buckminster Fuller Institute, 1743 S. La Cienega Blvd., Los Angeles, CA 90035); World Game Institute, 3508 Market St., Philadelphia, PA 19104; The Robert Muller School, 6006 Royaloak Dr., Arlington, TX 76016. Readers are also encouraged to investigate both the Montessori and Waldorf education philosophies.
11. Many excellent books have chronicled this shift; Capra's *The Turning Point* is one of my favorites.
12. Conversely, a holistic approach can help to clarify one's spirituality. *The Zen Teaching of Huang Po: On the Transmission of Mind*, translated by John Blofeld (New York: Grove, 1958), is an excellent book on this subject.
13. Prime examples include the work of R. Buckminster Fuller, physicists David Bohm and Fritjof Capra, molecular biologist Rupert Sheldrake, and Deepak Chopra, M.D. (author of *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine* [New York: Bantam, 1989]), to mention only a few.
14. *Synergetics* is Fuller's name for the geometry of nature's coordinate system. See *Synergetics: Explorations in the Geometry of Thinking* (cited in note 4) and *Synergetics 2: Further Explorations in the Geometry of Thinking*, also by R. Buckminster Fuller in collaboration with E.J. Applewhite (New York: Macmillan, 1979). Nature's coordinate system: "The mathematically expressible system that governs the coordination of both physical and metaphysical phenomena. Set of generalizations about the way systems are structured and able to cohere over time. Interplay of the principles describing spatial complexity with the requirements of minimum energy in the organization of natural structures." (From Amy C. Edmondson, *A Fuller Explanation: The Synergetic Geometry of R. Buckminster Fuller* [Boston: Birkhauser Boston, 1987], p. 283.)
15. See R. Buckminster Fuller and Anwar Dil, *Humans in Universe* (New York: Mouton, 1983), p. 43.

16. These and other Fuller artifacts and strategies are described in *Critical Path* and other books by Fuller.
17. E.J. Applewhite, *Cosmic Fishing: An Account of Writing Synergetics with Buckminster Fuller* (New York: Macmillan, 1977), p. 57. Applewhite says that Fuller described "poet" as "a very general term for a person who put things together in an era of great specialization when most people are differentiating or taking things apart." Further, Applewhite writes, "For Fuller, the stuff of poetry is the patterns of human behavior and the environment, and the interacting of physics and design and industry."
18. *Ibid.*, p. 7.
19. Hugh Kenner, *Bucky: A Guided Tour of Buckminster Fuller* (New York: Morrow, 1973), p. 11.
20. *Ibid.*, pp. 300, 314.
21. For example, see works by Fritjof Capra. Also see David Bohm, *Wholeness and the Implicate Order* (1980; reprint, London: Routledge & Kegan Paul, 1981); Gary Zukav, *The Dancing Wu Li Masters: An Overview of the New Physics* (1979; reprint, New York: Bantam, 1980); and Fred Alan Wolf, *Taking the Quantum Leap: The New Physics for Nonscientists* (San Francisco: Harper & Row, 1981).
22. Fuller often addressed *gestation rates*, which he defined as the lag between the discovery or invention of something and its acceptance and employment by industry or society. See *Critical Path*, pp. 283, 433.
23. See R. Buckminster Fuller, *Earth, Inc.* (Garden City, NY: Anchor-Doubleday, 1973), p. 101.
24. See Fuller, *Critical Path*, p. 266.
25. *R. Buckminster Fuller on Education*, edited by Peter H. Wagschal and Robert D. Kahn (Amherst: University of Massachusetts, 1979), p. 53.
26. Definitions adapted from *The Random House Dictionary of the English Language*, unabridged edition.
27. Toward the end of his life Fuller saw *integrity* "at the core of all he had been able to accomplish and central to what he now had to say." He saw the power of personal integrity as "a force in the world ... capable of steering humanity towards the realization of a world that truly works for everybody" (from a brochure titled "Integrity Day: A Meeting With Buckminster Fuller," 26 February 1983, p. 2).

*What our readers are  
saying about ΣΚΟΛΕ*

"ΣΚΟΛΕ is rich!..."

"There is no other publication like it!..."

"It keeps alive the things I value..."

"I like the humanness, directness,  
non-slickification..."

"We enjoy... the fresh, independent  
approach treating children as  
individuals with brains..."

"I like the mix of things, which reflects  
life, and the connection between  
education and life..."

"I like the more scholarly, in-depth  
approach to alternative education  
issues..."

"There is a need for ΣΚΟΛΕ. Although  
in some ways our journals overlap,  
ΣΚΟΛΕ gives voice more explicitly to  
the egalitarian, liberationist impulses  
in the alternative school movement...  
Hang in there." - Ron Miller, Editor  
of *Holistic Education Review*

**ΣΚΟΛΕ**



**The Journal of Alternative Education**  
ISSN 1056-9197  
Two issues a year - winter and summer  
Individuals \$15, institutions \$20  
Subscribe by phone (518) 432-1578  
or write 72 Philip St., Albany, NY 12202

# The Humanistic Paradigm in Education

by Roy José DeCarvalho

Some psychologists during the "Golden Age" of behaviorism after World War II, discontented with behaviorism's view of human nature and method, drew upon a long tradition linking psychology with humanities and, in a rebellious manner, institutionally founded humanistic psychology. They regarded themselves as a "third force," thus alluding to the fact that they were an alternative to the dominant behavioristic and psychoanalytical orientations in psychology. Some key psychologists of the period, such as Gordon Allport, Rollo May, Henry Murray, Gardner Murphy, Carl Rogers, and Abraham Maslow, joined the movement.<sup>1</sup>

Unknowingly, they also had an impact on other fields, education primarily, that had fallen under the monopoly of behaviorism. As they recognized this impact, they extended their agenda to education, creating a humanistic paradigm in that field. In reference to education, two humanistic psychologists stand out:

Carl Rogers (1902-1987), who is known for his student-centered approach, and Abraham Maslow (1908-1970), who is known for his views on self-actualization and humanistic education. A close study of their humanistic paradigm and the problems in education that they addressed is still as meaningful as it was two decades ago. It is suggested that the continuous deterioration of American education ensues in part from its failure to address Rogers's and Maslow's humanistic concerns.

Maslow and Rogers were certain that humans need a value system, a system of understanding, or frame of orientation that gives life meaning and reason.<sup>2</sup> But unfortunately, they argued, we live in an age where the ultimate disease is amorality, rootlessness, emptiness, hopelessness, lack of something to believe in and be devoted to. They blamed this modern uncertainty in value orientation on the anachronism between rigid ethical systems of the past and the ethical relativism of science. No longer unquestionably accepting the value of systems of our upbringing,

*Roy José DeCarvalho received his Ph.D. in the history of science from the University of Wisconsin, and is currently an assistant professor in the Institute of Technology at the Utica/Rome campus of the State University of New York. He is a frequent contributor of articles on the history of humanistic psychology and has recently completed two books: *The Founders of Humanistic Psychology* (Praeger) and *The Growth Hypothesis in Psychology: The Humanistic Psychology of Abraham Maslow and Carl Rogers* (Mellen Research University Press). This essay was supported by a New York State/United University Professions Dr. Nuala McGann Drescher Affirmative Action Leave Award. Address correspondence to Roy DeCarvalho, SUNY-Institute of Technology at Utica/Rome, Utica, NY 13504-3050.*

---

**This essay describes the theoretical breakthroughs of Abraham Maslow and Carl Rogers that in the 1960s fueled the establishment of the humanistic movement in American psychology. The essay discusses how Maslow's and Rogers's views on human nature, more specifically their understanding of the growth hypothesis of Kurt Goldstein, apply to education and address the continuing crisis in American education.**

---

*This article originally appeared in The Humanistic Psychologist, Spring, 1991 (Vol. 19, No. 1, pp. 88-104) and is reprinted with permission. Copyright, 1991, Division of Humanistic Psychology of the American Psychological Association. (The original publication contained additional references, most of them in specialized academic psychology journals, which have been edited out of this version. Most of Maslow's and Rogers's major writings on education are represented in the notes section.)*

we find ourselves in the dilemma of having to choose between various and at times even contradictory values. We live in an age of valuelessness, and this is obviously reflected in the educational system.<sup>3</sup>

The conflict and confusion in American education, they argued, results from the lack of values concerning the purpose and goal (i.e., the ultimate value) of the acquisition of knowledge. In order to evade issues of values in the curriculum, educators turned to what they mistakenly believe is a value-free mechanistic and technological education. Both Rogers and Maslow thus bitterly complained about the over technological and behavioristic emphasis in American education as if education were merely technological training for the acquisition of skills that are value-free or amoral. Instead of educating the whole child and facilitating personal growth, educators rather train children in skills that make them efficient and adjusted to a technological society that, although unrecognized, is in itself also a value. Rogers's and Maslow's answer to this problem, and their humanistic paradigm of education, ensues from their views on human nature. They thought that the ultimate goal of education was to facilitate students' self-actualization and fulfillment of their full potential, or, in Rogers's words, "to be that self which one truly is."<sup>4</sup>

### **The development of Maslow's views on education**

Maslow's college education was in the best behavioristic tradition in Madison, Wisconsin. His M.A. thesis, an experimental study of the effect of varying simple external conditions on learning, was also his first education-related research. Soon after graduation, however, he departed from the behavioristic approach to study dominance among college women and developed the needs hierarchy theory of human motivation that made him famous. These studies, most of them gathered in *Motivation and Personality* (1954), advanced a humanistic view of human nature that became an important pillar of the humanistic movement in American psychology. In that work, his distinction between expres-

sive and coping behavior, and his views on self-actualization became the bases of his later discussion of intrinsic and expressive learning. While coping behavior is a mere response to operant conditioning

At the age of 62, disappointed with the educational system at the University of Wisconsin-Madison, Rogers joined the Western Behavioral Sciences Institute in LaJolla, California, and during the next three years (1965-

---

## **Maslow argued that teaching creativity through art should become the paradigm for all other fields of education.**

---

dealing with matters of basic survival, expressive behavior is a spontaneous expression of a person's basic character leading to the actualization of inner potential.

In the 1960s, Maslow wrote on creativity and the significance of teaching students to utilize their creativity. He argued that teaching creativity through art should become the paradigm for all other fields of education. Most of these works were compiled in *Farther Reaches of Human Nature* (1971) published posthumously. *Farther Reaches* also contained a section on the values, goals, and implications of humanistic education. Drawing on the early distinction between expressive and coping behavior, Maslow wrote about intrinsic learning as the humanistic paradigm of education. Arguing that educators should form an alliance with the organismic forces conducive to the fulfillment of the students' potential and growth toward self-actualization, he criticized extrinsic learning and coping behavior, blaming these core concepts of the behavioristic paradigm for the failures of education.

### **The development of Rogers's views on education**

By 1952, Rogers was pessimistic about his teaching and education in general. Losing interest in education, he believed that it was impossible to really teach anything to anyone. Seven years later, in 1959, he was more optimistic; he published an article entitled "Significant Learning: In Psychotherapy and in Education," applying the process of learning in psychotherapy to education. During the next eight years, he expanded and refined the ideas advanced in this article.<sup>5</sup>

1968), he tried out his education program in practice. He proposed a plan adaptable to any educational system interested in innovative change. Several educational systems answered Rogers's call and when grants from different sources were available, Rogers chose the Immaculate Heart College that comprised several high schools and many elementary schools in the Los Angeles area. Three years later, Rogers proudly claimed having initiated self-directed change in a large educational system; the college had been successfully working under Rogers's plan independent of personal contact with Rogers or his group for two years.<sup>6</sup>

Believing that he had accomplished a revolution in education, Rogers collected reports of educators who tried to practice his ideas. In 1969, he compiled some of these reports in *Freedom to Learn — A View of What Education Might Become*, a book that became the bible of humanistic education. Selling 40,000 copies in the first year of publication, *Freedom to Learn* showed how educators could be personal, innovative, and facilitative of learning even within an antiquated system. After *Freedom to Learn*, Rogers continued to write for teachers' periodicals on personal growth, ideas and feelings about teaching, questions he would ask himself if he were a teacher, and the future of education. He told them that they were not teachers, but human facilitators.<sup>7</sup>

### **Views on human nature**

Maslow and Rogers thought that it was impossible for an educator, teacher, or psychologist to be objective and not to have a view of human nature. A well-articulated view of

human nature was, in their understanding, the most important value in education. Any educational system deserving the name entails a view of human nature, they argued. Every educator has, whether consciously stated or not, an understanding of people. The issue, they thought, is not whether to have a philosophy of education, but whether to have one that is conscious or unconscious. The unconscious understandings or theories of human nature are particularly dangerous since they guide the collection of data and research more profoundly than laboriously acquired empirical knowledge. Rogers and Maslow argued, in other words, that there are prior personal subjective views of human nature and choices of the purpose or value of education. It is important that these values be stated and clarified since they cannot be tested, evaluated, or denied by scientific means. In their case, they, indeed, dedicated much effort to the delineation of a view of human nature.<sup>8</sup>

The cornerstone of Maslow's and Rogers's views on human nature and consequently their naturalistic system of ethics and humanistic paradigm in education was the growth hypothesis. Maslow explained that an "instinctoid" inner core of human nature contains potentialities pressing for actualization. Similarly, Rogers stated that the human organism has a directional and actualizing tendency towards the fulfillment of inner potential. Both were inspired by Kurt Goldstein, the Jewish-German psychiatrist World War II émigré who first coined the term *self-actualization* to denote the reorganizational capability of the organism after injury. Goldstein argued that an injured organism reorganizes itself into a new unit that incorporates the damages. Maslow and Rogers acknowledged to have adopted the concept of self-actualization from Goldstein, although they used it more broadly. In his version of Goldstein's growth hypothesis, Maslow argued that persons have basic needs, emotions, and capacities that are neutral, pre-moral, positive, and good. If they guide our lives, we grow healthier and happier; but if we deny or suppress them, sickness is virtually a certainty. In this view, there are higher and lower needs arranged in levels of

potency, where the fulfillment of less potent needs relies upon the gratification of the more potent ones. The higher aspects of human nature, in other words, rest upon the fulfillment of the lower nature.<sup>9</sup>

Physiological needs related to basic survival, such as food, shelter, safety, and security, belong to the lower aspects of human nature and dominate the organism at the elementary level. When satisfied, however, the next-higher need emerges and organizes personality differently. Belonging, affection, love, respect, and self-esteem belong to the next level, self-actualization to another, and spiritual and transcendental needs constitute a last category. A healthy person is, according to Maslow, one who

But, Rogers argued, as infants grow their efficient valuing process is lost and slowly transformed into rigid artificial and organismically inefficient value systems. Their naive conception that what feels good is good is distorted by the assimilation of the evaluation of adults, who make them feel sorry, fearful, and guilty about their values in exchange for love. In this process, they lose the wisdom of organismic awareness and incorporate the values set by the immediate human environment. The values carried along with the love, esteem, and approval from adults forces them to distrust the experiencing of their own organism's guiding value system. They relinquish their trust of organismic wisdom.

---

### *The belief that the individual has the capacity for self-understanding and reorganization in satisfying ways ... was the foundation of Rogers's client-centered therapy.*

---

develops and actualizes his or her full potentialities and capacities by gratifying the ascending hierarchy of needs; Maslow called them *self-actualizers* because they sought to fulfill inner potential. When a persistent active basic need, however, is not satisfied the person is not free to grow and fulfill the higher needs, and is, thus, said to be ill. All needs, including the higher needs, are as "instinctoid" or physiological as, for example, the need for vitamins. Deprivation of safety, love, truth, joy, and justice generates a pathological state similar to the deprivation of vitamin C.<sup>10</sup>

Rogers's version of the growth hypothesis shares much in common with Maslow's self-actualization. Rogers thought that infants have a clear set of values. Infants choose experiences that maintain, induce growth, and actualize their organismic potential and reject what is contrary to their well-being. Since the values that guide their actualization lie strictly within their organism, they are thus naturalistic and objective.<sup>11</sup>

The belief that the individual has the capacity for self-understanding and reorganization in satisfying ways, if one is only provided the necessary and sufficient conditions for personality change, was the foundation of Rogers's client-centered therapy.<sup>12</sup> Given an appropriate growth-inducing environment in which one is unconditionally accepted, one learns the causes of behavior and new ways of perceiving and reacting to these causes. Once the denied attitudes and behavior become conscious and accepted, the self assimilates them and reorganizes itself, consequently altering the entire personality structure and behavior. If given freedom to become what one truly is, one naturally actualizes one's true identity, which, Rogers argued, could only positively enhance one's nature and existence.<sup>13</sup> Each one of us has a capacity for self-understanding and to initiate change in the direction of psychological growth and maturity, providing only that we are genuinely free and treated with worth and significance. In this sense, he argued, the

---

therapist merely makes an alliance with the person's organismic forces for growth and self-actualization.

### Critique of behaviorism

Rogers and Maslow carried on a persistent and at times bitter debate with behaviorists on the nature and scope of the social sciences. When they turned to education, they also criticized behaviorism. Behaviorists, such as B.F. Skinner, thought that advances in the study and control of behavior would make education a new "branch of technological science." In "The Science of Learning and the Art of Teaching," Skinner stated that certain techniques of reinforcement shape the behavior of an organism at the will of the experimenter. The precision of control is proportional to the precision of the manipulation of complex techniques of reinforcement consisting of carefully designed multiple schedules of reinforcement followed by changing contingencies. Education for democracy and for life were trivial pursuits that soon would be replaced by the principles of scientific technological education.<sup>14</sup> Moreover, the advances in scientific technological education, he argued, made human teachers outdated. He thus described in some detail the designing and marketing of teaching machines. In other words, Skinner was arguing for the dehumanization of education. Indeed, his social utopia, *Walden Two* (1948), pictured a civilization whose members had been brought up by a complex control of machinery and a cast of expert social technicians.

Rogers and Maslow were not only critical of Skinner's behavioristic educational philosophy, but also blamed such a philosophy for the failures of American education. They thought that behaviorism lacked systematic and valid concepts of human behavior and learning, aiming to cultivate enforced desired behavior, as if people were pigeons or laboratory rats. The consequence was that education became a mere impinging of a chosen technological, mechanistic, and valueless curriculum so the individual might not follow his or her own mistaken way.

In contrast, Rogers and Maslow held the growth-hypothesis under-

standing of human nature and believed that true learning is possible only when it is intrinsic, experiential, significant, or meaningful. When one learns something, one is describing a process of discovery that is real and an integral part of the character structure. A good illustration is a child who, in his free will, goes to the library in order to satisfy his curiosity about earthworms or sex. The essence of this type of learning is its personal intrinsic meaning. When one has a need to learn and is free to choose what to learn, the knowledge acquired becomes meaningful and a source of satisfaction. Self-initiated knowledge has the quality of personal involvement. Thus, the purpose of education, argued Rogers and Maslow, was not external conditioning and enforcement of learning habits, as Skinner had argued, but rather to stimulate curiosity, the inner need to discover and explore, facilitate personal involvement and, of course, also to supply the necessary resources.

The most important value and goal of education according to Maslow's and Rogers's humanistic paradigm is to facilitate the students' discovery and actualization of their nature, vocation, what they are good for, and what they enjoy doing. The learning resulting from this need has subjective meaning and results in expressive and creative behavior that is personally satisfying. In this sense, the goal of education is to make an alliance with the student's natural wonder and to facilitate the process of learning. This

means for discovery of identity, training in authenticity, and self-fulfillment. A good example is the discovery of one's professional vocation. When found, the ensuing acquired learning has personal meaning that becomes an integral part of personality and independent of reinforcing stimulus. Maslow and Rogers concluded that it is important that the educational system induces students to explore their organismic potential and, by forming an alliance with it, properly train them in their self-chosen professional or scholarly field. An educational system based on these principles, they argued, will turn out much more creative people.

### Maslow's intrinsic learning

Maslow thought that American education failed because it focused on extrinsic and coping behavior rather than on expressive behavior and intrinsic learning.<sup>15</sup> His later distinction between extrinsic and intrinsic learning followed his understanding of expressive and coping behavior first argued within terms of the need-hierarchy theory of motivation. Maslow blamed behaviorists for studying exclusively coping behavior, which, he argued, was the least significant part of personality. Coping behavior is functional, instrumental, adaptive, and the product of an interaction of the character-structure with the world. Coping behavior is learned or acquired in order to deal with specific environmental situations, and dies

---

*When one has a need to learn and is free to choose what to learn, the knowledge acquired becomes meaningful and a source of satisfaction.*

---

type of learning changes a person from within, enabling psychological health and growth towards the actualization of their human potential. Intrinsic learning and self-discovery, they argued, are related concepts in the sense that the latter enables students to look inward and from inner knowledge derive their own subjective values. Education becomes a vital

out if not rewarded or continuously bombarded with stimulus. Since the extrinsic knowledge ensuing from coping behavior is forcefully implanted by operant conditioning or indoctrination, it is never an integral part of personality and thus not perceived as meaningful. The conditioning must be reinforced continuously or the learning disappears. This type of learning

focuses on techniques that are interchangeable and results in automatic habits such as driving or swimming. It is a useful learning, but meaningless for the growth and actualization of the inner character structure. Problem solving, for example, ensues from a memorized response rather than from understanding the problem and reacting creatively. In fact, understanding is inimical to behavioral operant conditioning. When people understand that they are victims of conditioning, they rebel and dispose of the enforced learning. Earning a degree, rewards for scholarly achievement, and other similar practices are by-products of extrinsic education.

Extrinsic learning and coping behavior, he argued, have become the bases and failures of contemporary American education. Students not only drop out of school because they find little personal meaning in the process of learning, but also rebel against the system in order to assert their identity. The solution, he suggested, is to shift the educational system to the paradigm of intrinsic learning and expressive behavior. Expressive, behavior, such as artistic creation, play, wonder, and love, is a reflection of personality. Since it is nonfunctional and persists without reward, it is an epiphenomenon of inner character-structure. Expressive behavior resulting from intrinsic learning has meaningful personal value and remains an integral part of the self even when external stimuli cease.

Comparing the two types in their ability to predict behavior, Maslow discussed external scientific control of the behavioristic type versus the internal self-knowledge posited by humanistic psychology. He argued that people resent and rebel against external scientific control, but they accept the increase of self-knowledge that allows them to control their own behavior. Self-knowledge of the humanistic type has thus much more personal meaning and predictive power.<sup>16</sup>

A related and significant goal of education, according to Maslow, is to teach students skills that are vital in all fields of learning and professional activities, such as creativity. Any educational system deserving the name should cultivate creativity in students. Creativity is an inspired,

expressive behavior; it comes in flashes and furor; it is a product of fascination and inventiveness, of inner exploration, and self-discovery. Creativity requires the ability to listen and follow inner impulses or voices telling what is right and wrong. Only a system based on intrinsic learning will develop students' ability to reach their creativity when confronted with problems. Creativity can neither be taught by operant conditioning nor will it ensue as a product of method. Method is a technique whereby non-creative people create. Arts and music education, as against critical thinking and method, for example, offer intuitive glimpses into inner values and should be the paradigm for all fields of education whereby students learn to express themselves creatively.<sup>17</sup> Once intrinsically acquainted with their creativity, students learn how to reach for and release it in their self-chosen vocational fields. Like creativity, there are other skills necessary in all fields of learning. Experts in any field should be comfortable and enjoy change; they should be able to improvise and face with confidence, strength, and courage situations that emerge without forewarning.

We should not, however, devalue specific professional skills and knowledge of the various disciplines, argued Maslow. It is not enough just to be creative and intrinsically willing to become a civil engineer. Concrete knowledge of engineering, mathematics, and physics is also a prerequisite.

into lasting expressive behavior that is independent of reinforcing external stimuli.

### Rogers's student-centered learning

Rogers's views on education were an outgrowth of his client-centered therapy, more precisely, the concept of "significant learning." Significant learning in client-centered therapy penetrates the whole character-structure of the individual, deeply changing the individual's mode of being. When this type of learning occurs in psychotherapy, one's self-image improves; one accepts one's own feelings and way of being, adopts realistic goals and mature behavior, and develops a better awareness of inner and outer worlds. Rogers postulated that the therapist must provide five necessary and sufficient conditions, so that significant learning occurs.

The first condition is the *congruence* of the therapist's relationship with the client. By congruence, Rogers meant awareness and expression of what the therapist is experiencing in the relationship. In other words, the therapist is perceived as an integrated and authentic person, not a facade or role. The second condition is the therapist's *free expression and acceptance of his or her own immediate feelings*. The third condition is the therapist's expression of a *warm care for the client as a person* in his or her own right, thus providing a

---

**Once intrinsically acquainted with their creativity, students learn how to reach for and release it in their self-chosen vocational fields.**

---

The ideal, thus, is to integrate intrinsic learning and the traditional extrinsic learning such as training for professional skills or education for competence in any field. The main difference is whether this knowledge is sought out of personal need and meaning or as a response to rewarding and punishing stimuli. Knowledge gathered out of personal meaning translates

secure climate of *unconditional positive regard*. By *unconditional positive regard*, Rogers meant the therapist's acceptance of the client's expression of negative or "bad" and positive or "good" feelings without evaluating these feelings. In this sense, the client is given permission to express and find meaning in his or her own feelings. The fourth condition states that the thera-

pist must experience an *accurate empathic understanding* of the client's private world — his or her anger, fear, and confusion — as if these were the therapist's own feelings. This condition in turn enables the therapist to reflect back to the client his or her understanding of what is already known, thus awakening the client to the meanings he or she is scarcely aware of. The fifth and final condition is the ability of the therapist to *communicate to the client his or her own congruence, acceptance, and empathy*.

When these five conditions are met, significant learning induces a constructive process of personality change and growth. The reason, wrote Rogers, is that when the organism is integrated and allowed free and authentic expression, it releases a "self-actualizing tendency" to grow and fulfill all its potential.

When Rogers applied his reasoning to education, he argued that if significant learning is to occur in the classroom, the teacher, like the therapist, must create a facilitating climate that meets the same five conditions. Rogers also pointed out that in education, as in therapy, it is essential for the student to be curious, explorative, in touch with the problem, and conscious that its solution has personal significance. If the student lives through the problem and the five necessary and sufficient conditions are met, an astonishing amount of significant learning takes place.

The first implication of Rogers's psychotherapy to education is the realness of the teacher.<sup>18</sup> The teacher is not supposed to be a mere "faceless embodiment of a curricular requirement," or a "sterile pipe" of knowledge transmission, but rather a congruent person, authentic in the classroom, who accepts and manifests his or her feelings. Second, the teacher must warmly accept, understand, and empathize with the student in his or her own terms; and, among other things, the teacher must unconditionally accept the student's feelings of fear and discouragement which are always present when learning something new. Third, the instructional resources must be readily available, but never forced upon the student. The teacher should let the students know that his or her personal knowl-

edge is available to them in whatever form they want, whether in a lecture format or as a resource-finder. The student will not perceive the learning experience as the teacher's expectations, commands, impositions, or requirements. The task of the teacher is merely to facilitate the student's satisfaction of his or her own intellectual curiosity.

### Conclusion

Although most educators in the late 1950s and 1960s read Skinner's *Walden Two* and other education-related writings, Skinner's impact on education was insignificant. The radical behavioristic educational program was, in general terms, regarded as a utopia, indeed, a fearful utopia for some. The teaching machines and the cast of social technicians failed to relate to the human aspects of education. It was absurd to treat children as behaving organisms whose education was to follow the lines of control and prediction of behavior of rats, pigeons, and apes. But in an age that overestimated the social applications of science, the scientific appeal of behaviorism and concrete results in extreme cases such as occupational therapy and behavioral disabilities were powerful arguments against teachers' talk about the human aspects of education. Torn between the scientific credibility of behaviorism and the human aspects of the classroom when the 1960s countercultural revolution was under way, educators were ready for an alternative philosophy.

Not surprisingly, by the 1970s Rogers's and Maslow's humanistic paradigm of education was well established. Most educators today have a notion of Rogerian student-centered education and Maslow's intrinsic learning and expressive behavior. Both Rogers and Maslow reawakened educators to the need for humanizing education and, in doing so, they helped to dismantle the monopoly enjoyed by behaviorism in the American social sciences of the mid-20th century.

The growth hypothesis of Kurt Goldstein was a source of inspiration for Carl Rogers and Abraham Maslow, whose studies on self-actualization served as a breeding ground for the

establishment of the humanistic movement in American psychology. Their versions of the growth hypothesis also dictated their understanding of human nature, naturalistic ethics, and the humanistic paradigm in education.

Their views on education stemmed from a basic trust of the worthiness of human nature. They argued that when people are authentic, experience their inner worlds, and function free from internal and external barriers, they value and choose (from an organismic point of view) what is good for them. "To be that self which one truly is," a phrase Rogers borrowed from Kierkegaard and synonymous with the seeking of authenticity, was the highest value in Rogers's and Maslow's naturalistic system of ethics. In Maslow's words, authenticity was "truthfulness to one's own nature."

Although two decades old, Maslow's and Rogers' humanistic message is still valid for the 1990s. The success of any educational system depends on its ability to involve students in the process of learning and perceiving meaning in the acquisition of knowledge. Without the student's wonder, curiosity, and personal need to learn, good teachers and well-funded schools will fail. Students are not merely rat-like response organisms that learn technological knowledge and skills in response to rewarding stimuli. According to Maslow and Rogers, they learn only when they seek to actualize their inner human potential. The teacher should thus make an alliance with the students' natural curiosity and organismic forces pressing for growth, and facilitate the process of self-discovery, so that they may find which vocation and skills they are intrinsically good for. Once this alliance has been made, it is also the educator's responsibility to make extrinsic knowledge available and teach specific skills. Teachers themselves should serve as role models of people who are authentic, curious, explorative, and perplexed by the wonders of their disciplines.

According to Maslow and Rogers, the reason for the crisis in American education is in the behavioristic extrinsic learning and coping behavior paradigm. The solution, they

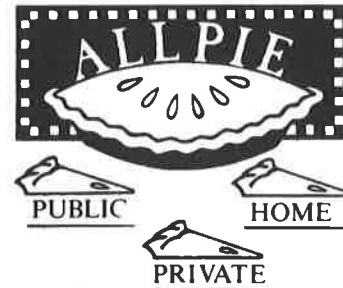


argued, is a shift to a paradigm that is student-centered, trusts and empowers the child with choice, value, and dignity. Perhaps education in the United States has continued to deteriorate since Maslow and Rogers first proposed the humanistic paradigm in education three decades ago because it has failed to introduce a more humanistic dimension to teaching and learning.

### Notes

1. R.J. DeCarvalho, "The 'Third Force' in Psychology," *Journal of Humanistic Psychology* 30 (1990), pp. 22-44.
2. R.I. Evans, *Carl Rogers: The Man and His Ideas* (New York: Dutton, 1975), p. 101; A.H. Maslow (ed.), *New Knowledge in Human Values* (New York: Harper, 1959); A.H. Maslow, *Religion, Values and Peak-Experiences* (Columbus: Ohio State University Press, 1964), pp. 3, 38, 82; and A.H. Maslow, *The Farther Reaches of Human Nature* (New York: Viking, 1971), p. 377.
3. R.J. DeCarvalho, "Carl Rogers's Naturalistic System of Ethics," *Psychological Reports* 65 (1989), pp. 1155-1162; and "The Ethics of the Growth Hypothesis of Abraham Maslow and Carl Rogers," *Journal of Ethical Studies* 6 (1991), pp. 3-17.
4. A.H. Maslow, "Eupsychia — The Good Society," *Journal of Humanistic Psychology* 1 (1961), pp. 1-11; A.H. Maslow, "The Farther Reaches of Human Nature," *Journal of Transpersonal Psychology* 1 (1968), pp. 1-9; and C.R. Rogers, "To Be That Self Which One Truly Is: A Therapist's View of Personal Goals" (Transcript of a talk at the College of Wooster, Ohio, 14 March 1957).
5. C.R. Rogers, "Significant Learning: In Psychotherapy and in Education," *Educational Leadership* 16 (1959), pp. 232-242; C.R. Rogers, "The Facilitation of Significant Learning," in *Contemporary Theories of Instruction*, edited by L. Siegel (San Francisco: Chandler, 1967), pp. 37-54; and C.R. Rogers, "The Interpersonal Relationship in the Facilitation of Learning," in *Humanizing Education*, edited by R. Leeper (Alexandria, VA: Association for Supervision and Curriculum Development, 1967), pp. 1-18.
6. C.R. Rogers, "The Project at Immaculate Heart: An Experiment in Self-Directed Change," *Education* 95 (1974), pp. 172-196.
7. C.R. Rogers, "Can Schools Grow Persons?," *Educational Leadership* 29 (1971), pp. 215-217; C.R. Rogers, "Bringing Together Ideas and Feelings in Learning," *Learning Today* 5 (1972), pp. 32-43; and C.R. Rogers, "Questions I Would Ask Myself If I Were a Teacher," *Education* 95 (1974), pp. 103-114.
8. C.R. Rogers and B.F. Skinner, "Some Issues Concerning the Control of Human Behavior," in Evans, *Carl Rogers*, pp. xiv-lxxxviii; W.B. Frick, *Humanistic Psychology: Interviews With Maslow, Murphy and Rogers* (Columbus: Merrill, 1971), pp. 22-32; A.H. Maslow, "A Philosophy of Psychology," in *Humanistic Viewpoints in Psychology*, edited by F.T. Severin (New York: McGraw Hill, 1956), pp. 17-33; and C.R. Rogers, *On Becoming a Person* (Boston: Houghton Mifflin, 1961), p. 391.
9. A.H. Maslow, *Motivation and Personality* (New York: Harper, 1954); A.H. Maslow, *Toward a Psychology of Being* (New York: Van Nostrand, 1962).
10. T.B. Roberts, "Maslow's Motivation Needs Hierarchy: A Bibliography," *Research in Education*, Ed-069-591.
11. C.R. Rogers, *Client-Centered Therapy: Its Current Practice, Implications and Theory* (Boston: Houghton Mifflin, 1951), pp. 139, 141, 522.
12. C.R. Rogers, *Counseling and Psychotherapy* (Boston: Houghton Mifflin, 1942).
13. Rogers, *Client-Centered Therapy*, pp. 75, 149, 157, 530.
14. B.F. Skinner, "The Science of Learning and the Art of Teaching," *Harvard Educational Review* 24 (1954), pp. 84-97.
15. A.H. Maslow, "Humanistic Education vs. Professional Education," *New Directions in Teaching* 2 (1969), pp. 6-8.
16. A.H. Maslow, *The Psychology of Science* (New York: Harper & Row, 1966), pp. 40-44.
17. A.H. Maslow, *Farther Reaches*, pp. 96-101.
18. C.R. Rogers, "Beyond the Watershed: And Where Now?," *Educational Leadership* 34 (1977), pp. 623-631.

### ANNOUNCEMENT:



### Alliance for Parental Involvement in Education, Inc.

**OCTOBER 4-5, 1991**

Families and Learning Conference, Albany, NY; sponsored by Alliance for Parental Involvement in Education. Keynote speaker: Dr. Pat Montgomery. Panels on home education, educational alternatives, involvement and enrichment, and more.

ALLPIE, PO Box 59, E. Chatham, NY 12060  
518/392-6900

Rocky Mountain Montessori Teacher Training Program (RMMTTP)  
proudly announces a name change to:

## Montessori Education Center of the Rockies

3300 Redstone Road • Boulder, CO 80303 • (303)494-3002



**Infant and Toddler**

**Preprimary**

**Teacher Education Courses**

American Montessori Society affiliated  
ACCESS accredited

*educating with excellence since 1978*

# Progressive Activists Form National Education Group

- *Parents and students fighting tracking in Alabama.*
- *Maryland teachers using their union to address the quality of education as well as their self-interest.*
- *Ohio activists electing education advocates to school boards and the state legislature.*
- *Teachers in Wisconsin using a quarterly journal to organize around local problems and debate broader issues.*

These are just a few of the education activists brought together by an ad-hoc group now known as the National Coalition of Education Activists (NCEA) and committed to building a multi-cultural organization involving all members of the education community.

Eager for ways to increase their effectiveness, and hungry to coordinate with their counterparts in other communities, hundreds of education activists have been meeting and corresponding since 1988. Their contact convinced them of the need for a national organization to help coordinate action on common issues and bring their progressive, multicultural perspective to the national education debate.

Last summer this ad-hoc group inaugurated NCEA. A ten-member steering committee, including parents, public school teachers, a professor of education, community and union activists, and a school administrator, was selected. Evenly divided between men and women, the committee includes four whites and six persons of color.

A statement of principles (see sidebar) was adopted and seed money has been secured. As its first project, NCEA will coordinate a nationwide series of forums on tracking and other forms of ability grouping. For information on organizing a forum in your area, contact NCEA at the address below.

NCEA's steering committee says that the group is equipped to build a progressive, national education group because it has successfully:

1. created situations in which diverse constituencies are able to find common ground and develop strategies for change while accepting and, when necessary, confronting the contradictions inherent in their roles as parents, school staff, elected officials, student advocates, and so on;
2. maintained geographic, racial, and organizational diversity through three national conferences and the process of developing principles and selecting a steering committee; and
3. forged consensus sufficient to establish a statement of principles covering key issues facing our schools.

## NCEA's long-term goals

As a national organization concerned with improving learning and teaching conditions, NCEA plans to:

1. *Build a multiracial, multiconstituency coalition* of local and regional groups intent on reforming local schools and national educational policy.
2. *Provide resources and technical assistance*, including research, a speakers' bureau, an information clearing house, feedback on local proposals, and organizing efforts for local groups and NCEA members.
3. *Develop a national voice and consensus* for progressive, multicultural approaches and positions on education issues such as:
  - A. *School restructuring*, including shared decision making and empowering parents, teachers, and communities. NCEA members argue that when schools are bureaucratic and fail to meet the needs of their communities, apathy and antagonism set in. A dose of democracy, they say, will help cure these ailments.
  - B. *Educational inequalities* rooted in race, class, gender, national origin, and disabilities. For instance, NCEA is interested in helping to create school environments that encourage multicultural approaches, increasing the number of teachers of color, and improving bilingual education.
  - C. *Participatory approaches to teaching and curricula*, including creating supportive environments for their use, providing teachers with the skills they need to use them effectively, and working to have them more broadly accepted among staff, parents, school boards, and communities.
4. *Encourage and facilitate dialogue* within and among school communities. NCEA members say they know that contradictions between various constituencies will not cease to exist, but they are determined to find ways to work through and around them; no single constituency can build the kinds of schools our children need, they say.
5. *Help coordinate locally based campaigns* on educational issues of national concern.
6. *Broaden and deepen the movement for better schools* by reaching out to parents and staff who are not active. By addressing specific issues, NCEA hopes to mobilize part of the large pool of teachers and parents who feel excluded from educational decision making and frustrated by their inability to affect what happens in their schools.

For more information, write  
 NCEA  
 P.O. Box 405  
 Rosendale, NY 12472  
 or phone 914-658-8115.

## Statement of Principles

Our schools are in crisis. Our children are being miseducated. Our youth are losing their spirit to live constructively in society. We must act now to build a progressive agenda and movement that will provide equal, quality, and humane education for all of our children.

A new agenda for education should be set by those with the most at stake: teachers, students, and other workers inside the schools, and the parents and communities those schools should serve. Today, across the nation there are many dedicated, creative people organizing in schools, in teachers' unions, and in local neighborhoods to make our schools democratic, child-centered, and capable of providing quality education for all of our children. These efforts recognize the multicultural nature of our society and work toward schools that are nonracist, nonsexist, and not biased against poor and working people. The goal of the National Coalition of Education Activists (NCEA) is to give national form and voice to these efforts in order to enter the public debate on education and to counter the program of elitist reform with an activist, progressive program of alternatives.

Progressive educational change should serve broadly defined individual and social goals. The results of reform should be judged by our success in preparing students who can participate actively in a democratic society, not only circle the correct answer on a test; students who can think critically about the world around them and fully develop their potential, not just secure entry-level jobs in the labor market. All students should not only know how to read, but also love to read. They should not only be good writers, but also want to use their knowledge of writing to improve their lives and their world. Students should have high self-esteem and identify positively with their own heritage, while at the same time knowing about and respecting others who are different. Throughout their schooling, students should learn how racism and other forms of prejudice have stained our nation's history and the world they will inherit in the next century.

Ten years of intense national attention on education has made one thing clear: schools will change in the 1990s. What remains uncertain is how they will change. A top-down "reform movement," driven exclusively by business interests, politicians, and foundation analysts, is pushing schooling in some dangerous directions. If unchallenged, such "reforms" will leave our schools less democratic, more repressive, and less able to serve the diverse and pressing needs of our increasingly multi-racial, multicultural, and multilingual public school population.

To ensure that educational reform is truly about quality education for all, teachers and parents need to be in the forefront of building a genuine bottom-up movement. Yet, for years, these two groups have been unable to forge sufficient trust and unity. Teachers and parents often tend to blame each other for problems over which they have little control. Elitist attitudes by some teachers and narrow self-interest approaches by many teacher unions have further contributed to this division. We must highlight and duplicate the positive efforts by teachers and local teacher unions and parents and community organizations who seek to overcome barriers to unity. There must be respect and equality between teachers and parents, and there must be institutionalized means, such as local school councils, in

which teachers and parents are empowered to affect the future of their schools. Our success will in many ways be determined by our ability to overcome the barriers to teacher-parent unity and to proceed in a new, united movement that puts the interests of our children first.

To this end we pledge ourselves and call on others to build a national movement that will be characterized by these principles:

1. School reform must be guided by a broad vision of social change, consciously linked to the struggle for democracy, equality, and social justice. The many problems that we face at schools are reflections of deeper social problems, especially racism, poverty, and powerlessness. Moreover, each distinct problem of teaching and learning is linked to a myriad of other educational issues and cannot be addressed in isolation. There are no panaceas, no singular strategies, no "teacher-proof" formulas that will magically solve the education crisis.
2. We stand for a new kind of schooling. We reject the factory model that has characterized U.S. education, in which teachers are viewed as assembly-line workers and students as products. We condemn the prison-like atmosphere that exists in too many of our schools. Instead we envision classrooms and schools as places where children want to be and which are connected to their lives and neighborhoods. Teachers must restructure their classrooms so that students become active participants in their education, critically examining their lives and the world around them.
3. Conditions of teaching and learning must dramatically improve. Class sizes need to be much smaller, bureaucracy must be reduced, and preparation and planning time must be increased. Teachers need more time to personalize instruction, to assist their students, to plan with their colleagues, and to evaluate what works.
4. We must address the negative impact of racism — both on U.S. education and within the educational reform movement. Schools must give high priority to confronting the long history of racism that has shaped our educational system. Likewise we must address the dangers of class and gender discrimination. While legal access to institutions and programs must be maintained, the quality of education must be improved for all students. At the same time, we must purposively integrate the reform movement with the voices and participation of people of color.
5. Grassroots efforts are the key to successful school change. In order to tackle the deep and multiple problems of our schools, the communities in which the schools are located must be mobilized and empowered. The failure to make this connection has meant that the highly publicized reforms of the 1980s have not met the needs of teachers, parents, and students. The school reform movement must be driven by organizing campaigns, not commission reports, by teacher-parent-community-union alliances, not administrative directives, and by the mobilization of schools and communities, not conferences of governors and politicians.

Please join our efforts!

## Notes on an Education Platform for the 1990s

The National Coalition of Education Activists (NCEA) offers the following ideas as the beginning of a national platform to transform our educational system. We welcome comments and suggestions.

1. *Funding.* Dramatically increase federal funding for education and other social needs, paid for by sharply cutting defense expenditures. Provide full equity in funding for all schools and school districts.
2. *Tracking and grouping.* Promote heterogeneous classes and groupings within the classroom that foster intellectual and cooperative learning, values, and skills. End racist, class-biased, and sexist tracking systems and grouping practices, which frequently start in elementary schools and do not prepare children with the necessary skills for life and work.
3. *Reconstruction.* Rebuild our failing schools and build new schools to meet our communities' needs — making our schools centers for community activities, increasing local jobs, allowing more classrooms and smaller classes, and providing for libraries, art, music, and sports.
4. *Class size.* Reduce the student/classroom teacher ratio to 1 to 15 in kindergarten through third grade and 1 to 20 in fourth grade and up.
5. *Teachers of color.* Fund federal and state programs to recruit, educate, and hire African-American, Latino, Native-American, and Asian-American teachers. Remove arbitrary barriers (such as multiple-choice tests) to inclusion.
6. *Education profession.* Reform how teachers and administrators are educated, trained, selected, inducted, and evaluated. We need fair and equitable means of monitoring staff performance that give support to these education reforms.
7. *Multicultural education.* Federal, state, and local agencies should promote curricula that are multicultural, anti-racist, and antisexist, including funding for community-based curriculum development efforts, staff development in multicultural education and intergroup dynamics, and for universal student access to enrichment activities. Teachers must be willing and held accountable to implement multicultural education and be able to teach children culturally different from themselves.
8. *Bilingual education.* Every child should have the opportunity to learn a second language, including the maintenance and development of his or her native language.
9. *Shared decision making.* Federal, state, and local policies should encourage meaningful school-level decision making and reform initiatives led jointly by teachers and parents — leading to reduction in local school bureaucracies and an increase in power to local school councils.
10. *Testing.* Ban norm-referenced multiple-choice and short-answer standardized tests in kindergarten through third grade and phase out their use in upper grades. Replace such tests with performance-based assessment, particularly with classroom-based documentation and portfolios.
11. *Curriculum.* Curriculum reform should create methods and environments that enable educators to improve academic skills, as well as to teach children to act as critical and morally responsible citizens.
12. *Teachers' unions.* Teachers' unions should become more child-centered and fight for the rights of children to get a quality education as well as teachers' rights as workers. Local, state, and national teacher unions and organizations should make all possible efforts to learn from and unite with parents and communities in their efforts to improve schools.

## Book Reviews

### *Educating Psyche: Emotion, Imagination and the Unconscious in Learning*

by Bernie Neville

Published by Collins Dove  
(60-64 Railway Rd., Blackburn,  
Victoria 3130, Australia)  
1989; 302 pages; paperback

Reviewed by Ron Miller

This remarkable book opens vast new horizons for education by taking us on an illuminating journey into the deeper regions of the human mind. Bernie Neville is a lecturer in education at La Trobe University in Melbourne, Australia, who has integrated the most penetrating and original psychological thinking of the 20th century into his work. In *Educating Psyche*, Neville gives his readers a useful introduction to the ideas of Sigmund Freud, Carl Jung, Roberto Assagioli, Milton Erickson, J.L. Moreno, Georgi Lozanov, and Emile Coué, among many others. He explores the educational applications of archetypal psychology, psychodrama, Neuro-Linguistic Programming, Jack Gibb's TORI model, meditation, autogenic training (ranging from affirmations to biofeedback), and theories on the creative process. The scope of this book is breathtaking.

Neville's eclecticism, however, revolves around a powerful, unifying perspective — his emphasis on universal human archetypes as symbolized by the gods and goddesses of Greek mythology. Neville argues that a full and integrated human life — which for him is the ultimate goal of our development — is one that appropriately incorporates *all* of these psychic energies: the rational objectivity of Apollo, the technological pragmatism symbolized by Prometheus, the ecstasy and creativity of Dionysus, the emotional bonds between human beings as represented by Eros, the nurturing concern of Demeter, the

preservation of culture and tradition (the "Senex" archetype symbolized by Kronus, Saturn, Zeus) as well as the spontaneity and rebelliousness of youth (the "Puer" archetype) — and several others. For Neville, as for Jung, *Psyche* is an archetype of wholeness; she is the soul itself, seeking truth and meaning through an integration of knowledge, intuition, and love. In several insightful passages, Neville argues that the process of education must strive for a harmonious and creative balance of these forces. He recognizes that conventional education, which serves the interests of the state and industry, is heavily dominated by Apollo, Prometheus, and the authoritarian Senex, and a major purpose of the book is to call attention to the neglected functions of play, spontaneity, intuition, imagination, nurturing, love, ecstasy, and transcendence. Educators who consider themselves to be humanistic, progressive, or alternative will be thrilled by Neville's poetic and passionate advocacy of these values in education. But he never loses his sense of balance and integration, and warns in no uncertain terms that an education which serves *only* Eros, Dionysus, and the Puer — he specifically mentions the alternative "free school" and open classroom movement of the 1960s and 1970s, as well as Rogerian humanistic education — is a "partial vision":

To be locked into one archetypal perspective is to be locked into its negative as well as its positive aspects. A consistently "traditional" education has the potential to narrow, distort and suppress the children's personalities. So does a consistently "free" education (p. 132)... We do not seem to be very interested in developing double-vision, yet single vision leads us into nonsense or pathology and may be positively dangerous. Senex' intolerance and blindness is presently destroying the earth; Eros' intolerance and blindness will not save it (p. 268)... If we consciously identify with one perspective only we allow ourselves to be unconsciously controlled by the other, instead of drawing delight from the harmony and energy from the tension. (p. 291)

This raises tremendously important questions about holistic education. In our rebellion against the oppressiveness of conventional schooling, do we

acknowledge the dangers of embracing the opposite extreme? How might educators in the libertarian tradition of Francisco Ferrer, John Holt, and A.S. Neill respond to the suggestion that their vision is only partial? Could it be that approaches like Montessori and Waldorf, which are often criticized by progressive/alternative educators for being structured too strictly, have achieved the sort of balance that Neville believes is most healthy? (Unfortunately, Neville makes no reference at all to Montessori or Steiner.) I suppose our answers to such questions hinge on whether or not we accept the legitimacy of these archetypal forces. I myself found Neville's presentation very enlightening, and certainly worth grappling with.

Another major theme in *Educating Psyche* is a recognition that wholeness/integration/balance is an ultimate developmental goal, requiring a great deal of discipline, effort, and (in the context of a classroom or any community) cooperation. It is not a condition that we can produce or achieve at will. It is not enough to espouse holistic ideals; creating a genuinely holistic learning environment, as we all know, takes a lot of work, and is rarely completely successful. Neville draws upon Gibb's TORI (Trust, Openness, Realization, Interdependence) model, which posits ten stages in the development of a fully realized human community, starting with a punitive environment (as in a prison or many schools), and culminating in a "cosmic" sense of community. Progress through these stages is not easy; indeed, it may be our fundamental human task to work our way through them.

Even the structure of Neville's book reinforces this developmental perspective. The first few chapters describe various psychological and educational techniques, such as Silva Mind Control, NLP, visualization, and Lozanov's accelerative learning method, as though they are neat little tricks for increasing student concentration, which "can be exploited for more effective teaching of the curriculum" (p. 94). In this part of the book, Neville seems to accept education's modern role as servant of the corporate state and the dominant culture. Although he calls attention to the

"Promethean" nature of modern schooling, he seems resigned to it. Although he discusses the vast creativity and wisdom that reside in the unconscious of every person, he seems to endorse the use of techniques for tapping into the unconscious to achieve the educator's (and society's) narrow and utilitarian goals. I was growing quite disturbed while reading this early part of the book, because it seemed to support an authoritarian approach to education in manipulating the sublime potentials of the unconscious.

But starting with chapter 5, which presents an excellent summary of Jung's work, Neville's writing takes on an entirely different character. Now he begins to argue that modern education is fundamentally *impoverished* because of its one-sided concern for productivity and efficiency. He moves on to Moreno, whose work in psychodrama emphasized spontaneity, and to Assagioli, whose theory of psychosynthesis emphasized heightened awareness through meditation, in an expanding criticism of education-as-technique. He describes the Eros archetype — education as genuine human encounter — and draws from existential thinkers like Martin Buber and Carl Rogers.

The ideal teacher is the one whose whole personality is available to her class, who is not limited by a narrow self-image, whose behavior with each child at each moment is entirely

appropriate to the child and the moment, who acknowledges her pupils' right not to be carbon copies of herself, who gives her pupils every opportunity to do the things they do best while leading them gently to expand their image of who they are.... (p. 153)

So what *Educating Psyche* does, with extreme subtlety, is to begin where most of today's educators actually are — caught in a Promethean/Apollonian system, at the "punitive" or "autocratic" stages of the TORI model, with little appreciation for the latent powers of the human soul — and to arouse their curiosity enough to consider a radically different worldview. If Erickson's hypnotic therapy and Coué's auto-suggestion and Lozanov's super-learning show us what is *possible* when we tap into the unconscious mind, then we must go on to reconsider what education, and human development itself, are really about. We can no longer be satisfied with the one-dimensional focus of conventional schooling, and we must begin the long and difficult process of balancing its ruling archetypes with those it has neglected.

I would like to address one more point, which Neville considers only fleetingly: whether or not the unconscious represents a truly *spiritual* dimension to human existence. At the close of his chapter on Jung, Neville writes:

It may not seem to have much practical application for the ... teacher to

envision her pupils as the critical point in the universe where evolution is in process, where matter is evolving into consciousness, where universal mind is emerging, but it certainly gives her activity some significance. (p. 154)

This is a pithy statement of what holistic educators mean by "spirituality," and Neville quite understates the matter by saying that it gives the educational endeavor "*some* significance"; in holistic thinking, this emergence of universal consciousness is the very essence of human existence — this is the highest meaning of the "whole" in holistic. So to us it is the *ultimate* significance of education, next to which all of the economic and nationalistic goals of modern schooling pale in comparison. But Neville does not develop this view; apparently, he is content to see "spiritual" and "mystical" dimensions of experience simply as other archetypal realities, coexisting in the unconscious with all of the rest. (This was confirmed in a letter Neville sent to me, in which he wrote that archetypal psychology is inclined to "relativize" all perspectives, including holism.) We may never know the full truth in these transcendental matters, but these surely are fascinating questions to consider. As *Educating Psyche* establishes so clearly, human existence is vastly more complex and laden with meaning than contemporary ways of schooling even begin to realize.

## *Spare the Child: The Religious Roots of Punishment and the Psychological Impact of Physical Abuse*

by Philip Greven  
Published by Alfred A. Knopf  
(New York, NY)  
1991; 263 pages; \$22.95 hardcover

*Reviewed by Ron Miller*

Philip Greven is a social historian who has done extensive research on both family life and Protestantism in American culture; *Spare the Child* is the product of his own troubled reflec-

tions on the familial and religious roots of the widespread violence in our society. This book, in exploring the merciless infliction of pain on children and infants in the name of "Christianity," and the serious psychological damage resulting from such sadistic discipline, is both profoundly disturbing and profoundly important. Greven's principal argument is that we are only beginning to realize that many of our most serious psychological problems and social pathologies have significant roots in the physical punishment of children:

Virtually no aspect of our lives as a people is untouched by the violence that we do unthinkingly to children.... Recognition of the enduring conse-

quences of corporal punishments will be the psychological and intellectual equivalent of the Rosetta stone. Suddenly feelings, thoughts and behaviors that were indecipherable before the realities of childhood punishments and pain were seen and acknowledged will begin to make sense. (pp. 9, 121)

This is a large claim to make, but I believe Greven is on to something that is vitally important. Patterns of violence, coercion, authoritarianism and control — closely linked to an antihuman Calvinist theology — permeate American culture, despite our self-righteous mythology of democracy, freedom, and human rights. It is becoming quite clear, thanks to the work of Alice Miller and others, that one primary source of

these cultural patterns is the brutality, pain, and fear that millions of children suffer at the hands of their violent parents. In my own historical research, I have found that these persistent cultural themes go a long way toward explaining our restrictive and repressive educational practices. Those of us who desire to transform education and society toward a more humane and loving model must, therefore, count corporal punishment, and its widespread acceptance as a normal way of raising children, as one of the most substantial barriers to realizing this vision.

In *Spare the Child*, Greven describes the fundamentalist ideology of child rearing with excerpts from modern "Christian" parent manuals and historical documents going back 300 years. In order to save children's souls from hell, these writings advocate the deliberate infliction of pain and cultivation of fear, and the "breaking" of the child's will in order to obtain complete, unquestioning obedience to the parent — especially the father, who is seen as God's disciplinary agent. Reading these passages made me terribly sad; it is heartbreaking to realize how many millions of children, over many generations, have suffered the pain, terror and humiliation that these self-proclaimed Christians so callously advocate as an essential ingredient of spiritual development. After a while, I could not even feel anger at these ignorant authoritarians; I realized that they — themselves products of childhood pain and terror — may be fundamentally sick.

This conclusion is strongly suggested by the next major section in Greven's book, in which he marches through an amazing litany of psychic and social pathologies that are claimed to result directly from violence against children: Among the most obvious are hatred and rage, which on a social scale become a "national obsession with defense and warfare" (p. 8). In addition, the "violation of the child's body and soul by painful punishments" (p. 127) naturally leads to apathy, depression, self-hatred, and ultimately suicide; lack of empathy for others; rigidity and a compulsive need to control others; authoritarian beliefs and behavior; dissociation (hysteria, multiple per-

sonalities); paranoia; sadomasochism; aggressiveness, delinquency and criminal behavior; domestic violence (spouse, child, and sibling abuse); and rigid, intolerant, authoritarian, and even violently apocalyptic theologies and political beliefs. There is even a section suggesting a strong connection between Puritan theology, with its emphasis on punishment, and the development of behaviorism as a singularly reductionistic, compassionless approach to psychotherapy and learning theory.

Of course, we must be careful not to explain complex social and ideological phenomena in terms of one cause alone; childhood violence may be a critical, but not necessarily determining, factor — one among many others. For the most part, Greven does avoid a reductionistic interpretation, but one question is more problematic than this book lets on: Do children from fundamentalist families *actually* (not just presumably) experience these terrible psychological consequences in higher proportions than the population at large? Much of the research Greven draws on specifically refers to *erratic* patterns of child-rearing — for example, parents who neglect the child most of the time, then beat him or her in a drunken fit. Fundamentalist child-hitters, as this book makes clear, are not erratic but highly methodical, and punishment is always supposed to take place in a context of prayer, forgiveness, and "love" rather than in fits of anger. How much difference might this make? Greven quotes from numerous diaries and documents to show that some fundamentalists do suffer from these psychological aberrations, and suggests that their apocalyptic theology has deep roots in childhood trauma, but this falls short of conclusive evidence.

Still, this is a minor point, because *Spare the Child* is a moral and philosophical critique of corporal punishment, not an exhaustive psychological study. Even if beatings-with-prayer are not quite as harmful as random angry beatings, they are clearly part of a "poisonous" cultural pattern of violence, coercion, and control. Indeed, Greven points out that religious ideology gives legitimacy even to secular forms of oppression against chil-

dren, such as corporal punishment (without due process) in schools. Greven is unflinching in his condemnation of violence against children; he argues that there is no clear dividing line between commonly accepted physical punishment — which almost all parents use at one time or another — and child abuse; violence is violence, and pain is pain. His book is aimed at the "moderate" parent, probably in the majority in our culture, who generally wishes to avoid punishment but feels that it is "the last resort" when parental authority must be upheld. In a short but stirring closing chapter, Greven says that what we now know about the lasting effects of childhood violence should move us to dissolve such ambivalence once and for all:

We can begin to choose to nurture and preserve life, our own and others', rather than to abuse life and destroy it. Our collective addiction to pain and suffering can be overcome through conscious decisions and actions, however difficult such transformation seems to be. (pp. 216-217)

Thus, the foundation of Greven's critique — the deepest core of his position — is *reverence for life*. He shares with holistic educators, and with the sincere followers of many spiritual traditions, the conviction that "love is natural; hate is created" only by our own violence and pain (p. 123). He argues that the few Biblical sanctions for corporal punishment, which fundamentalist child-hitters quote obsessively, are far outweighed by the Bible's emphasis on love, compassion, and nurturing. He cites moderate Christian writers on this score, and observes that *nowhere in the Gospels does Jesus Christ advise parents to discipline children with physical violence*. In direct opposition to the fundamentalist's infatuation with pain, fear, and control, the first Epistle of John states in very clear terms: "There is no fear in love, but perfect love casts out fear. For fear has to do with punishment, and he who fears is not perfected in love" (quoted on p. 217).

Greven comments:

Everything that we are beginning to know about punishment confirms this ancient observation. Fear stifles love and constricts our ability to feel and to

live.... Despite all the efforts by advocates of the rod and the belt to convince us that physical punishment is the "Christian" method of discipline, we must reject this confusion of fear with love and begin to act upon our knowledge that the physical violence against children urged by so many Christians is not truly "Christian" at all. (p. 218)

Greven closes the book with a moving reference to the photos of Earth from space and to the Gaia hypothesis; "We are learning," he says, "that all life is interconnected and that all the parts form a whole web of existence" (p. 221). Given this holistic perspective, we must "begin to see and understand that the end of the world begins with the striking of a single child...." (p. 222)

## *The Long Haul: An Autobiography*

by Myles Horton, with Judith Kohl and Herbert Kohl  
Published by Doubleday  
1990; 231 pages; \$10.95 paperback

*Reviewed by Ron Miller*

I have a holistic view of the educative process. The universe is one: nature and mind and spirit and the heavens and time and the future all are part of the big ball of life. Instead of thinking that you put pieces together that will add up to a whole, I think you have to start with the premise that they're already together and you try to keep from destroying life by segmenting it, overorganizing it, and dehumanizing it. You try to keep things together. (p. 130)

Myles Horton (1905-1990) was a holistic educator who made a difference — a *tremendous* difference — in the lives of hundreds of men and women, and in the quality of American society at large. In 1932 Horton founded the Highlander Folk School in the Appalachian Mountains of eastern Tennessee, and over the next half-century, this adult education center was an important inspiration and resource for numerous grassroots movements for justice and economic reform, including the civil rights movement. For Horton, education meant active engagement with con-

crete social problems, a process that would empower ordinary men and women to achieve dignity, fairness, and justice by working together in a participatory democratic setting. Rosa Parks, for example, attended a Highlander workshop on desegregation in 1955, not long before her historic action on a Montgomery, Alabama, bus, and later had this to say about her experience:

At Highlander, I found out for the first time in my adult life that this could be a unified society, that there was such a thing as people of different races and backgrounds meeting together in workshops, and living together in peace and harmony. (pp. 149-150)

Martin Luther King, Jr., Andrew Young, and other civil rights leaders drew inspiration and support from Horton and Highlander as well.

In *The Long Haul*, we see that Highlander embodied the unwavering vision and moral courage of its founder. Horton grew up in rural Appalachia, attended high school and a local college, and then went on to study at Union Theological Seminary in New York, the University of Chicago, and in the folk schools of Denmark. He sought out, and learned from, some of the leading thinkers and social activists of the time, including John Dewey, Jane Addams, theologian Reinhold Niebuhr, and sociologist Robert Park. He was moved, from an early age, by a deep sense of idealism:

I wanted and still want to see a world in which people can be equal, where people give their property to be held in common if they can't make personal use of it. I'd like to see a world where you could really love your enemies, where you could really care for people, a humane world.... To make life worth living you have to believe in those things that will bring about justice in society, and be willing to die for them. (p. 27)

Throughout his life Horton challenged unjust social conventions and laws, such as racial segregation, and stood up to intimidation from local authorities, union-busting thugs, Congressional investigators, right-wing agitators, and the FBI. *The Long Haul* is a modestly told but compelling tale of moral strength and personal conviction.

The book also provides an illuminating perspective on social change in American culture. Horton was not a "Communist," as opponents frequently charged, but he was outraged by the ways in which capitalism distributes power and privilege to a few and disempowers so many. His writing conveys numerous examples of blatant social and economic injustice, particularly in the South, and describes his efforts to help working people organize themselves into unions and cooperatives, as they educate themselves about the conditions of their lives.

Horton also reflects on methods and strategies for promoting democracy and justice; for example, he argues that people need, above all, to confront social problems collectively, cooperatively — he dismisses the self-absorbed pursuit of "personal growth" and believes that personal problems and insecurities are most effectively resolved when one is deeply engaged in a cooperative, meaningful effort to address social issues. Many holistic educators would disagree with this emphasis, of course, arguing that change must begin within the person. But it is difficult to face the social and economic conditions Horton describes, and to recognize that his approach *effectively empowered people*, and still claim that his emphasis was wrong. Horton's lesson is that personal growth must take place in the context of a democratic community life. And his conception of democracy is radical; "it is not limited to political decision making, to voting," he says.

It is a philosophical concept meaning that people are really free and empowered to make collectively the decisions that affect their lives.... I think you have, to have democracy right down into the home and into children's lives. It's got to be everywhere.... (pp. 169, 172)

Myles Horton was a master educator, and his observations on the art of teaching should speak to us all:

That's how you learn anything — by doing it. I believed [in 1932] and still believe that you learn from your experience of doing something and from your analysis of that experience. (p. 57)

Throughout the book, Horton emphasizes this point. Education at