# Child Spirit

*Exploring the frontiers of consciousness: IONS' research continues to push the boundaries. This issue: precognition.*

Several weeks ago, I was cutting back ivy growing up the foundation of my home. As I struggled against the bountiful and hardy crop, my young son asked if I'd planted it. "No," I told him with some emphasis, "the people who lived here before us planted it." Suddenly, struck by his wonder-filled, five-year old insight, he announced with conviction that he knew who lived in our house before the previous owner (the only other previous resident—as best I know). "Oh, who?" I asked, not sure what to expect but very curious about where this was going. "God," he proclaimed with certainty. "God lived inside our house." "That's really interesting," I told him, enchanted by his revelation. "Where does God live now?" "Everywhere," he answered immediately. "God is everywhere. Inside us. Inside the animals. And inside plants, too. Right, Mummie?" "Sounds right to me, Skyler." My perspective on the once evil ivy quickly was reframed in the way only a child can do, I put the gardening aside and played with my spirited boy, who was exploring life on his roller skates.

This story, while meaningful to me, is not uncommon. Various polls suggest that significant numbers of people who report spiritual experiences describe something that happened in childhood. In fact, child psychologist Tobin Hart says that children have remarkable spiritual lives full of wonder, wisdom, and pure joy. Their gift is to remind us of our greater possibilities. But all too often, this abundance of spiritual experience, which frequently includes divine encounters and visions of ethereal worlds, is dismissed by adults as fantasy or even pathology. Our educational system is structured to develop the cognitive dimensions of early development, but not the imaginal and creative aspects that make childhood so rich.

Of course, the power of inner guidance is not a new idea. Great sages, mystics, and philosophers alike have reported the importance of turning our attention to consciousness. For Socrates, the inner voice was called the *daimon*, or divine. Plato described the soul's remembrance of truth as *anamnesis*. Philosopher William James used the term *noetic* to describe states of insight unplumbed by the discursive intellect—a kind of direct knowing. And Teilhard de Chardin, the Jesuit scholar, described his own experience as a child: "I was certainly no more than six or seven when I began to feel myself drawn to matter—or more exactly by something that 'shone' in the heart of matter."

In his book, *The Secret Spiritual Life of Children*, Hart (an associate professor at the State University of West Georgia and an active parent) takes us into the fascinating world of children's experiences with the transcendent. He makes the distinction between religion, which shapes children's experience from the outside, and spirituality, which involves naturally occurring direct experiences that originate from inside the child. Spirituality, according to Hart, is both a worldview and a process of development.

According to Hart, most of the research on this subject concludes that children must have developed formal reasoning before they can have a spiritual life, usually some time in adolescence. But Hart challenges this view. He

# S OF RESEARCH

DREW GALLOWAY. PHOTO: JEANNE CLAYTON

'There are only two lasting bequests we can hope to give our children. One is roots; the other, wings.'

— HODDING CARTER

argues that the inner experiences of children's spirituality are profound moments that shape their lives in enduring ways. "From moments of wonder to finding inner wisdom, from asking the big questions about meaning and life to expressing compassion, and even to seeing beneath the surface of the material world, these experiences serve as touchstones for our life as spiritual beings on Earth."

Hart is one of a growing number of professionals who are probing the inner life of children—and all its spiritual richness. A meeting of this new generation of scholars, researchers, teachers, counselors, community leaders, parents, and grandparents will take place at the ChildSpirit Conference at Asilomar in Pacific Grove, California from October 7 to 10. The conference is a collaboration between Hart's ChildSpirit Institute and the Institute of Noetic Sciences, with support from the Department of Psychology at the State University of West Georgia. It will focus on ways we can nurture spirituality in children, and will seek to map more completely the spiritual life of children from the perspective of their inner experience. A special youth

program is also being presented to nourish wisdom and wonder in a playful and joyful environment.

As a parent, sometimes overly consumed with the ivy and not my child's inner life, I'm reminded of the beauty that comes in nurturing a young mind and soul. In Hart's words, this requires more than showing up, "it means that we wake up." As Julia Cameron noted in her book *The Artist's Way: The Spiritual Path to Higher Creativity:* "The quality of life is in proportion, always, to the capacity for delight. The capacity for delight is the gift of paying attention." Children are our teachers in the art of delightful living in all its various forms. As parents and caregivers, paying attention and using our intention may be key to the development of spiritually intelligent children.

*(This essay first appeared in* Spirituality & Health *in August 2004.)*

Marilyn Schlitz, PhD,
*IONS' Vice President for Research and Education*

# The Future is Now

Divining the future is an age-old wish. All of us would like advance warnings to help steer our lives through uncertain times. Wishing aside, are there any reasons to believe that sensing the future is possible? Laboratory evidence gathered over the past fifty years suggests that the answer is almost certainly yes, although "the future" that we perceive may refer to events that are likely to manifest, rather than preordained events that must occur.

People often report that they've had an intuition about a future event that later turned out to be correct, but many such hunches can be attributed to unconscious inferences, coincidence, elaboration, and the imperfections of memory. However, sometimes a hunch seems so intrinsically unlikely, and yet is later verified to be true, that one wonders whether some such experiences do involve perception of future information. In 1995, I began a series of experiments designed to investigate precognitive intuitions under double-blind conditions. My approach was to see if the human autonomic nervous system responds differently before a person experiences randomly selected calm versus emotional futures.

The experimental design was simple: An investigator attaches electrodes to a participant's left hand to continuously measure the electrical resistance of the skin, which in turn reflects the activity of the sweat glands. The participant then sits in front of a computer monitor displaying a blank screen, and he or she is instructed to press a button at will. After the button press, the computer waits 5 seconds. It then selects a photo at random from a large pool of photos (some calm and some emotional), displays it for 3 seconds, and then the screen goes blank again for 10 seconds. After a short "cool-down" period, the computer instructs the participant to press the button again at will. A typical session may last 30 minutes, during which time some 40 trials may be repeated, each involving a new, randomly selected photo.

What I've observed in these experiments, conducted with a total of 131 participants so far, is that on average people sweat slightly more (that is, their autonomic nervous system becomes activated) before they see emotional photos than before they see calm photos. The observed overall difference in autonomic arousal is associated with a probability of $p = 0.00003$, so there is good reason to believe that this result is not due to chance. My colleagues and I have considered numerous conventional explanations for this effect, including sensory cues, inferences, nonrandom target selection, and physiological anticipatory effects, but none have been found to be adequate. It appears that our nervous systems can indeed perceive about 5 seconds into the future.

'It appears that our nervous system can perceive about five seconds into the future.'

After conducting these studies, I learned that physicist Zoltan Vassy of Budapest, Hungary had conducted similar studies in the late 1970s using electric shock as a stimulus. Vassy reported strong evidence for precognition. Today, this line of experimentation has been successfully replicated and extended by a half-dozen colleagues around the world. In one version, recently reported by physicists Edwin May and James Spottiswoode of the Cognitive Sciences Laboratory in Palo Alto, California, at random times participants wearing headphones heard a loud sound blast. Based on a preplanned series of 100 participants, their study resulted in remarkably strong evidence showing that people had more spontaneous skin conductance responses 3 seconds before the sounds than before an equivalent number of silent control periods ($p = 1.8 \times 10^{-7}$). In other words, their subjects became more agitated 3 seconds before they heard a randomly timed, alarming sound than they did before a control moment of silence.

Another study, described in two recent articles appearing in the *Journal of Alternative and Complementary Medicine,* was reported by psychophysiologist Rollin McCraty and his colleagues from the Institute of Heartmath in Boulder Creek, California. McCraty's group simultaneously measured skin conductance, heart rate, and brainwave activity before, during, and after 26 participants viewed emotional and calm pictures. They found that both the heart ($p < 0.001$) and the brain ($p < 0.05$) responded about 5 seconds before the future emotional stimuli, and to their amazement, that the heart responded before the brain. They also observed significant gender differences in the processing of this future information (women performed better, on average, than men). They concluded: "Our findings suggest that intuitive perception is not a discrete function produced by a single part or system of the body alone. Rather, it appears that intuition may in fact be a system-wide process involving at least the heart and brain, together, in the processing and decoding of intuitive information." They highlighted that "the fact that the heart is involved in the perception of a future external event is a surprising, even astounding result, especially from the classical perspective that assigns the brain an exclusive role [for perception]."

In another variation of this experiment, psychologist Daryl Bem of Cornell University has developed a method that takes advantage of a psychological bias known as "mere exposure." It works like this: Say you have pictures of two men's faces, both previously rated as equally preferable by panels of independent observers. If you now randomly select and repeatedly display one of those faces to naive subjects, and then show that face along with the other equally preferable face, and ask which they prefer, most people will choose the face they've already been exposed to. In other words, repeated exposure to an image tends to increase preference; or "familiarly breeds likeability." Bem used the mere exposure effect to create a clever precognition test. Prior to the experiment, Bem developed a pool consisting of pairs of photos, each pair matched for preference. In the experiment, a subject would look at a pair of images and indicate the preferred picture. After the selection, the computer would randomly select one of the images and then repeatedly display it, that is, a mere exposure effect *after* the decision had already been made. If we are influenced by our future, as precognition implies, then when the subject decides which picture he or she prefers, that decision should be slightly biased by the future mere exposure effect. This is precisely what Bem found; other investigators have now successfully repeated his findings.

'Intuition may be a system-wide process involving the heart and brain, together.'

In sum, several classes of new experiments are beginning to confirm the conclusions of earlier studies reported since the 1950s: Our sense of the perceived present is not inherently limited to about the half-second we subjectively call "now." Now also appears to stretch into the future, challenging conventional concepts of perception, time, and causality.

Dean Radin, PhD
*IONS' Senior Scientist*