

FLOOR TIME

A new approach to the treatment of autism, one that emphasizes emotional development through intensive one-on-one engagement with autistic children, appears to offer some hope in responding to a disorder that is both epidemic and frequently intractable

BY PATRICIA STACEY

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With Walker we began in a darkened room. No matter how one altered his position, his head had always moved like the needle of a compass to the light. Light was his true north. But in dim light, with shades drawn, Walker slowly moved his head away from the window. Still, what he looked at then was not us but objects. Toys.

Arlene instructed me to curl him tightly in a ball and hold him in my arms.

"Hold him close," she said. "Now try to get his attention, but don't smile too much. That would be too much for him." I held him firmly and waited. He looked up at me, and his large, round green eyes penetrated mine. Suddenly his hand rose to touch my face. I shivered—he was seven months old and he had never come this close before. Yet within the instant his hand flew in the other direction; his eyes looked away as if looking at me had been painful.

"It's not that he doesn't want to," Arlene said, "It's that he can't."

From the moment our son, Walker, was born, in 1996, we knew something was different about him. Friends and doctors tried to convince us we were wrong, that all newborns were that way. Even when his problems became more obvious, no one at our HMO would believe us. But we weren't wrong. By the time he was six months old, we had no doubt. Walker was covered with eczema; he struggled to breathe at night; he could barely grab a toy. More difficult to describe, but just as compelling, was the sense that he was suffering some disturbance of the soul—he flailed in space. Somehow, mysteriously, he would look at us only when we were standing far above him, or across the room.

Finally my husband, Cliff, and I managed to talk our way into the office of a senior pediatrician at our HMO in Amherst, Massachusetts. He came in quickly, with an oversized duffel bag. He wrapped a tape measure around Walker's head and measured him in all the ways it's possible for a doctor to measure a baby, checking his length, his reflexes, his muscle tone. Then he tried to talk to Walker. "Walker," he said firmly. Walker didn't respond. The doctor dug into his duffel and pulled out a fuzzy red ball and began waving it in Walker's face. "Wal-ker!" "Wal-ker!" he said, first firmly, then animatedly, and finally yelling. Walker lay staring out the window, impassive, ineluctably drawn to the light.

The doctor took a seat, removed his glasses, and began. He explained that we needed to prepare ourselves for the limitations of our son's abilities: he might never walk or talk; he might be mentally retarded, perhaps even severely. The doctor wondered if Walker was perhaps blind or deaf. We tried to express our perplexity—the uncanny sense that something was missing from this examination. Walker was a distant baby, yet we'd had many moments of connection at far range. Could this strange behavior have something to do with allergies? How else to explain the eczema, the congestion, the discomfort?

The pediatrician assumed a sympathetic expression and then looked at the floor.

This not looking at us was becoming familiar—our son couldn't do it, and now neither could his doctor. We left the HMO office and spent weeks trying to find a specialist with an explanation, but the doctors could offer none. Instead they recommended that we call our local early-intervention program, REACH. But we had already done so, at the suggestion of our day-care provider, whose son was mentally retarded.

Twenty years ago Massachusetts was among the first states to introduce a statewide early-intervention program, providing therapeutic "home-based" support to developmentally delayed children up to the age of three and their families. Now, under the federal Individuals with Disabilities Education Act, all fifty states provide such services.

The director of REACH, Darleen Corbett, suspected that she knew what was wrong with Walker before she met him. In fact, she was bold enough to reveal her suspicion over the phone: sensory integration disorder, an extreme form of sensitivity. When she examined him and confirmed her suspicions, Corbett explained that the disorder tends to affect a number of systems simultaneously. A child with S.I. problems is likely to have allergies as well as heightened sensitivity to a variety of stimuli. Corbett assigned the case to Arlene Spooner, a physical therapist with training in sensory integration.

When Arlene met Walker, he wasn't at all the listless baby he had been in the doctor's office. In fact, he seemed to have swung dramatically in the opposite direction. No longer dumbstruck, he seemed electrified, a caricature of excitement. His head swung from side to side; he laughed constantly, almost maniacally; and his arms and legs moved up and down rapidly, repetitively, as if he were sprinting through the air.

Arlene sat in front of Walker and studied him with obvious alarm. We pressed her for an explanation, but she chose her words carefully. She didn't want to doom Walker before she gave him a chance. On this first visit she would only repeat, "You have a very sensitive son."

"But why objects?" I said to Arlene. "Why won't he look at me? It's hard not to believe he just doesn't like us."
B*"Because faces have an amazing amount of information in them," she said. "Especially the eyes. Right now that's too much information for him. Right now he prefers objects."*

That summer, when REACH began working with Walker, my mother came from California to take care of our then five-year-old daughter, Elizabeth. One day I took Elizabeth to swim at my mother's hotel. In the solarium I passed a tall, thin man sitting on a lounge chair next to the swimming pool. Cross-legged, stiff-backed, his arms outstretched, the man moved his hands through the air, his wrists rotating as if he were drawing circles. An hour later he was unchanged. I knew what to call his problem: autism. No one had used the term when talking about Walker, but both Darleen Corbett and Arlene Spooner had expressed alarm at the level of Walker's unrelatedness, his tendency to pull inward, the peculiar motions of his limbs.

The next day Cliff came home with the news that he had looked up "sensory integration disorder" on the Internet and found hundreds of entries—widely cross-referenced with autism. Walker's sensory problems, we felt we could reasonably conclude, were so severe that they were leading into an autistic retreat. He simply wasn't emotionally available to us.

The prefix "aut-," or "auto-," as in "auto-erotic," "auto-immune," means "self." People with autism retreat into their own worlds and appear not to be interested in our world. But why?

More than twenty years ago A. Jean Ayres, an occupational therapist, found a key to what makes autistic people act the way they do: often they are not out of tune with this world but, ironically, far too aware of it. The world is too much with them, and because they are excruciatingly sensitive, they're forced to retreat. Thus Walker hadn't necessarily been unaware of the doctor's presence when he became distant—he was simply overstimulated. Similarly, on the day he met Darleen Corbett, she showed him a bright-red plastic apple with a broad painted face which chimed sweetly. He instantly fell asleep—to protect himself from overstimulation, she explained.

Imagine your sensory world scrambled and unregulated, your auditory intake a rock station—or worse, mere static—blasting incessantly in your ears. Imagine your kitchen light as bright as a searchlight, boring into your cornea every time you turn it on. Imagine yourself in clothes so irritating that they seem lined with metal scraping brushes. Imagine entering a restaurant and encountering fumes so overpowering to your eyes that you think the cook must be boiling Mace. This can be the world of the autistic.

Understanding the enigmatic and contradictory world of sensory dysfunction is the task of S.I. experts, most of whom initially trained as occupational therapists or physical therapists. It's also the task of parents, and it can seem like a sojourn in the world of Lewis Carroll. Some children are so auditorially sensitive that they can recount conversations that took place in the house next door. Some are so aware of smells that they can identify the one person chewing gum in a large conference hall. Understanding a child through his senses requires close detective work—intimate, hairsplitting observation—because each person's sensory challenges are unique.

"Why the light?" I asked Arlene. "Why would light be attractive to a child who's sensitive?"

"I don't know," she said. "Perhaps because it is stimulating somehow. Or perhaps because it's like a great void, a great nothingness."

"You mean it blinds him ... like snow blindness?"

"Yes, possibly," she said.

Children with S.I. problems can also be "hyposensitive," undersensitive, in one or more areas. A child may have oversensitive hearing yet be undersensitive visually. A tactilely hyposensitive child might need to throw himself against a wall just to know he exists, just to feel himself in space. Walker flailed in space because his sense of the location of his body parts and even the boundaries of his own being wasn't working well. He spent most of his energy trying to figure out where he was.

THE EPIDEMIC

Over the past ten years the number of children with autism has increased astoundingly. When I asked a local organization, [Community Resources for People With Autism](#), for some statistics about the incidence of the disorder, I was told that a report merely three months old would be out of date. California, reflecting a national trend, reported 3,864 cases in 1987 and 11,995 in 1998—a 210 percent increase in a decade. Estimates for the current incidence nationwide vary from one in 500 people to one in 150.

Most experts now agree that autism has a genetic component, but genetics represents only a piece of the puzzle. Some researchers speculate that genetic propensity may work in concert with environmental causes. The possibility that toxins from pesticides, other chemicals, or vaccines may be culprits has been vigorously debated. (Mercury, a neurotoxin, was found in the past few years to be in vaccines in excess of EPA recommendations; vaccine manufacturers recently discontinued its use.) One theory proposes that food sensitivities may be responsible.

A partial explanation for the rise in the incidence is that the very definition of autism is expanding. In 1943, when the term was coined, the disorder was viewed as an intractable mental disease, largely untreatable, a cousin to schizophrenia. Our understanding is being recast. Each time the American Psychiatric Association's *Diagnostic and Statistical Manual* (now in its fourth edition) is revised, the scope of autism broadens. In common and clinical language, "autism spectrum disorder" encompasses everything from autism in its most extreme form (sometimes called "full-blown" or "classical" autism) to less severe forms such as pervasive development disorder and Asperger's syndrome. Some people put attention deficit disorder and other learning disorders in the spectrum. One school of thought sees autism as a personality type—the cliché of the classic "engineer": highly intelligent, highly visual, mechanically oriented, associative, relatively unskilled verbally and socially.

At the far end of the spectrum are people dwelling in a Dantean nightmare. They exist among us but not with us, having no meaningful speech or even language comprehension; theirs is a world of objects rather than people. They may bite themselves or others, scream out for no apparent reason, have uncontrollable tantrums, thrash, bang their heads against walls, act as though in a trance, rock back and forth, or wave their hands in mysterious patterns. The worst cases involve severe mental retardation. Even in less severe circumstances autistic children may refuse or be unable to look at others, or may repeat phrases from Disney movies, for example, or fragments of commercials, without seeming to know what they've said. Autistic people may engage in obsessive behaviors, focusing on one thing and refusing to let it out of their sight: they may stare at a stain on a rug and rub it incessantly. Some such people must be institutionalized, or watched constantly by an aide, to be saved from themselves. A volunteer who helped us with our son told me that for an entire summer she had worked with an autistic man who lived in a residential hospital and engaged in one activity alone: he hit his ears from behind, slapping at them with both his hands.

"That was my whole job," she said. "All summer ... trying to keep him from doing it, and he never stopped. That's all he did."

"Why didn't you just let him do it?" I asked naively.

"He would have bled to death."

Thirty years ago something happened in Los Angeles that changed the landscape of autism forever. Ivar Lovaas, a professor of psychology at the University of California at Los Angeles, began experimenting with behavior-modification techniques on children with autism. In 1987 he published a landmark study, showing that devastating symptoms of autism could be ameliorated and even reversed in some children.

For his study Lovaas separated thirty-eight autistic children of preschool age into two groups of nineteen. The first group was given an average of forty hours a week of intensive behavioral intervention called applied behavioral analysis. The intervention involved extremely repetitive exercises. The children sat in chairs and received requests: "Put this cube in a bucket," for example. A child who reacted appropriately was rewarded—with a cookie, perhaps, or praise. For children who did not react appropriately the request was repeated, again and again. Lovaas theorized that a child participating in a constant series of these exchanges, called discrete trials, would, by the laws of behaviorism, adopt more socially correct behaviors, which would be consistently reinforced.

Lovaas's results were unprecedented; for the first time, someone in the scientific community had proved that autism was treatable. The children who received intensive intervention enjoyed an average increase in IQ of thirty points. Nine of the nineteen children went on to attend regular first grade. The second group of children in the study, who received merely five to ten hours a week of behavioral therapy, reacted as if they hadn't been treated at all: not one was eventually placed in a regular class or showed an increase in IQ.

Some parent groups are critical of Lovaas, because in the years prior to publication of his 1987 study he recommended aversive techniques—spanking, showing anger, looking away, yelling—as means of coercing children to behave differently. But a representative of the [Lovaas Institute for Early Intervention](#) explained to me, "His techniques have been evolving for thirty years. Lovaas has found more-effective means of positive reinforcement, has eliminated aversive techniques, and has added a social

component to his program: play groups and play dates supervised by facilitators." Not everyone agrees, however, that using applied behavioral analysis is the best or most advanced way to treat autism or that Lovaas's standards for measuring improved functioning are high enough. In fact, his critics argue that his program does not sufficiently work on or test for a number of the hallmarks of autism—significant impairments in emotional intimacy, empathy, and creative and abstract thinking.

CIRCLES OF COMMUNICATION

The goal with Walker was to attune his senses, to one another and to an overwhelming world—not just so that he would be a happier baby but so that he might be able to resist the sirens that beckoned him inward. From the time she began working with Walker, Arlene Spooner made clear what was at stake: If Walker couldn't maintain his focus on the external world, he would not be able to learn. Her therapy wasn't certain to reach him, but she was eager to try. After working with Walker for two months, Arlene brought in Dawn Smith, a colleague at REACH who is also a specialist in autism.

Walker was an unusual case. Dawn had seen many toddlers—and, indeed, adults—with the symptoms of autism, but she had never before seen such behavior in a child this young. Usually autism becomes apparent when the speech and social skills that usually appear at eighteen months to two years are slow to develop. One of the major forms of autism shows a regressive pattern—seemingly typical children might begin to lose words they have already learned to speak. Dawn knew from the research that a significant percentage of autistic children show symptoms from birth. But parents may not know something is wrong—or find useful help—until the disorder is advanced. She later explained to me that, remarkably, pediatricians in America are often not adequately trained to screen for the disorder. Dawn had believed for a long time that the description of autism appearing in the *DSM-IV* applied only to more-advanced stages. Still, whatever one called Walker's problem, she thought he would receive the diagnosis of autism within a year if we didn't act, and act quickly. Although she used a few behavioral techniques in special circumstances, Dawn had serious reservations about using a behavioral approach; it didn't address the crucial issue of emotional development. By a fortunate coincidence Dawn was primed to try something new in her practice. Just three months before she met Walker, she had read an article by [Stanley Greenspan](#) and his colleague Serena Wieder, in the journal *Zero to Three*, outlining an effective new approach for treating toddlers and babies with symptoms of autism.

Later she found a chart review of Greenspan's patients. The results struck me as astoundingly positive. Greenspan had been able to help more than 50 percent of his 200 patients to become fully functioning children—warm, engaged, interactive, verbal, and creative. Another 30 percent made substantial progress. He helped children to reach these unexpected levels of functioning using a comprehensive program including occupational therapy, speech therapy, and what he called "floor time." The therapy required that a child be reacting to his parents or therapists in what Greenspan called "circles of communication." A circle would be started if someone tried to engage the child and completed if that someone received a response. Smile and the baby smiles back: one circle. Hand a toy to the baby and the baby hands it back: another circle.

I called Greenspan, who, though notoriously difficult to see, was eager to work with Walker because Walker was so young. Two months later we flew down to Bethesda, Maryland, on short notice and met with Greenspan in his home office, a large, comfortable room with old chairs and couches, stacked with papers and books and littered with toys.

Greenspan, a child psychiatrist specializing in early development, had spent sixteen years at the National Institute of Mental Health, and his studies led to a new philosophy of emotional development—for which he won the Ittleson Award, the American Psychiatric Association's highest honor for research in child psychiatry. In his years at the NIMH, Greenspan developed sophisticated criteria for understanding and defining emotional maturity and began to map out its phases. He applied recent research about how babies and toddlers "process" the vast amount of sensory information available to them each day. On the basis of his insights Greenspan designed a therapeutic model to help children with a variety of problems. He called it D.I.R. (developmental, individual-difference, relationship-based model) or, informally, "floor time" and made the approach available to the public in his book *The Child With Special Needs* (1998). Floor time required parental involvement. Though it emphasized relationship, fun, joy, the method drew its power from parents' ability to entice an impaired child to perform at increasingly higher levels of attention, cognition, and motor functioning—far higher than that child would normally be disposed to. It was tailored to a child's particular deficits and strengths and designed to grow in scope as the child climbed the developmental ladder.

The important question for Greenspan, however, was how high could an impaired child climb? In recent years Greenspan and his associates discovered something peculiar. They could teach autistic children certain cognitive and living skills through an intensive regime, as Lovaas had, but for some reason the children became stuck when they were asked to do anything imaginative or conceptually abstract. Even autistic children who were geniuses at mathematics and music had difficulty making certain simple connections between their reality and the world of abstractions. Psychologists and researchers noted a similar problem with social development: autistic children could not wrap their minds around the idea that other people have feelings and make judgments. Often autistic people can't feel sympathy for others and have no understanding of others' thought processes. At an early age, when most children are detecting how the minds of their parents and peers work, scheming to get what they want out of their social environment, many autistic children can't understand the simplest pun or detect the simplest lie, though some might be able to calculate in a matter of seconds how many of their birthdays will fall on a Tuesday. They seem hopelessly mired in the literal.

Psychologists and researchers in autism have coined the term "theory of mind" to describe the ability to understand how other people reason as they do. Greenspan and his associates asked themselves, Why do many autistic people lack theory of mind? And why can't autistic children make the leap into abstraction? From a traditional developmental point of view, there was no reason to assume that autistic children would have trouble conceptualizing abstractions. The pioneering Swiss psychologist Jean Piaget had persuasively argued long ago that abstractions are grasped when a child operates on his environment (he pulls a string, and a bell rings: causality). But Greenspan was convinced that some mechanism must be missing in an autistic baby's mind. What was it? The answer was staring him right in the face. Or, rather, the answer was in all those young faces that simply couldn't look him in the eye. Greenspan and his colleagues made a leap: these children, they suddenly realized, wouldn't understand abstractions *until they understood their own emotions*. Already celebrated for his work in developmental psychiatry, Greenspan had, by observing the dysfunction of autistic children, come to a turning point in his understanding of human cognitive development. He understood that everything a child does and thinks as he is developing he does largely because of his emotions. Children apply to the physical world what they have already learned emotionally; they are not, as Piaget thought, introduced to abstractions by the physical world. "The first lesson in causality," Greenspan says, "is not in pulling the string to ring the bell. The first lesson in causality happens months earlier—pulling your mother's heartstrings with a smile in order to receive one back." Furthermore, he says, the earliest concepts of math are nothing but reasoning driven by emotion. "For instance, when a child is learning concepts of quantity, he doesn't understand *conceptually*, he understands *emotionally*, in terms of his affective universe. What is 'a lot' to a toddler? It's more than you expect. What is 'a little'? It's less than you want."

First we "get it" from our personal experience, and then we make connections, conceptualizing abstractions. What was missing from the autistic child's experience was a clear understanding of himself—a connection among feelings, actions, and ideas. He couldn't make the intuitive leap into a conceptual world beyond himself because he didn't "get" himself.

Although autism is a biological disorder, the path to combating it was clear to Greenspan: A therapist alone couldn't teach an autistic child to come out of his world; the parents (or someone else with an emotional connection to the child) would have to be involved. The foundation of cognitive development would need to be laid at home. This emphasis on emotional development separated Greenspan dramatically from the behaviorist tradition in treating autism. He argued that the brain and the mind could be developed only by "wooing"—enticing the child into an emotional relationship.

Though Greenspan's floor time and Lovaas's behavior modification are two of the major therapeutic models funded by many states, the latter is by far the most prevalent and was for many years the only method; some school systems insist that it's the single proven technique. Recently, however, a number of schools and institutions, recognizing the importance of Greenspan's emphasis on emotional development and acknowledging that his success rate is comparable to or even better than Lovaas's, have created their own programs to combine the techniques.

Of the ten Department of Public Health-approved "specialty service providers" (programs for children up to three and sometimes five years of age) available in Massachusetts, for instance, two use floor time as their primary approach, four use only behavior modification, and four use a combination. Behavior modification conditions through principles of systematic reinforcement; Greenspan's model seeks to change the underlying causes of behavior. No definitive proof exists in favor of either. Neither method has yet been studied on a truly representative population in a clinical trial, nor has either been compared with the other, though such studies are planned.

When we met with Stanley Greenspan at his Bethesda office, he reviewed our history and then used a video camera to film Cliff and me as we played individually with Walker for about fifteen minutes each. After reviewing the tapes he instructed us to get back on the floor and try again. This time, still behind the camera, he called out orders, telling us we should work harder and faster and be more engaging, more intimate. "No, no, no ... now you've lost him." When we'd finally captured our son's attention for longer periods, he'd yell out, "Now you're cookin'!"

Greenspan was re-educating us in the science of Walker, who was then eleven months old. We had already made some strides using floor time at home. We'd won eye contact from Walker, and he was becoming more used to light, more used to interaction, though only in fleeting doses. Still, Greenspan was insistent that we change our attitude. He revealed the ways in which we showed him—and Walker—that we had diminished expectations for our son's performance. "Let him control his own body," he'd insist from behind the camera. "Let him move—don't do the work for him."

The evening after the appointment Cliff and I were sitting in a restaurant with Walker. Greenspan had told us that we would need to make Walker work for what he wanted—that every desire would need to be satisfied through human interaction. ("You must become the button that makes anything he wants happen.") "I'll give you this cup," I said, "if you squeeze my finger." Walker didn't react. We weren't sure he was even intelligent enough to understand. I said it again. The boy who had previously never responded to a purely verbal request put his hand up to mine and squeezed.

Doing floor time, I often felt I was performing a desperate sort of stand-up comedy to save my son's life. Not only were the sessions

exhausting—we found ourselves clapping, jumping up and down, making up songs, egging Walker on to move or to knock down blocks—but floor time required that our voices be ever livelier, the games more enticing, the joking more exaggerated. Our energy and focus had to be at the highest levels possible. Children like Walker, we understood, are inclined to recede to an internal landscape that is far more seductive than the "real" world. Greenspan asserted that we must not only maintain Walker's attention but also actually help to "build" Walker, or help him to build himself—block by block, so to speak, through each phase of development, physical and emotional. "You're trying to lay new pathways in your son's mind," he said.

Laying new pathways in the mind takes manpower—far more, we soon realized, than a family can provide. Greenspan wanted us to do ten sessions a day of twenty to thirty minutes each. We told Darleen Corbett that we needed as much time as possible from Dawn and Arlene. In a decision unprecedented at REACH, Corbett found funds through the Massachusetts Department of Public Health to pay a tutor for ten hours a week. She also gave us more of Dawn and Arlene's time: a total of four hours a week each. Their help was crucial.

During her sessions Dawn worked to help Walker understand his social and cognitive relationship with the world. She encouraged him to look at himself in a mirror when he played with her. She warned us against being too focused on what she called "splinter skills"—small milestones, such as stacking blocks, that in other therapies often become goals in themselves. Working in a constantly interactive environment, we were actually teaching Walker how to learn. "If he can learn how to learn, then he can learn anything," Dawn said.

Exhausted, we brought in a volunteer, Amy, a Smith College student. Amy was interested in working with Walker on language acquisition. She knew that Walker might never speak, but she was eager to try to help. She showed up five afternoons a week to sit with Walker at his high chair, enticing him to show what he wanted to eat and when he wanted to stop. She began by teaching pre-verbal gestures, which had been shown to help speed language acquisition in typical children.

It was a time of shedding old ideas. Doing floor time, I was learning about brain development, the very foundation of intelligence. I had studied Western civilization in college, and had mistakenly believed that the body was somehow inferior to the mind. Now I quickly came to understand that the brain depends on the body for its breadth of knowledge. By moving through space we integrate with the world; by declaring ourselves creatures in it, we come to know it. Movement also stimulates brain function. Time and again Arlene went straight to Walker's body, focusing on movement as a way of helping stimulate the nerve impulses that build mental pathways. For example, when Walker was grabbing toys, she would often encourage him to reach not just forward but across—"crossing mid-line," she called it.

"What's so important about crossing mid-line?" I asked.

"It connects the two parts of his brain, left and right," Arlene told me. "If he can reach across his body, he'll better be able to conceptualize an angled line, or a triangle, or one day draw an X, because he's already drawn one with his body."

One day, when Walker was nearly a year old, Dawn and Arlene and I were all on the floor with him. We had taught him to crawl at about ten months, but he still couldn't sit up by himself (a skill his peers had mastered at six months). Seeing that he was trying to make his way up, we cheered him on. He succeeded—vertical on his own for the first time. We all clapped. This primarily physical leap spurred a social one as well—he looked from Dawn to me to Arlene as if to say, "Hey, you guys, did you see me?"

"Look what he just did!" Arlene exclaimed. "He looked from one of us to the other and back again. He's never done that before!" Walker had read and acted on our emotional cues in a sophisticated way. A few weeks later he began to verbalize: "Hambugah!" "Hambugah!"

In June of 1998, when Walker was twenty months old, we revisited Greenspan's office. Walker had learned to walk the month before, but Greenspan was after bigger gains. He asked Walker to find a large toy we had "hidden" under a rug in the office. Walker couldn't find it. Greenspan explained that this failure indicated that Walker's visual-spatial reasoning wasn't fully developed. We spent the next nine months playing hiding games with Walker. For a year after that we focused on games involving imagination—to my surprise, a crucial cognitive building block. It is the screen, Greenspan had explained, on which the mind begins to project possibilities beyond what is. Our aim was to build the foundation for higher reasoning.

The results of Greenspan's intensive interactive therapy were staggering. Each time Walker was tested at REACH, at six-month assessments for social and physical maturity, he had attained higher levels of development. Though we flattered ourselves that we were like Professor Henry Higgins, Walker, like Eliza Doolittle, mocked our illusions of control, becoming more and more the person he wanted to be. He exhibited a sense of humor. His expressiveness grew, as did all his motor skills. Emotion bloomed on his face. He laughed during our games, toyed with us, made up his own ways of playing.

On the day Walker was scheduled to receive his three-year-old assessment at REACH, six adults—Dawn, Arlene, Jean (a speech

therapist), Walker's prospective preschool teacher, Cliff, and I—congregated around him in a small clinical testing room. Cliff held the video camera. Each of the therapists put herself in front of Walker to test him in her area of expertise. Dawn and Arlene would be using the Michigan Early Intervention Developmental Profile. Dawn presented puzzles and diagrams and toys to test cognitive ability. Arlene asked Walker to jump, to draw, to stack blocks. Jean used the Preschool Language Scale to test both receptive and expressive language. She put a large book on the table in front of Walker and showed him pictures. Each page of the book contained exercises matched to increasing levels of skill. She asked Walker to repeat a string of words. He did so, beaming proudly. She pointed to a picture of a bicycle, a broom, scissors. "Which do you ride?" "Which do you cut with?" He passed the three-year-old mark. She turned a few pages. He passed the three-and-a-half-year-old mark, while flirting with his examiner. She turned some more. A three-year-old who might never have spoken had acquired the language proficiency of a child close to four years old. But when Arlene had asked him to jump, he couldn't.

Nine months later, after receiving physical therapy at school for increasingly subtle problems, Walker could jump and run, though perhaps not as vigorously as most children. He could cut paper with scissors and do particularly well-aimed and sneaky things with a squirt gun.

Walker still suffers from allergies and from occasional gastrointestinal difficulties. At times he is an overly sensitive child; in his first year of preschool he was frightened by loud lawnmowers; now, two years later, he's inured to them, and can spend hours happily in a noisy arcade. But he is sensitive in positive ways as well. I would argue that his therapy, or perhaps some inherent gift related to his sensitivity, has afforded him a high degree of emotional intelligence—ironic, given his early patterns.

At three and a half years old, Walker came into the kitchen holding the beige-plastic body of Mr. Potato Head puppet-style.

"Hi!" he said in a high, squeaky voice. "I'm Mr. Potato Head. Actually, no," he corrected himself, still in the potato voice. "I'm not Mr. Potato Head ... I'm Mr. Nobody."

"Why Mr. Nobody?" I asked.

He showed me the body. It was blank. "Because I have no eyes, no nose or a mouth. I'm sad and lonely."

"Why are you sad?" I said.

"I want my whole self."

"Then you'll be happy?"

"Yes," he said.

Perhaps most important of all, Walker has a deep sense of empathy. When his great aunt died, more than a year ago, he worried most that her surviving sister would be lonely. How often are typical four-year-old boys able to put themselves in someone else's place?

In May of 2000, when Walker was three years and seven months old, Greenspan filmed us playing and working with our son. In the past he had usually filmed us twice, correcting our floor-time method during the second round. This time he filmed us once, turned off his video camera, and sent Walker out of the room. He told us that Walker was doing wonderfully by any standards. "He's intelligent, a great problem solver, creative thinker, has a can-do attitude. More important, he's got that spark in his eye. You don't see the average kid looking this wonderful." Far from being self-absorbed, repetitive, or stereotypical, Walker has now emerged among his peers as one of the most engaged, warm, and intelligent. Walker is now a kindergartner. His teacher has said that she thinks of him as "a typical child" and "very bright," though she admits he occasionally has his unruly moments. Most important is his social development; people at school see him as friendly and animated.

That day in Greenspan's office we began talking about child-rearing in general. "It's great when parents spend time with their kids," he said.

Great when parents spend time with their kids? I would have slugged the man if I hadn't been so grateful.

In his *The Phenomenology of Mind*, Hegel asserted something fundamental about self-awareness: "Self-consciousness exists ... in that, and by the fact that it exists for another self-consciousness." We can be complete, conscious beings only when we have known ourselves through the eyes of another. To call this process the healing power of love would be sentimental—especially since in Walker's case so much pragmatic, unsentimental energy and work was involved in overcoming biological obstacles and forming a relationship. Still, early human interaction is the starting point of all knowledge. How important it is, then, to teach a highly sensitive child to bear the often unbearable light of another person's gaze.

The DIR/Floortime model was developed by Dr. Stanley Greenspan and Dr. Serena Weider (Greenspan & Wieder, 1999). It is based on a hypothesis that ASD is acquired as a result of a child's early environment not providing specific kinds of emotional nurturing. This leads to them missing one or more of the six hypothesized emotional developmental milestones. Floortime is a well-established form of play therapy that helps children with autism build social, communication, and emotional skills. Learn more about its effects. History. Floortime was developed by Drs. Stanley Greenspan and Serena Weider, and became increasingly popular during the early part of the 21st century. Both Greenspan and Weider were psychologists whose books *The Child with Special Needs* and *Engaging Autism* reached large audiences. The Developmental, Individual-differences, Relationship-based (DIR) model is a developmental model for assessing and understanding any child's strengths and weaknesses. It has become particularly effective at identifying the unique developmental profiles and developing programs for children experiencing developmental delays due to autism, autism spectrum disorders, or other developmental disorders. This Model was developed by Dr. Stanley Greenspan and first outlined in 1979 in his book *Intelligence Floortime* (also known as DIRFloortime) is an intervention that is used to promote an individual's development through a respectful, playful, joyful, and engaging process. It uses the power of relationships and human connections to promote engagement, communication, positive behaviors, and thinking. It is based on the DIR® model that was developed by Dr. Stanley Greenspan and his colleagues. Floortime is a relationship-based therapy for children with autism. The intervention is called Floortime because the parent gets down on the floor with the child to play and interact with the child at their level. Floortime is an alternative to ABA and is sometimes used in combination with ABA therapies. The goal is for adults to help children expand their "circles of communication." They meet the child at their developmental level and build on their strengths.