On first encountering Stanley Greenspan’s work, one is likely to become quite overwhelmed with its scope. At least this was one of my initial reactions to being introduced to his work about 20 years ago. Through the years that I have been studying and using his theory in my practice, I have found it tremendously useful in organizing my clinical understanding of developmentally challenged individuals. Since I anticipate that the reader of Greenspan’s work that is being published in this journal is likely to have a similar reaction, I wanted, by way of introduction, to first explore the reason many people, clinicians, and nonclinicians alike, respond initially with some anxiety and trepidation.

In this brief introduction to Greenspan’s work and to the Developmental-Individual Differences-Relationships-Based Therapy (DIR model), I will first describe the theory and the role of the clinician applying it. Then I will discuss the way Greenspan addresses the “core deficit” in autism, the deficit in linking affect and intention, and finally, I will illustrate the application of the theory with a brief case vignette.

The Complexity of the Clinical Theory

The Greenspanian project is quite an ambitious one. In the papers that you are about to read, Greenspan delineates the factors that a clinician who treats children in general and children with severe challenges in relating...
and communicating needs to consider. While many theoreticians and writers in the field list the many factors that may be involved in normal and pathological development, Greenspan expects the clinician not only to be aware of these factors and their impact on development but also to specifically intervene and include each of them in his treatment plan for the child and the family. Now this is often beyond what most clinicians have been trained to deliver to a child and family in therapy, and it puts a considerable responsibility on the clinician to familiarize himself and become conversant in many aspects that pertain to the child’s development. Here is how Greenspan describes the interplay of all these factors that the clinician needs to hold in mind:

In the DIR model, three dynamically related influences work together. The first influence includes partially, biologically based capacities for auditory processing and language, visual-spatial processing, motor planning and sequencing, and sensory and affective modulation, as well as other cognitive, motor, and sensory processes. The second influence includes caregiver, cultural, and family factors, as well as the physical environment. The third influence, the child/caregiver interaction patterns, incorporates what the child brings (e.g., his processing differences), what the caregiver brings (family and cultural patterns), and determines the child’s capacity for relative mastery (or nonmastery) of a series of functional and emotional developmental capacities (Greenspan 2004, p.6).

Greenspan’s view of development as described in this paragraph is consistent with other writings on child development such as Brazelton (2000). However, Greenspan is unique in his emphasis on the centrality of the relationships. In his emphasis on the relationships between caregiver and the young child, Greenspan provides a relational-interpersonal context for development than can be particularly meaningful to the child analyst who works from a similar perspective and who wishes to expand his knowledge base.

Furthermore, Greenspan expects the DIR clinician, in order to address these factors fully, to be able to accurately assess and include each of them in the treatment of the child and his family. Since most child clinicians are trained in a specific discipline—for example, psychology, medicine, occupational, speech, or language therapy—they have developed certain areas of expertise and, when treating a child, will often consider primarily the factors related to their discipline as relevant to the child developmental chal-
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... and to the intervention. For example, most dynamically trained child psychologists were trained to consider the child's psychosexual developmental level, his familial history, and his ego functions as the essential elements in assessing the child. Greenspan challenges this view and suggests that in order to understand where the child is developmentally, one has to closely observe the child's sensory processing, motor development (which is the domain of occupational therapy and neurology), the child's communication (usually assessed by the speech and language therapist), and address possible other factors such as biology (medical factors such as nutrition, allergies, genetics which are usually assessed by the pediatrician, geneticist, nutritionist, and allergist).

The clinician practicing within this model has to wear many hats and ideally treats a child within a multidisciplinary team. The child, treated in DIR, typically sees professionals from all these disciplines. The difference is that unlike multi-disciplinary teams not working within a DIR framework, DIR clinicians share a common theoretical framework which translates to a number of principles, the most important of which is that any intervention with a child, psychological, sensory-motor, communicative, or medical-bio-
logical, is relationship-based. Each clinician in the team is attuned to the child's level of engagement and participation in the therapeutic relationships. For instance, for a child that is showing significant low tone and is sensory craving, all clinicians will attempt to integrate this information in their work with the child to support the child's ability to relate and stay connected. The occupational therapist will make much use of swings and gym activities to get the child enough proprioceptive stimulation to support his regulation so that the child can begin to experience himself as an active partner in this interaction. The speech and language therapist will work with the child on communication while using swings and in movement in the room, perhaps as they are dancing or racing with each other to augment the child communicative intent. The psychologist will use similar swings, bean bags, and physio-balls activities to engage the child while inviting him to reflect on his experience and to problem solve.

DIR as a clinical theory deepens the clinician's empathic range to include children in the autistic spectrum who are difficult to reach. I recall a seven-year-old boy who after many years in DIR therapy was able to tell me why he repeatedly pushed and bumped against other children. "...sometimes you just need to bump and squeeze against other people and things and so that your body really can tell you that it is still there, that I am me." This boy, who used to drive his parents and teachers to despair by constantly touching, pushing, and bumping against other children, was able to...
reflect on his sensory needs and to articulate them clearly in the context of a long-standing safe and soothing relationship with his therapist. The development of a reflective function is recognized as a pivotal developmental milestone, both in psychoanalytic theory (Fonagy, Gergely, Jurist, and Target, 2002) and in DIR clinical work. It allows the child access into other minds, and into the subjective world of shared intentions and mental states. This seven-year-old, being able to reflect on his sensory cravings, may be better able to recognize, self-regulate, and communicate his needs.

**Autism as an Intention Deficit**

Greenspan describes how the young child’s emergent sense of self is embedded in co-regulated affective interactions.

Through affective interactions, the infant discovers that “I can make something happen.” The infant learns how to take initiative (you do something and it makes something happen, your smile gets a smile from Mom or Dad). From this process, the infant is beginning to have a sense of purpose, will, and, most importantly, the elements of a prerepresentational sense of self (it’s “me” making something happen, “me” getting that smile or getting that little red rattle with reaching out my hand). While not yet an integrated sense of self, this early stage in the formation of the sense of self, will, and purpose, as well as the beginning of causal logical thinking, all occur through long chains of reciprocal affective interactions.” (Greenspan, 2004, p.15)

Greenspan’s description of the emergence of the sense of self is similar yet different from Stern (1985) and Sander. Greenspan articulates the various ways in which the development of the sense of self can go awry. He identified it as the “core deficit,” which defines for him the essential challenge in autism in pervasive developmental disorders. He calls this hypothesis the Affect Diathesis Hypothesis (Greenspan, 2001).

“It postulates that co-regulated affect signaling is difficult because of a unique biological challenge. The biological challenge is in connecting affect or emotion to the capacity to plan and sequence actions. This biological challenge begins with the difficulty in connecting sensations, affects, and motor responses together early in the first year.” (Greenspan, 2004, p.14)
The core deficit in connecting affect to action has profound consequences:

We have found that the capacities for empathy, psychological mindedness, abstract thinking, social problem-solving, functional language, and affective reciprocity all stem from the infant’s ability to connect affect or intent to motor planning capacities and emerging symbols. (Greenspan 2001, p.7)

Greenspan’s view of deficits is a dialectical one; it is not an all or none phenomena. Therefore, at different times he prefers to refer to them as “challenges.” It suggests that while the main connections between affect and intention are blocked or disrupted, through a carefully crafted intervention that strengthens the connection between sensation, affect, and motor action, the child can begin to develop his intention, become purposeful, and be an active participant in co-regulated interaction. This offers a much more dynamic view of autism that is more accessible to intervention. It also conveys the often bewildering experience of caregivers and clinicians who notice a wide range of functioning in these children who at times may be well-regulated and related, and at other times will appear self-absorbed and extremely withdrawn.

Fred Pine, from a slightly different perspective has noted how difficult it is for the clinician to conclude that a certain function is absent, or present since it may appear and vanish quite mysteriously:

I have noticed on a few occasions that capacities I came to view as “defective” (object constancy, affect control, self-other differentiation, in the instances I have in mind) rather suddenly seemed to be present and functional in the patient in whom I thought of them as not available. Indeed, at these points, new conflictual meanings often emerged that seemed to ‘explain’ the defect in function. But then, shortly, the function was seemingly absent again. How is one to understand that? (Pine, 1994, p.9)

It is interesting that Pine reaches a similar conclusion to Greenspan as to the nature of this paradoxical presence and absence of certain functions.

I believe it would be well to consider whether some functional capacities are not either-or but are developed as potentials that are not reli-
ably usable or still require stimulus nutriment from the outside (that is a specific caretaking setting) to make them work. (Pine, 1994, p.9)

Both Pine and Greenspan view object relations as the medium through which psychic “nutriments” are delivered from caregiver to the child. To expand the metaphor, the autistic child is not consistently capable of finding his own experiential diet that will support his development, and when the external supply is disrupted he becomes disorganized. Greenspan, in his clinical theory, spells out the specific sensory, motor, and processing channels through which the flow of co-regulated experiences can flow and nourish the child’s development.

**Brief Case Illustration**

J., an adorable two-and-a-half year old boy, was referred to me by his Early Intervention Speech therapist. Long before J. entered my room, I heard his wailing from the hallway outside the suite. On entering my office with his parents, who looked distressed and embarrassed about his shrieking and crying, he began to wail again, turning around and running for the closed door, hitting and kicking the door. His mother scooped him up into her arms and he immediately and frantically began seeking her breasts. He lifted her shirt and instantly latched on to her nipple and began feverishly nursing. His mother looked up at me apologetically, “This is the only way I know how to calm him down,” she said. Dad was looking on and I noticed how his anxiety gradually abated as J. was calming himself down into a soothing rhythmic suckling and twisting of Mom’s hair around his thumb.

J. began to slow down his nursing and started peeking over mother’s shoulder at this new environment. A few seconds later her wiggled his way out of his mother’s arms and began to move about the office. His gait was steady and he walked directly to the corner of the office where the wood file cabinets met the credenza, forming a straight line. He stopped for a few seconds and focused on the meeting point, the corner where the horizontal and the vertical met. His eyes began to trace the horizontal line, very attentively following it all the way across to the point where it met the other vertical line of the tall cabinet on the other side. He followed this line a few times back and forth and then came closer and put his pointer on the first corner and took careful steps across the room to the other corner, all the while keeping his finger and his eyes on the straight edge of the cabinet. He
did it a number of times, and his father explained, “He is mesmerized by straight lines; he can do it all day long.”

After a few more back and forth tracking like that, J. noticed the windows and enthusiastically, with a vocalization that resembled an upward pitched “Yeeceee” coming out of his wide open mouth, he quickly walked to the window and pulled up the Venetian blinds that blocked his view. He began looking out at the street, tracking the cars driving by and the people walking on the sidewalk, his body completely still, except for his eyes following the cars and his head moving from side to side. After a few minutes he raised his hands to his sides, a smile took shape on his face and he began jumping in place flapping his hands and vocalizing while fixating his gaze on the street traffic.

Later in the consultation, as his parents took out the toys they brought with them, they desperately tried to engage him in a pretend play using little human and cartoon characters. They put these characters on the circular platform of the sit and spin toy that J. had found earlier in my office, letting the characters fly off the turning top and roll onto the rug. J. was sitting across the sit and spin toy, spinning the plate quickly while his mother put these characters on the platform, narrating for him “and now the little girl rolls of the spinner, weeeeee!” J. did not look at her face even once; as she escalated her attempts to put the characters closer to him, vocalize at a higher and higher pitch various words that these figurines were saying as they went flying across the spinning plate. At this point J.’s mother looked up at me and holding back her tears said, “I can never make him look at me, he just always ignores me unless I am nursing him. I am his big pacifier and that is all he uses me for.” The father described a discussion they had with a behavior therapist who told them that they needed to extinguish J.’s hand flapping, which makes him appear autistic and that they should not let him follow the lines, as he did earlier in my office.

This moment, when J.’s parents turned to me with their anguish questions as to how to manage J.’s apparently autistic behavior, is a typical moment in the work with parents and children in the autistic spectrum. The clinician is confronted with the parents’ despair, with the pressure and the expectation that he produce change, that he will put the child on a developmental trajectory that will bring him in line with his peers and will make him at least appear like a normal child. The clinician is thrown at this very moment on her ability to find meaning, hope, and purpose in the face of the child’s behavior that apparently lacks meaning, intention, or purpose. More than anything, the clinician, confronted with this challenge, needs to have a container, a theory that will allow him to consider the child as a purpose-
ful and intentional person who, albeit, in peculiar and chaotic manner, is seeking to satisfy the primary human needs for attachment, security, and recognition.

Parents of children who are first diagnosed as suffering from Pervasive Developmental Disorder are often traumatized by the diagnosis, and bewildered by the unpredictable future course that it spells out. The clinician is under an overwhelming pressure to act, to “do,” and by doing to demonstrate to the family that he has a solution a key to this terrifying enigma. When J.’s parents have asked me “can we expect him to be a normal child? Will he be able to speak? Will he be able to live independently?” They conveyed their sense of a future that has been shattered. The clinician can often experience these frantic questions as pressure to “produce results,” to demonstrate to the parents that the child’s aberrant behaviors can be changed and even extinguished. This type of pressure often guides parents to seek an action plan which is more readily available by turning to Applied Behavior Analysis (ABA) with its structured interventions graphs and charts. Other parents often seek pharmacological interventions to reduce autistic behaviors.

Stanley Greenspan’s DIR offers us a third and radically different therapeutic option, which follows in the best tradition of psychoanalysis. He insists on finding the meanings and the function of the PDD child apparently purposeless and meaningless behaviors. Greenspan invites us to consider J.’s behaviors as purposeful and intentional. J’s following straight lines, his rotating objects in his hands, his perseverative behaviors—are all coherent and meaningful if one considers them as systematic attempts to self-regulate his level of arousal and consolidate his inchoate sense of self.

The italicized if in the last sentence is the operative here. The clinician, who uses the DIR model, has many useful hypotheses to try out as he tries to understand J’s challenges.

The clinician invites the parents to speculate about the purpose of the child’s behavior. Using the language of regulation and the child’s need for an optimal level of arousal in order to feel safe and grounded in his body, the clinician will suggest that J. has developed a wide range of strategies that allow him to maintain his internal balance. The problem with these strategies is that they are rigid and repetitive, and furthermore do not allow J. to move into an intimate co-regulated interaction with his caregivers except for when he nurses.

During the following consultations I invited J’s parents to carefully evaluate his sensory-motor and processing profile as a way of beginning to find alternatives to his limited self-regulatory strategies. We discussed J.’s sen-
sory motor profile emphasizing his intense craving of oral and visual stimulation (his frequent nursing and his visual tracking of lines). It is important to note that it is logical to assume that J. is orally and visually hypo-sensitive and underreactive to these stimuli and therefore seeks them out so compulsively, but on further questioning with the parents it became clear that J. has a much more complex sensory profile. His parents and his speech therapist reported that J. was underreactive in the front of his mouth at his lips and the front of his tongue, while the back of his mouth and palate were hypersensitive. This type of profile often leads to a child's having perpetual craving for nursing and oral stimulation by sucking and chewing, yet when new and unfamiliar textures are introduced into his mouth, he is likely to gag and panic. I am elaborating on this apparent contradictory oral-sensory profile since it leads to a wrenching contradiction in J.'s intentionality. He seeks stimulation and at the same time is repeatedly overwhelmed if not traumatized by the sensory input that he receives. This mixed reactivity may have contributed to his fragmented approach to the world that has become so bewildering to his parents. Only a very detailed sensory analysis can begin to disentangle these opposing tendencies.

This type of analysis is supported also by J.'s reaction to sound. He is very attracted to strong visual stimuli, cars on the street, colorful, and complex toys. However, as he was playing with a jack in the box toy, fascinated by the colors and the soft music coming out of the box, he became terrified and almost inconsolable when the Jack puppet popped out of the box. When he recovered a few minutes later, he immediately sought the box again, approaching it with great trepidation, sideways with his eyes averted and with one hand covering his ear. As he slowly and deliberately turned the handle, his body was tense his jaw clenched, and when the puppet popped out he was just as terrified as he was the first time. This contradictory reaction, excruciating to watch, remained undiminished over many repetitions of this game. It repeated itself in almost any activity when J. showed an interest in a new activity or a familiar one. His approach was almost always with part of his system propelling him toward the new object, while the other part signaling danger and leading to hyper-vigilance avoidance and often catastrophic anxieties. Central to this challenging sensory profile was the fact that there was very little room for a caregiver to actively participate in helping him to mutually regulate his fear.

His parents, unaware of his contradictory sensory profile, where constantly either over or under stimulating, with the results that he was constantly in a state of panic, needing active and vigorous soothing, or under stimulated, lethargic and self absorbed.
 Needless to say, this abrupt transition from low arousal to hyper-arousal many times a day was totally exasperating to J.'s parents and they have lost the hope to be empathically attuned to his needs. By the time they came for the consultation, they have given up on making any sense of his behavior and the best they hoped for was to manage to not have a meltdown every 15 minutes. The power of Greenspan's intervention is twofold. First, it provides a powerful diagnostic and intervention tool with children in the autistic spectrum. Second and no less important is its semiotic value, its contextualizing the child's apparently purposeless behaviors within a self-regulated and co-regulated intersubjective frame. The Greenspanian clinician approaches the child and the caregivers who are suffering from a semiotic crisis, and offer them a set of working hypotheses that can lead to effective interventions that have the potential to restore a sense of meaning and hope.

Through his interaction and coaching of parents, the clinician refers constantly to the child's intention whether it is evident or only hypothesized, almost imagined. It is as if the parents are invited to respond not the child's overt behavior but to his inchoate intention.

I will illustrate how the clinician infuses the session with meaning by returning to J and his parents. I have said to J.'s parents that he has more ideas, both motor ideas as to how to move his body, reach and manipulate objects of interest, than he can execute because of his low tone and severe dyspraxia. At the moment that J. glanced at a colorful ball-drop toy, I referred to his gaze as if he pointed to the object. “You really want to play with this toy don't you?” my voice conveying the affective tone of “really wanting to.” Simultaneously, I brought the toy within his reach. J.'s wandering glance, which was about to move on, returned to the toy and fixated it. His hand reached for it and touched it and he oriented himself by turning his torso which, up to that moment was slumped and bent, toward the toy. This sequence illustrates the myriad goals that we are trying to address as we intervene with a child like J. His caregivers who have been watching me intently during this sequence recognized that J. had the intention to reach that object, which they have stopped long ago to attribute to him, since they have been bringing everything within his reach. Most importantly, J. has experienced himself as “wishing to reach that ball drop,” as an agent and his parents recognized it. Through my reflective “marking” of his putative intention he and his parents are discovering new possibilities. It is easy to overlook the fact that the autistic child's internal world, has not originated with, but is often re-internalized as a reflection of the parents' own experience of chaos and meaninglessness they see in the child. In introduc-
ing intention repeatedly in this "micro moments" and expanding them gradually into a larger view of the child as an agent, we re-establish the meaning making process that has been detailed.

As this clinical vignette illustrates, the discovery of intentionality for a parent of an autistic child can become a turning point in how the parent constructs and by consequence experiences that the child's behavior as originating from a coherent subjective center. Once the parent begins to recognize more and more complex intentional action plans in his child, he begins to identify and refer to the child's inner states of thinking, wanting, feeling, and so on. The child now is in the presence of a caregiver who feeds him back a reflection of himself as a complex intentional participant in a relationship, which will gradually open up to deeper shared meanings and the emergence of the meeting of two minds.

REFERENCES


