

The Movements of Play:

Restoring Spontaneity and Flexibility in Traumatized Individuals

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Joan, physically and sexually abused as a child, reports to her therapist (PO) that she is often told she is “too serious” and that her husband complains of her inability to relax and have fun. These observations are corroborated by her bodily communications: Joan’s body is stiff, pulled in, awkward in its rigidity, telegraphing a non-verbal message to “keep away” emotionally and physically. The tension across her hunched shoulders, a lack of movement and freedom in her upper body, and a plodding quality to her gait echoes Joan’s feeling that she is accustomed to great hardships. Though Joan wistfully speaks of wishing that she could experience greater enjoyment in life, she also reports a sense of discomfort and even alarm when she attempts to be more relaxed or playful. Joan, like many traumatized individuals, has come to associate spontaneity and pleasure with vulnerability to danger and has little experience with the joyful spontaneity and elation characteristic of play (Luxenberg, Spinazzola, Hidalgo, Hunt, & van der Kolk, 2001; Luxenberg, Spinazzola, & van der Kolk, 2001; van der Kolk, McFarlane, & Weisaeth, 1996).

Brown (1995) defines play as “. . . a spontaneous, nonstereotyped, intrinsically pleasurable activity, free of anxiety or other overpowering emotion, without a visible, clear-cut goal other than its own activity.”(pp. 7-8). These qualities of spontaneity, pleasure, flexibility, and well-being, as well as the trust required to engage in open-ended activities, are precisely the traits that are incompatible with trauma-related responses of hypervigilance, hyper- or hypoarousal, and frozen or impulsively driven defensive movements. Thus, in the context of neglect and abuse, not only are attachment patterns affected, but also the behavioral systems of exploration and play. Playfulness cannot develop in the shadow of threat and danger, a fact that carries debilitating and far-ranging consequences characteristic of the plight of traumatized individuals: “The forestalling of playing means living a life of impoverishment and isolation, developing a literalism that prevents connection and normal development” (Cannon, in press).

Playfulness depends upon the ability to regulate a wide range of arousal states, which, in childhood, is facilitated by the caregiver’s sensitive, attuned responses to both positive and negative affect. The “good enough mother” (Winnicott, 1945) not only helps the child recover from negative states of distress, fatigue, and discomfort, but also actively engages in play with her infant. Thus, “[a]ffect regulation is not just the reduction of affective intensity, the dampening of negative emotion. It also involves an amplification, an intensification of positive emotion, a condition necessary for more complex self-organization” (Schore, 2003, p. 78). Knowing that Joan grew up in a traumatogenic environment with a maternal caregiver who was anxious and depressed and provided little protection from the frightening behavior of a violent alcoholic

father, we can infer that, as an infant and child, Joan experienced inadequate soothing of her states of distress and the loss of playful, positively toned interpersonal interactions.

The fine distinction between traumatic arousal and positive excitement may be difficult to discern for those whose past experiences of physiological arousal have been primarily or exclusively related to danger (Migdow, 2003). Excitement itself may become something to avoid, interfering with playful behavior that includes varying degrees and rapid shifts in arousal. As Schore (2003) writes, “During the imprinting of play episodes mother and infant show sympathetic cardiac acceleration and then parasympathetic deceleration in response to the smile of the other...” (p. 277). These rapid alterations from high to low arousal encourage tolerance for a wide variety of affective and physical states and facilitate a tolerance for the quick changes of affect and movement characteristic of play behavior. In contrast, when a child like Joan is not helped early on to regulate autonomic arousal effectively, her later tolerance for both pleasant and unpleasant emotional and physical states is impaired. Specifically, play behavior was compromised by her inability to tolerate quick, spontaneous movements and high levels of elation, joy, and laughter.

Autonomic hyperarousal and hypoarousal, intended to assure survival by mobilizing fight, flight, freeze, or submission/feigned death responses in the face of danger, tend to become chronically dysregulated in traumatized individuals at baseline and further exacerbated by exposure to situational cues that evoke overwhelming affects, body sensations, and movement impulses. Unpredictability and novelty are characteristics of both play and of frightened and frightening caregiving, thus typically becoming threat cues for traumatized and neglected infants (Lyons-Ruth, 2001). While these qualities evoke excitement and curiosity in a non-traumatized child, they activate animal defense responses in the traumatized individual. Brown (1995) argues that, in animals with high arousal at baseline, play states can rapidly escalate to defensive and aggressive behavior. The increased arousal of excitement and curiosity that individuals normally experience in response to novel stimuli and playful activity quickly escalates to the extreme arousal of survival: either hyperarousal-related mobilizing states, such as aggression, or hypoarousal-related immobilization and loss of energy. Many traumatized individuals, like Joan, avoid play to minimize the risk of dysregulated arousal.

While survival needs for safety may appear to be met in the patient’s current reality, the internal experience for survivors of trauma typically remains one of impending threat. Play behavior requires a degree of available surplus energy (Meeker, 1995), but the ongoing internal experience of defending against perceived danger leaves these patients in a constant state of hyper- or hypo-arousal or vacillating between these two poles of depletion and dysregulation, neither conducive to play. For the traumatized individual, the energy consumed in repeated activation of the autonomic nervous system and defensive responses is exhausting, leaving little energy left over to turn towards play, even if novelty and unpredictability could be tolerated.

In both humans and other mammals, if safety is threatened, play is instantly terminated and animal defenses engaged. If the threatening conditions are prolonged, such as they were throughout Joan's childhood, the ability to play is typically greatly diminished, if not lost. Similar to abused or caged chimpanzees, traumatized individuals demonstrate a lack of playfulness, reflected in physical organization and patterns of movement that are designed to assure survival under threat (Goodall, 1995). Joan's body exemplifies how the competing states of discomfort and fear impede her ability to play: her bodily stiffness speaks of muscular hypervigilance, a body "braced for trouble," frozen and immobilized. None of these characteristics lends itself to spontaneous and uninhibited movements of play.

In children, exploration and play are almost synonymous: they occur in such rapid succession and are so similar in their body manifestations that they often appear to happen simultaneously. Exploration often spontaneously leads to play, and, conversely, play often stimulates new ideas, new movements or thought, and thus contributes to increased exploration. Despite the close relationship of these two systems, Panksepp (1998) argues that play and exploration are organized differently and activate different circuitry in the brain, thus comprising two different action systems. Exploration, characterized by curiosity, comes "on line" early in development as the infant begins to explore the environment in the first few weeks of life, using touch, taste, hearing, smell, and movements of the head, lips, and limbs to gather information. Play, characterized by joyfulness and laughter, includes the rough-and-tumble play seen in young animals and children by the second half of the first year, as well as social play such as "hide and seek" or "peek-a-boo."

As the child matures, play activities become more elaborated, spontaneous, and creative in the context of secure attachment and normal development, beginning with imaginative play, and, later, spontaneous group play activities. As the prefrontal cortex develops in the latency and pre-puberty years, more complex varieties of play emerge, which are less physical and more cognitive in nature: jokes, puns, and other kinds of mental humor, comedy, and entertainment. "Contest" activities—organized sports, video games, and other competitive activities—are often described as play, but they actually qualify as play only if the excitement and pleasure accompanying these activities does not become anxiety-driven, detracting from the spontaneity and joy of play itself. Because play pairs increased arousal with positive affect, it is associated with endorphin production, feelings of general well-being, and an increase in physical and mental health (Schoore, 2003). According to Panksepp (1998), the hallmark of play is laughter, which serves to strengthen attachment and social bonds, helping to develop cooperation, communication, leadership skills, and determine social rank. For example, in children, group play activities are a major forum for the development of adaptive social behavior. Joan's report of being a "loner" as a child, as well as her current awkwardness in social situations, discomfort with interpersonal communication, and general lack of social support in her life, all likely reflect her early inability to enjoy playful activities.

Winnicott (1971) posited that patients could benefit from opportunities for “formless experience, and for creative impulses, motor and sensory, which are the stuff of playing” (p. 64). Studies show that a variety of characteristic cross-cultural and cross-species patterns of movement are signals for play behavior to other members of the social environment. These include a relaxed, open body posture and a tilting of the head, often accompanied by a whimsical expression on the face (Bekoff & Allen, 1998; Caldwell, 2003; Donaldson, 1993), postures that are unfamiliar and even threatening to Joan. Basic play movements shift quickly and are random, non-stereotyped, and expressed in children and animals in a variety of leaps, rolls, and rotational movements (Goodall, 1995). The large, gross motor movements characteristic of play are not consistent with a tense body and constricted gestures. Rapid shifts from one behavior to another are not features of serious, non-playful interactions (Bekoff & Byers, 1998; Brown, 1995) typical of Joan’s social behavior. Unless such movements are interpreted as part of the play (Brown et al., 1986; Brown, 1995), agitated or nervous movements are signals that prevent or end play behavior, presumably as a threat-oriented survival strategy. To initiate and support the patient’s playfulness, it is essential that the therapist be able to embody the rapid shifts of playful movements and to be appropriately playful, using humor, spontaneity, and an attitude of lightheartedness.

Fostering play and the corresponding affects of fun, pleasure, and expressive movement are particularly important in therapy with traumatized individuals. One of the challenges in treating trauma is the tendency toward autonomic dysregulation, both when directly addressing traumatic events and as patients are exposed to traumatic reminders. Unresolved fight, flight, freeze, and collapse responses are evoked, and, in turn, set off predictable, definitive action sequences designed to serve the purpose of survival. The visible hallmarks of these responses can be observed in physical structure: in hyperaroused patients, the therapist might observe constriction in the neck, clenching of the jaw, arms, legs, diaphragm and viscera, as well as muscular hypervigilance. Or, the therapist might note the opposite pattern of flaccidity in the muscles, an expressionless face, collapsed posture, and the flatness and non-responsiveness characteristic of hypoaroused states. These predetermined survival patterns do not lend themselves to the immediate flexibility necessary for play behavior, and typically usurp interpersonal playful interactions.

Winnicott (1971) posited that, when patients are phobic of or unable to engage in playful behavior, a primary task of the therapist is to teach them to play. Play behavior can potentially access and transform trauma-related implicit memories, especially their somatic components, by modulating autonomic dysregulation, addressing the phobias of novelty and unpredictability, and educating new movement patterns, increasing a sense of safety at a body level. As noted, basic play movements, in contrast to serious encounters, shift quickly; they are random, non-stereotyped, and evident in the variety of upward leaps, rolls, and rotational movements, the “squiggles and wiggles” (Brown 1995). Additionally, play is thought to enhance learning and creativity and increase one’s capacity to cope with life stressors (Siviy, 1998) as well as facilitate

the integration of information (Beckoff and Byers, 1998). Donaldson (1993) hypothesizes that play may boost the immune system, increase the efficiency of the heart, decrease the production of biochemicals associated with anxiety, and increase serotonin levels—all of which would be helpful to patients and therapists in ameliorating the effects of trauma.

Trauma is largely a non-verbal experience, and traumatic events do not lend themselves to verbal representation (Van der Kolk, B. 1994). Emotional responses follow a split second later, and cognitive ones soon after, but the initial impact of trauma is on the body: autonomic arousal, mobilization of animal defenses, and cortical inhibition. In a Sensorimotor Psychotherapy treatment such as Joan experienced, the therapist (PO) not only listens to the verbal content of the narrative, but also tracks the bodily responses evoked by the verbalization, alert to indications of both procedurally-learned habitual defensive responses, as well as reactions characteristic of social engagement, positive affect, and play. Even early on in therapy, patients often experience short-lived moments of pleasure and playfulness that include particular “play signals”: non-verbal gestures, postures, and movements such as a spontaneous increase in proximity, enhanced social engagement, eye contact, and relaxed, mobile facial expressions (Beckoff et al., 1998). Even the briefest of giggles, laughter, grins, and smiles and other expressions of fun and interpersonal connectedness (Panksepp 1998) are noted and elaborated in therapy. The therapist meticulously watches for incipient spontaneous or playful actions and affects—the beginning of a smile, a joke, a more expansive movement—and capitalizes on those moments by participating in kind, and/or calling attention and curiosity to them, enabling the moment to linger.

Initially, however, attempts to learn the flexible, diversified movements characteristic of play are likely to ignite trauma-related bottom-up processing: automatic patterns of immobilization, hyper- or hypoarousal responses, or disorganized, frantic movements. For example, as Joan began to explore play movements, she reported tension and constriction in her body that told her to expect danger. Her therapist taught her how to practice a mobilizing defensive response of pushing away, using the tension in a gesture of boundary-setting and protection. This movement was practiced again and again, gradually fostering a sense of active protection and safety in Joan that began to alleviate her habitual frozen immobilization.

Eventually, her therapist asked her what kind of posture and movements her body would want to make in a context of playfulness and safety, and Joan reflected that those actions would be free, spontaneous and expressive. In a carefree, playful manner, the therapist executed playful movements (tilting of the head, dancing motions with legs and arms) at Joan’s instruction, first modeling them for her, and then asking Joan to explore mirroring these movements, challenging Joan’s procedurally learned action tendencies of constriction and defense.

Initially, Joan again reported that these playful actions felt frightening, and she felt the impulse to curtail the movements and return to her habitual tension. Joan was able to explore spontaneous, expressive

movements because her therapist remained playful, helped her sense the safety of the here-and-now, encouraged her to maintain eye-contact, and also reminded her of her newly-learned ability to set her boundaries and say “no.” Over the course of therapy, Joan and her therapist practiced other movements that facilitated play, such as comparing Joan’s plodding gait with a bouncy, “head up” walk, exchanging her hunched shoulders and rounded spine for an upright, shoulders-down posture that encouraged eye contact and engagement with others. Over time, with continued practice, Joan’s integrated body posture became more natural, and her playful movements became increasingly unpredictable, unforced, and complex, occurring without prompting from her therapist. While her arousal increased during many playful incidents, high arousal was paired with positive affect of elation and fun, in marked contrast to her usual coupling of high arousal with danger and hypervigilance.

The therapist’s engagement of the patient in appropriately playful behavior offers the potential for increasing the capacity for social engagement and experiential learning of trust in relationship, abilities that can then expand to include others. When patient and therapist engage in play, the context is that of a safe, attuned relational system in which collaboration is central. Clients need to experience a felt sense of an internal locus of control and feeling of command over their participation in order to engage in playful interactions (Fisher, Murray, & Bundy, 1991; Levy, 1978). The dyadic dance (Schoore 1994) between therapist and client is intended to be safe, free, and flexible—an antidote to the rigid, controlling, non-permissive system related to trauma. Patients can test their own and their therapist’s capacity and tolerance for intimacy in relationship through play, thereby possibly challenging traumatic relational dynamics without having to confront them head on. The extremes of distrust and traumatic arousal survivors often experience in intimate relationships can thus be mitigated, facilitating greater receptivity to new experiences that are pleasurable, intimate, or exciting.

Thus, in the context of sensitive attunement and collaboration, the patient can learn to become more curious and mindful of internal experience in response to the thought, remembrance, or engagement of play, to play movements, or to spontaneous moments of playful interaction with the therapist. We propose that “playing” with play and practicing the movements of play can foster resilience and buoyancy, stimulate social engagement, and engender an overall sense of well-being. The simple joy, humor, and lightheartedness that accompany play behavior counter the often arduous work of trauma therapy, and, over time, inspire patients to engage a wider range of playful possibilities and enjoyment of life.

References

Beckoff, M. & Allen, C. (1998). Intentional communication and social play: How and why animals negotiate and agree to play. In M. Bekoff & J. Byers (Eds.), *Animal play: Evolutionary, comparative, and ecological perspectives* (pp. 97-114). New York: Cambridge University Press.

- Beckoff, M. & Byers, J. (1998). *Animal play: Evolutionary, comparative, and ecological perspectives*. New York: Cambridge University Press.
- Brown, S. (1995). Through the lens of play. *Revision*, 17/4, 4-14.
- Brown, D., Schlegglin, A., & Hammond, D. (1998). *Memory, trauma, treatment, and the law: An essential reference on memory for clinicians, researchers, attorneys, and judges*. New York: W.W. Norton & Company.
- Caldwell, C. (2003). Adult Group Play Therapy. In C.Schaefer (Ed.), *Play Therapy with Adults* (pp. 301-316). Hoboken, NJ: John Wiley & Sons.
- Cannon, B. (in press). Authenticity, the Spirit of Play and the Practice of Psychotherapy. *Review of Existential Psychology and Psychiatry*.
- Donaldson, F. (1993). *Playing by heart: The vision and practice of belonging*. Deerfield Beach, FL: Health Communications.
- Goodall, J. (1995). Chimpanzees and others at play. *Revision*, 17, 14-20.
- Fisher, A., Murray, E., & Bundy, A. (1991). *Sensory integration: Theory and practice*. Philadelphia: Davis.
- Levy, J. (1978). *Play Behavior*. New York: Wiley.
- Luxenberg, T., Spinazzola, J., & van der Kolk, B. A. (2001). Complex trauma and disorders of extreme stress (DESNOS) diagnosis, part one: Assessment. *Directions in Psychiatry*, 21, 363-392.
- Lyons-Ruth, K. (2001). The two person construction of defense: Disorganized attachment strategies, unintegrated mental states and hostile/helpless relational processes. *Psychologist Psychoanalyst*, 21, 40-45.
- Meeker, J. (1995) Comedy and a play ethic, *ReVision*, 17/4. 21-24
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.
- Schore, A. (2003). *Affect Dysregulation and Disorders of the Self*. W. W. Norton & Company.

- Siviy, S. (1998). Neurobiological substrates of play behavior: Glimpses into the structure and function of mammalian playfulness. In M. Beckoff & J. Byers (Eds.), *Animal play: Evolutionary, comparative, and ecological perspectives* (pp. 221-242). Cambridge, UK: Cambridge University Press.
- van der Kolk, B. A. (1994). The body keeps the score: memory and the evolving psychobiology of posttraumatic stress. *Harvard Review of Psychiatry*, 1, 253-265.
- Van der Kolk, B. A., McFarlane, A., & Weisaeth, L. (1996). *Traumatic stress: The effects of overwhelming experience on mind, body and society*. New York: Guilford Press.
- Winnicott, D. (1945). Primitive emotional development. In D.W. Winnicott (Ed) *Collected papers: through paediatrics to psycho-analysis* (pp 145-156) New York: Brunner/Mazel/London:
- Winnicott, D.W.. [1971]. *Playing and Reality*. London and New York: Tavistock Publications.