

---

# I Am an Avatar of Myself

## Fantasy, Trauma, and Self-Deception



TERRY MARKS-TARLOW

The author employs neurobiology to help explore deception in nature and self-deception in human beings. She examines activities that may appear playful but that lack such hallmark qualities of play as equality, mutual pleasure, and voluntarism and that can, therefore, prove psychologically destructive. She warns that the kind of playful interactions of parents and children that help connect the concept of self with the concept of other and to expand children's imaginative horizons during healthy development may turn defensive and do harm during severe trauma. Such interactions can shrink mental horizons, help separate mind from body, and facilitate the disconnection of the self from others. These devastating outcomes occur especially when play-like activities seem to offer in fantasy a safety absent from real life. The author uses the clinical case of a victim of sexual abuse to illustrate such unhealthy activity and the compulsion and dissociation it creates, which can foster the epigenetic transmission of incest from one generation to the next. **Key words:** interpersonal neurobiology; fantasy; dissociation; self-deception; emotional regulation; epigenetics

**C**OMPARED WITH HERBERT SPENCER'S (1873) outdated view of play as frivolous and without purpose, the very existence of this multidisciplinary *American Journal of Play* provides evidence for an important switch in perspective. All forms of play, especially the imaginative variety, appear critical to healthy human development. As study after study attests, researchers posit multiple developmental functions for play, including practicing adult roles (Sutton-Smith 1997); internalizing culture (Winnicott 1972); symbolic representation (Piaget 1962); narrative skills (Nicolopoulou 2005); making meaning (Bruner 1990); shaping identity (Meares 2005, 2016); establishing gender identification (Davies 1997); and considering play as a pathway to the social self (Henricks 2015), to name a few.

As a clinical psychologist with a specialty in developmental neuroscience,

I previously have written in these pages about the fractal seeds of self in play (Marks-Tarlow 2010). I maintained that early imagination and pretend games serve to crystalize later identity, partly by establishing lifelong neural pathways for subsequent interests, vocations, and elements of self-expression. I have also written about how play functions within open-ended psychotherapy (Marks-Tarlow 2012, 2015a and 2015b), more at implicit than explicit levels. I proposed that formal games, most prototypically hide-and-seek, operate nonverbally at nonconscious levels to signal safety and danger within the therapeutic relationship and to express relational bids for engagement or disengagement.

Here, I hope to extend my scope of inquiry. Whereas my previous writings looked primarily at solo play, here I concentrate on how early forms of interactional play between parent and child can later influence the internal world and emotional coping style of the child. As always, I address these issues from the perspective of interpersonal neurobiology (Badenoch 2008; Cozolino 2002; Hill 2015; Schore 2012; Siegel 1999), the interdisciplinary study of how the brain, mind, and body develop in response to personal relationships. I concentrate specifically on regulation theory (Schore 2012; Schore and Schore 2008), which examines the role of early care givers in shaping a child's brain, mind, and body, either as a unified or fragmented system. Whether or not a young child feels securely attached to others and generally safe in the world depends intimately on the presence or absence of attuned responses from primary care givers. As I will describe, if a parent systematically fails to tune into the needs and feelings of a child—and at the same time permits real danger in the environment—early forms of imaginative, interactive play can serve to narrow rather than expand that child's later horizons.

Having been in private practice for more than thirty years, I make my case through an extended clinical example of a young woman I shall call Jen. At the time of writing this essay, Jen and I had been meeting for weekly psychotherapy sessions for about five years. I secured permission to write this story, both from Jen and from her half-brother, whom I shall call Zev. Jen was eager to have her story told, both to pierce the veil of silence and invisibility that shrouded her early years, as well as to further discussion of one of the most troublesome and controversial of topics—incest.

I plan to examine a case of multigenerational trauma, where self-similar forms of traumatic assault have manifested repeatedly from one generation to the next. In simple terms, this means that abuse beget abuse, with patterns of psychopathology and defense in one generation triggering nearly identical patterns in the next generation. Such patterns frequently extend for generation

after generation until the cycle is broken. Because early play helps establish the rules of social engagement, I argue that in cases such as these, breakdowns in interactive communication, worsened by self-deception, actually help propagate traumatic transmission between generations.

I set the stage by introducing the evolutionary and developmental perspective of interpersonal neurobiology. This theoretical framework describes how early play bolsters emotional regulation and personal resilience and how play expands “affect tolerance”—the capacity to tolerate strong emotion, whether negative or positive—in human children and in juvenile social mammals. Next, I turn to the case of Jen, detailing her trauma history and the symptoms she presented at the start of psychotherapy. I highlight the evolutionary role of deception in nature, including mimicry and illusion, as a natural precursor to more formal and conscious deception in *Homo sapiens*. Self-deception can be pleasurable while offering survival value alongside personal risk.

Next, I connect Jen’s later symptoms and dissociative coping style with early forms of imaginative play that took place with Jen’s father. I address potential neurobiological origins of self-deception within the human brain—in the gap between left and right sides. If a functional separation also exists between cortical and subcortical levels of processing, dissociation can arise as a symptom. When this occurs, unconscious affects and experiences become completely walled off from conscious accessibility.

I end by celebrating Jen’s creativity as a healing force. I compare a poem this young woman wrote toward the beginning of our work together with another poem she wrote quite recently. Differences in style and content reveal the significant progress she has achieved within psychotherapy. Early games had taught Jen how to ignore body-based signals of interpersonal danger. She had learned how to use fantasy not only to escape but also to disappear inside herself. Yet, Jen’s solid early emotional foundation alongside her pursuit of the truth helped convert her capacity for fantasy and creativity into a healing experience. Through psychotherapy, Jen has become less isolated by the traumas of her youth.

### **Emotional, Motivational, and Relational Circuitry of Development**

No human is an island. Instead, *Homo sapiens* are social animals who live and thrive in groups. Mammals are unique through their investment in child rearing,

including episodes of play that extend into adulthood, as well as in their complexity of social living, elaborate tool and language use, and symbol manipulation. Ethologist Gordon Burghardt might protest that reptiles also possess the incipient capacity for play, and some birds also invest heavily in raising their young and gathering in groups. Yet, for the most part, parental responsibility for reptiles and fish generally ends with egg laying or birth in contrast to mammal babies that require further care.

From an evolutionary perspective, these differences are reflected in a hierarchical arrangement of neural structures. In mammals, the reptilian brain possesses the four emotional and motivational circuits—presented in all capital letters to emphasize their universality—that Panksepp (1998,2012) considers necessary for survival. The SEEKING circuit grants interest, curiosity, and the motivational urge to explore the environment to fulfill needs. Because it energizes many of the other circuits, primarily through the neurotransmitter dopamine, Panksepp considers the SEEKING circuit primary. The FEAR circuit detects and responds to danger by enabling an animal either to freeze or to take flight. The RAGE circuit helps an animal respond to danger with the self-protective instinct to fight, whether for food, territory, or sexual opportunity. Finally, the genetic imperative toward sexual activity to spread genes far and wide finds fulfillment in the LUST circuit.

With the later evolution of mammals came the addition of the social emotions, as supplied by the limbic system, once called the paleo-mammalian brain that sits atop the reptilian brain (MacLean 1990). In all mammals, including *Homo sapiens's* most complex apex, the limbic system is the seat of emotion and the most interconnected system in the brain. Within the mammalian brain, the limbic system extends from subcortical roots in the periaqueductal gray and hypothalamus, through midbrain structures like the amygdala and insula, into the higher centers of the cerebral cortex—the nerve center of language, symbolic thinking, and conscious reflection, including self-reflection. The autonomic nervous system (sympathetic and parasympathetic branches) operates in conjunction with limbic circuitry by regulating stress as well as the intensity of emotion.

In mammals, the limbic system provides three more emotional and motivational circuits alongside the four possessed by the reptilian brain. The CARE circuit adds the attachment system by which parents love, care for, and protect their babies, who in turn, become attached to and highly dependent on their parents for a sense of internal comfort and external safety. The PANIC circuit operates in conjunction with the attachment system to signal separation anxi-

ety and grief upon the loss of significant others. The PLAY circuit, which offers potential for the most complex behavior of all, generates joy as it dictates the rules, roles, and relationships of social and cultural engagement. Whereas in most mammals, play is restricted to the rough-and-tumble variety of interaction, in humans play extends to the symbolic movement of the mind and flight of the imagination.

### **Human Attachment Needs**

Animals, such as amphibians and snakes, are characterized by closed neural loops, such that rigid wiring within brain circuitry limits animal response and behavior to a few fixed action patterns. Crudely speaking, frogs are limited to the four *F*s: they fight or flee moving objects larger than themselves, feed on moving objects smaller than themselves, and copulate with moving objects the same size as themselves. Due to these limited response patterns, frogs among other amphibians, are born fully equipped to launch into the world without additional help from parents.

From the perspective of evolutionary strategies, reptile babies do not need further care partly because they play the numbers game: so many of them hatch from eggs that at least a few are likely to outlast hungry predators. Human families come in much smaller numbers. The attachment system ensures that each child is precious to parents who are wired to provide protection to their offspring. Human babies do not usually encounter predation in the same way other animals do. We are mostly safe from hungry beasts yet nonetheless subject to other sorts of predation from within our species, such as kidnapping, human trafficking, or sexual abuse, as the case to come explores. With incest, LUST combines with RAGE in complex ways that amount to an abuse of power and interfere with the CARE circuit, whereby we nourish rather than manipulate vulnerable others.

Mammals differ from reptiles in their capacity for learning and for exhibiting complex and flexible responses. The social emotions and motivations of CARE, PANIC, and PLAY all evolved to deal with more immature yet open brains at birth. As opposed to closed circuits, open circuits include feedback loops that take in information from the environment and allow for experience-dependent learning. Because human children develop much more slowly, they change radically as a result of their social experiences, while their brains develop in typical fashion.

Because of our need for maternal care, mammalian babies are born in smaller batches that can readily remain under the watchful eyes of parents. Whereas some species of mammals, like horses or giraffes, can walk and feed themselves from birth, human babies emerge from the womb helpless and dependent. Horses learn to walk in minutes; human babies take many months. An extended period of childhood, referred to as neoteny, goes hand-in-hand with the human brain's ability to capitalize on its open wiring.

Both in the critical prenatal and perinatal developmental windows, the brain matures in a particular order. From an energetic perspective, this developmental trajectory resembles an oak tree whose entire form is embedded in the seed of an acorn. Both oak trees and the brain grow from bottom up and from inside out. The bottom of the brain consists of subcortical structures that regulate primitive aspects of survival, like breathing, internal homeostasis, and sleep-wake cycles. Higher up in the neocortex, which is unique to the human brain, midline structures are central to developing a sense of self. The brain also grows from back to front. The back of the brain involves sensory areas for taking in information, and the ancient structure of the cerebellum, critical to motor sequences. The last structures to mature lie at the top and front of the brain—the frontal lobes—seat of morality, judgment, and decision making. The frontal lobes do not become fully functional and integrated with the rest of brain circuitry until young adults reach their mid- to late twenties.

The interactions of parents and babies during the two years after birth lay down the critical, lifelong emotional and social foundations for the brain (Schoré 1994, 2012). When the primary care giver, usually a mother, is highly attuned to the physical and emotional needs of her child, the infant feels safe in the world and full of agency, or personal power, for having her needs met. Young infants are filled with shifting, intense emotions. One crucial task they learn is called emotional regulation, which involves helping babies tolerate the quality and intensity of their needs and feelings. Emotional regulation begins interactively, as a two-person enterprise, requiring intimate coordination between mother and child of the rhythms of need and response.

There are two major aspects to interactive regulation. Mothers help babies soothe negative emotions through comforting touch, melodic tones of voice, and loving faces, all aimed at easing a baby's discomforts and fears. At the same time, mothers help babies boost mood and positive emotions like joy, interest, and curiosity, which occurs primarily through play and what Trevarthan and Aitken (2001) and Meares (2005, 2016) call infant intersubjectivity and the "protocon-

versation.” Trevarthan and Aitken emphasize the nonverbal aspect of intense eye gaze, touch, and other sensory exploration and mutual contact. Meares emphasizes the verbal aspect of how mothers begin playing games right at their children’s births by speaking to them as if they fully understand. Although infants lack the cognitive capacity to process the content of their mothers’ words, they possess right from the start the social intelligence to understand the loving, caring intentions of parents, partly because they are sensitive to the emotional nuances of voices and facial expressions.

At the beginning of life, the infant’s feeling states are separated and rather extreme. When a baby is upset, she cannot help but involve her whole body in crying. Once mother soothes her, the baby returns to a calm, alert state. During the first couple of years, babies lurch from one feeling state to another, from fear to joy or anger to satisfaction, in a discrete, choppy, manner. As young children develop, they can increasingly blend emotions in more complex and integrated ways. An older child might feel disappointed he or she is not allowed ice cream after every meal, but simultaneously understand this is better for his or her body. In this way, the neocortex of the human brain differs from other primates. Alongside the capacity to symbolize and use language, an important aspect of a child’s later development includes the increasing cognitive and self-reflective capacities layered into ever more subtle feelings. Examples of these later developing, blended emotions include jealousy and righteous indignation.

The critical brain structure for assessing nuances of safety and danger in the environment is the amygdala, a bilateral (meaning we each have two) almond shaped structure, located near the hippocampus (seat of memory and learning), toward the front of the temporal lobe. The amygdala is a subcortical limbic structure that develops fully by the eighth month in the womb, equipping the baby with the ability to perceive safety, danger, and emotional nuance from the start of life. In this way, the words matter less than the underlying emotional climate, and nothing goes hidden. Because human children are born completely helpless, all infants depend upon primary care givers for meeting their earliest needs. Over time the child becomes increasingly able and empowered to feed, clothe, and protect itself, including the ability to self-regulate his own emotions.

The CARE circuit helps develop the adult capacity to love and empathize with others and maintain lasting connections, but the PLAY circuit helps develop our imagination and creativity and our ability to manipulate objects and produce symbols. Perhaps because PLAY is so central to the maintenance and evolution of human culture, humans retain the capacity to play into adult-

hood and, in this respect, are neotenuous throughout the life-span. If developmental researchers emphasize positive forms of adult play for life, like sports, creative expression, and adventure for its own sake, clinicians are also aware of negative forms of adult play such as video game addiction that can isolate adults from face-to-face contact or a retreat into fantasy as a disconnect from adult responsibility.

### **Trauma and Epigenetics**

Brain-mind-body development is a delicate affair. Healthy development can easily go off track if primary care givers fail to attend to an infant's emotional needs or fail to repair inevitable misattunements. All healthy babies are exquisitely sensitive. Try maintaining an unrelentingly unresponsive face toward a four- to six-month-old for even a minute. The baby will visibly collapse in despair by losing all muscle tone. Because an unresponsive mother is so traumatic for a baby, the "still face" paradigm (Tronick et al. 1978) has become the gold standard for studying neglect (Mesman, van IJzendoorn, and Bakermans-Kranenburg 2009). The still face underscores how a sequence of tiny, microassaults are enough to trigger relational trauma in a baby. If a baby is traumatized for a sustained period of time, stress hormones like cortisol will flood the brain, stunt cell growth, and even burn out brain cells in key limbic areas (Schoore 1994, 2012). A critical window of emotional development exists during the first two years of life, the time when the emotion-processing, stress-regulating right brain develops (Schoore 1994, 2012). Inadequate emotional support during this period can set a child on a trajectory for psychiatric and medical problems for the rest of his or her life. The earlier the emotional trauma, the fewer the prospects for corrective growth and healing.

Evolution designed human brains, minds, and bodies to be open and receptive and to grow in response to one another. Because we are intrinsically social beings, when our care givers tune in well—when they beam with our pleasures, clap at our accomplishments, and resonate empathically with our distresses—we naturally learn to "read" ourselves, by identifying and eventually naming and managing our own feeling states. Because self-understanding and understanding others are intertwined as faculties, we simultaneously learn to understand the minds of others. We learn how to read ourselves by reading how others read us. We develop a sense of self and of interior space from this interpenetrating



discourse with others minds, which establishes a burgeoning sense of the Other.

If all goes well in our relationships to significant care givers, we grow up feeling safe with others as well as with our own full range of feelings. We learn to tolerate the intensity of life's highs and lows. We develop the capacity to remain engaged in the present moment while receptive to the inner signals of our own feelings and bodies and to the cues of our physical and social surroundings. By contrast, if we become traumatized, we become haunted by the past in a way that dooms us to repeat it. If an infant, older child, or even an adult becomes severely emotionally traumatized, the effects sometimes tragically reverberate beyond the life of that individual.

During the last decade or so, neurobiologists have uncovered what they call "epigenetic" mechanisms by which gene expression is affected by a person's experience and quality of care. When experience-dependent epigenetic mechanisms are at work, the underlying genetic code is unaffected. Instead, what shifts is which genes get expressed, plus how and when these genes turn on and off. Stress during early, critical windows of development, as early as in the womb, can turn on or off genes related to health, longevity, and resilience. A recent, sobering paper by Allan N. Schore (2017) details how boys are especially at risk for autism, schizophrenia, and conduct disorders. This vulnerability to later developing problems starts right in the womb if toxic chemicals or stress-related androgen (sex hormone) disruptors alter the flow of critical hormonal processes.

To understand how experience-dependent learning passes from one generation to the next, consider the very first epigenetic experiment, as conducted by Michael Meaney (2001). The concept may seem difficult to grasp, but the experiment was surprisingly simple. The set-up involved trauma to the attachment system. Meaney's lab compared a group of "good" rat mothers, those who licked their pups vigorously shortly after birth, with a group of "poor" rat mothers, those who failed to lick their pups vigorously. In rats, licking provides the nurturing touch and loving care needed to activate secure attachments in rat babies. The well-licked pups developed into good mothers themselves who licked their own pups prodigiously. The insufficiently licked pups became relatively poor mothers who likewise failed to lick their own new litter of pups.

Meaney's lab went beyond the behavioral, descriptive level to uncover the genetic mechanism by which particular genes got turned on or off through a process called "acetylation." Meaney's discovery of which genes were involved and exactly how they were affected by postnatal experience was literally ground-

breaking, by breaking open the nature-nurture controversy. Scientists used to ask whether nature or nurture caused particular traits or problems. This dichotomy led them to seek underlying genetic markers or specific environmental triggers. We now understand that most complex human traits, especially ones that have to do with states of mind or well-being in the body cannot be reduced either to nature or nurture but instead tend to be a complicated blend of both as mediated by epigenetic mechanisms.

The study of epigenetics in human beings is currently exploding. For example, scientists have now discovered an “epigenetic clock” that is better able to predict longevity than chronological age (Jones, Goodman, and Konor 2015). With adequate care giving and attunement, epigenetic expression can lead to healthy emotional, cognitive, moral, and spiritual development. With healthy beginnings, human adults retain the capability to tune into the body-based signals of our present-centered experience. We feel our faces blush; we take pleasure in acts of mastery; we laugh when something is funny; we cry when something is sad. By contrast, traumatized individuals display a very different sort of epigenetic expression, sometimes becoming so disconnected from primary experience that some feelings—especially those that involve emotional danger, like anger or fear—become dissociated from conscious awareness. If close family members share an emotional trauma, sometimes dissociation becomes the only way to preserve the appearance of trust and harmonious relationships.

Dissociation is a complicated clinical concept; researchers argue over its definition as well as whether it should be considered a discrete condition or part of a continuum. There is a normal kind of dissociation, as when we sit in a movie theater and narrow our conscious focus to the screen before us, as if the rest of our life does not exist. A more pathological variety of dissociation is the hallmark of severe emotional, physical, or sexual trauma. With this kind of dissociation, the separation between body-based levels of emotion and subjectively felt experience becomes so complete that it precludes conscious access. This divide happens if a person suffers horrors that are unthinkable and unbearable. In cases of severe dissociation, this unconscious struggle leaves an individual so apparently unaware that he or she seems to be in a trance. Unfortunately, when dissociation controls close relationships, the situation becomes ripe for the epigenetic transmission of trauma to the next generation. This is exactly what happened in the case of Jen, her half-brother, and her father, whose story I turn to now.

## **A Case of Trauma and its Intergenerational Transmission**

The red light went on in my office five minutes early, a good sign—my new patient had arrived promptly. I opened my waiting room door to meet Jen, a young, attractive twenty-three-year old. She breezed by me into the office, walking tall and straight, sporting a distinctive, girlish hairstyle. Jen's skirt flared wide around shapely legs; frilled socks sat atop black, patent leather shoes. Little toy dolls dangled from her ears. As she landed on the couch, Jen removed her backpack, fashioned in the shape of the gray, stuffed Tortoro character from a 1988 Japanese film whose splayed limbs seemed to hug Jen's shoulders and waist, as if the figure was hanging on for dear life.

During this first session, Jen barely looked at me. She made virtually no eye contact and spoke out into space with an impassive face and flat tone of voice. I immediately recognized Jen's absence of interpersonal contact, at a deep body level, as a sign of dissociation. Indeed, Jen announced immediately that she had PTSD. Internally, I noted this self-diagnosis was a rather unusual way to start psychotherapy. Jen described her current day-to-day existence as highly unstructured and chaotic. With barely enough work at her freelance job translating Japanese into English, Jen did not know what to do with herself unless she was pressed into action. She described frequently walking for hours without a destination, as if she were trying to lose her way. She mentioned she might ride a bus from one end of the line to the other, over and over, as if she were going somewhere. Jen would tell herself that she should complete a task or run an errand the next day, yet she rarely carried the task through. Instead, she often lost track of time altogether, going into a fugue state that sometimes lasted for hours.

All of Jen's highly dissociative symptoms would soon make sense to me in light of her personal history. Indeed, Jen relayed conditions of her childhood that utterly shocked me and included events that seemed almost inconceivable. I was so stunned that, as I listened, I felt an urge to pinch myself or slap my own face to avoid my own sense of nightmare. Unfortunately, the young woman's tale was all too real.

Jen grew up in a tiny, rural town deep in the Southern Bible belt in one of a handful of Jewish families. Jen's father, a highly revered physician, had moved from the East Coast to enjoy small-town celebrity. There he met his first wife, with whom he had two children—a girl, Penelope, and a boy, Zev, twelve and eight years older than Jen, respectively. In the early years, Jen enjoyed a quiet,

pleasant childhood and adequate caretaking. The trauma started after Jen turned five and her half-brother Zev—then fourteen and previously living with his biological mother—moved into her house.

Zev, a rebellious boy heavily involved with alcohol and drugs, was apparently furious with his father for divorcing Zev's mother and marrying Jen's. Zev acted out his discontents in a horrifying way. Within a couple of months of moving in, Zev one day lured Jen into his bedroom, shut the door, and played some grunge rock music. Over the next several hours he sexually explored the body of his five-year-old half-sister. Clearly, given the large difference in their ages, Zev's actions were not innocent sexual play. Instead, it was the beginning of an increasingly intense sexual interaction that slowly culminated in oral sex. This crime occurred at least weekly, sometimes more often, for month after month over a two-year span. Shockingly, these molestations always took place at the house, often when Jen's parents were home.

Jen was a quiet little girl, who did not try to tell her parents about the sexual abuse because Zev wanted her to keep it secret. Instead, she told them how hard he hit her when they "play fought." But her parents dismissed her complaints. They said her brother "didn't know his own strength" and, apparently, failed to recognize the signs of her distress. They seemed more interested in keeping the peace than in knowing what was going on. As children do, Jen complied with her parents' implicit message and learned to surrender her body without surrendering her mind. Part of her would fly to the ceiling to hover in an out of body experience and look down on herself with Zev. Meanwhile, she was confused emotionally and unsure about what was happening or why. As she later wrote:

I learned to leave the room while staying still.  
Like holding onto a leash so nothing strays where you can't follow,  
I rise up to the ceiling, tied as if with string to the sluggish flesh. Until I  
remember that I am underwater, until I swallow.

Zev never hurt his sister physically. He could be gentle, even playful, as the sexual encounters continued. When Zev showed Jen pornography, he asked her what she liked, and Jen—who wanted to please her brother—tried to answer by narrowing her focus to tiny details of the pornographic images. She would notice a dragon tattoo on an arm in one of the salacious photographs and this would please Zev, who would then tear out the page and offer it as a present to his little sister. Jen did favor one so-called game she and Zev played during which Zev lifted Jen high off the bed with his arms and legs. They called it the "Ceiling

Game.” Perhaps instinctively, Jen found some refuge in this particular activity because she was farther away from sexual contact with Zev’s body and closer to the place where her mind sought safety when disconnecting from her body.

Here, I must note that Zev’s criminal acts were deceptively play-like, and Jen perceived the molestations as game-like. Indeed, Zev’s perverse behavior marshaled the rules of play for a strategy of abuse, although his nefarious motives undermined the very tenets of play, especially that it should be equal, pleasurable, and voluntary for all involved. Zev’s abuse relied on a vastly unequal power relationship. Sometimes players do pretend to be victims, but, when they do, they generally cooperate and self-handicap to make things equal. By contrast, young Jen was an unwilling participant and involuntary victim who took none of the conventional pleasure she would have enjoyed in voluntary play. Jen paid dearly for the abuse she suffered, as I will describe later, and she took refuge in compulsive fantasizing. This kind of preoccupation with fantasy is not truly playful either, because Jen could not change what she was doing. She was not free *not* to fantasize, and—please note—such volunteerism is the hallmark of real play.

Finally, when Jen was in second grade, she told a teacher what was happening at home and the situation exploded. Advised by authorities, her parents forced her half-brother Zev to leave the house abruptly and completely severed his contact with Jen. But, back at home, nobody provided therapy to those involved. In fact, as far as Jen remembers, no one ever brought up the subject of sexual abuse again. Instead, life simply proceeded for this seven-year-old as if nothing out of the ordinary had occurred. Although this may seem quite peculiar to us for whom communication and emotional repair flow freely in the wake of rupture, such denial and avoidance are typical of dysfunctional families whose members cannot handle trauma.

When Jen told me her tale, she spoke almost as if she were in a trance. Her voice seemed distant, lost, deep down inside her, as if hiding from the horror of her own memories. Unlike Jen’s motionless body and nearly frozen facial expressions, her quick hands compulsively twisted strands of her hair. She would first twirl a strand with one hand, then with the other, as if to symbolize the underlying distress.

### **Ghosts in the Nursery**

That no one in Jen’s family discussed the emotional significance of the incest

fits her family's long and sordid—although not unique by any means—family history. As Doris Fraiberg and colleagues (1975) have eloquently put it, ancestral “ghosts lurked in the nursery,” playing tricks with everyone's minds. Jen's grandfather (her father's father), was a Holocaust survivor, who had sexually molested both of his daughters. Now dead, he had also physically and emotionally abused Jen's father, his only son. This proved an important detail for me, because it alerted me to the epigenetic mechanisms at work (a topic to which I return shortly). I could imagine the horror and helplessness of Jen's father as a young child. Although he witnessed (whether directly or indirectly) one of the most unspeakable crimes—incest—between his father and sisters, he was only a boy. Terrified of the physical violence to which his father regularly resorted, the little brother could not stop his father's sexual molestations of the girls.

Incest and sexual molestation were definitely part of the wider family culture, because as Jen learned quite recently, her older half-sister Penelope had also been molested—in her case by an uncle on her mother's side of the family. This uncle not only had young children of his own but also continued to show up invited to all family holidays. Naturally, anyone outside such a culture wonders how these atrocious molestations occur. Jen was no latchkey kid, harmed in the absence of effective parental oversight. She had a stay-at-home mother; neither parent used drugs or abused alcohol; both were highly functioning, upstanding citizens who loved their children. That what happened to Jen could happen in an otherwise apparently caring family seems bad enough, but the lack of follow-through after everything came to light may be even worse. How could no one conduct inquiries? How could no one be aware of the emotional damage done? Why did her parents make no apologies for their failure to protect their daughter? What stopped her mother and father from recognizing their guilt and feeling shamed enough to ask repentance for their shortcomings as parents?

Here—via self-deception—the epigenetics of trauma transmission come into play. I suggest that although Jen's parents did not consciously know about the abuse before she told her teacher, they unconsciously did so. In this dark, fertile gap between conscious and unconscious knowledge, dissociation breeds and self-deception thrives. Mother and baby are intimately connected in the womb. What mother eats nourishes baby's body as well. What mother feels becomes the hormonal bath for baby's developing brain. These open physiological and emotional borders do not vanish at birth. Mother's body remains in sync with baby's rhythms, and their heart rates, breathing, and sleep cycles stay loosely coordinated. This is related, I speculate, to the phenomenon of people married

for decades tending to die shortly after their spouses at a rate that might not be accounted for by grief. There is an additional level of physiological stress when a widow or widower's internal processes can no longer rest within the synchronized rhythms of their loved ones.

Due to such body-to-body synchrony, which includes the amygdala's ability to sense unconscious emotion and motivation from the womb onwards, babies tend to "know" everything—not in thoughts or even words, but in the whole-body, emotional sense of empathy-based resonances. Just as a mother's body and brain, especially her amygdala, act as a human tuning fork to feel, sense, and respond to a baby's subtlest needs, so too does a baby's brain and whole body act as a human tuning fork, picking up whatever emotional tones fill the air.

From birth, the brain grows at the astronomical rate of 1 percent per day. By the end of the first three months, brain size has increased some 64 percent (Gholipour 2014). The earliest neural development is right-lateralized and social and emotional in nature. Thus, the brain growth of the first two years provides a lifelong, social and emotional foundation for an individual's functioning. Only during the second year, when language becomes primary, does dominant growth shift to the left side. As language, thinking, and other cognitive functions begin occupying the mind, individuals require a solid emotional foundation to support this cognitive overlay. In a Western culture dominated by a flood of information, we find it too easy to lose touch with the body-based sensory and emotional experience that dominates our early life and brain development. And in the event of trauma, all an individual senses and feels can become severed from conscious awareness or disassociated.

Some people are much better than others at consciously tuning into body cues and emotional resonances. I have written extensively about clinical intuition (Marks-Tarlow, 2012, 2014a, 2014b, 2015c), pointing out that gut feelings, visual flashes, and sudden hunches preceding supporting evidence are common. Many psychotherapists who are intuitively gifted or specifically trained in somatic methods (e.g., Ogden, Minton, and Pain 2006; Ogden and Fisher 2015; Levine 1997, 2008) pay attention to the subtlest of emotions and their physical cues. For psychotherapists, the flick of a muscle in a patient's face or a dark shadow that crosses a patient's eyes may be enough to signal an incipient emotion or the engagement of the autonomic nervous system. But for those like Jen's father, epigenetic mechanisms can blunt inner as well as outer signals. They neither notice danger themselves nor become aware of their own inclination to transmit implicit mandates against others who do notice. When they do not properly

process these signals of danger, circumstances like Jen's become that much more difficult for them to handle. Unfortunately, her father's vulnerability, his tendency to dissociate from his own emotions and body, led Jen to emulate the very same style. Such dynamics explain precisely how multigenerational trauma develops (Coates 2012; Fraiburg, Adelson, and Shapiro 1975; Silber 2012).

Because Jen's grandfather was a Holocaust survivor, her father's story resonates sadly with many other second- and third-generation survivors. The trauma of the Holocaust for these families proved so shocking and unthinkable that they could not adequately process it emotionally. And trauma is not fully digested becomes ripe for unconscious, epigenetic transmission to the next generation. I suspect that, at some unconscious level, Jen's father sensed both what his father was doing to his sisters and, subsequently, what his son did to his daughter. He simply could not bear to deal with it. Instead, he used self-deception to ignore the clues. Before I take a look at the signs of this effect in a father's early play with his daughter, I first turn more broadly to the forms and functions of deception as an aspect of natural play.

### **The Nature of Self-Deception**

Through evolution, nature capitalizes on its accomplishments with new adaptations, a concept evolutionary biologists call "exaptation" to describe a trait whose use becomes something other than the use for which it was naturally selected. Consider, for example, the hippocampus, a partially limbic, partially nonlimbic brain structure. In rats, the hippocampus evolved to create internal maps that help the animals, first, orient and, only later, navigate through physical space (Buzsáki 2006). The hippocampus also serves a similar purpose in human beings. In fact, in one experiment Maguire, Woollett, and Spiers (2006) discovered that British taxi drivers with well-developed internalized maps of London streets also possessed larger hippocampus structures than nontaxi drivers. In humans, the hippocampus has been exapted beyond such examples of physical navigation to become the seat of autobiographical and long-term memory and learning. Elsewhere, I have described the neural underpinnings for children's use of free play as much the same as that of rats' use of free navigation to become, first, oriented toward and, later, able to navigate through social space (Marks-Tarlow 2012). In humans, navigation is important at many levels—not just physically, but also symbolically, historically, and culturally.



Perhaps successful navigation proved so advantageous that natural selection exaggerated mutations favoring way finding. Evolution tends to repeat inventions when it hits upon a good idea. For example, evolution developed three unconnected lines of image-producing organs, or eyes, in insects, mollusks, and vertebrates. The capacity for deception suggests another evolutionary good idea, which developed in many forms, especially in forms that involved mimicry. Camouflage has obvious survival benefits, for example. Nonpoisonous plants evolve to resemble poisonous ones to fool hungry animals into avoiding them, too. Insects evolve to resemble the stems or leaves of plants to evade predation by animals. One species of animal evolves to mimic the look or coloration of another species, thereby attaining safety by blending in.

I suspect that mimicry may constitute an evolutionary precursor to play in mammals. Looked at across a broad array of manifestations in plants and animals, evolution loves to play in the intermediate zone between pretense and reality, such that pretense eventually becomes reality. In each example above, evolution seems to play an “as-if” game. When mimicry offers camouflage in service of safety, the game appears to be a precursor of hide-and-seek. When deception consists of coloration or illusions to heighten sexual attractiveness, the game appears to be a precursor to catch-me-if-you-can. Whether hiding to repel enemies or standing out to attract mates, there is a clear evolutionary advantage to pretense. This holds true both for an interspecies context, when one species tries to dupe another, as well as for an intraspecies context, when members of the same species attempt to gain advantage over one another through deception.

Evolutionary biologist Robert Trivers (2011) has written extensively about deception in nature, including the origins self-deception in humans. Trivers speculates that humans have evolved the art of self-deception as a means better to deceive other people. Trivers cites the example of a parent who severely, even cruelly, punishes a child, only to claim, “I did it for your own good.” Clinical evidence suggests that severe punishment, including spanking, bears no positive outcome. Children may become outwardly compliant, yet inwardly they harbor hurt and resentment that often festers into later problems. Despite these negative outcomes, parents grant themselves free rein for their temper as if it actually serves children. Similar dynamics hold in cases of child or spousal abuse. Abusers characteristically avoid responsibility for their actions by claiming, “It’s not my fault. I wouldn’t have done it if she hadn’t provoked me into it.” Outrageous claims such as these come much more easily if people believe their own internal lies. Whether in a cycle of thievery, abuse, or addiction, promises made to others

not to repeat an offense become all the more effective when we believe our own trickery, which is as true for benign offenses and unconscious self-deception as it is for psychopaths who consciously mean to deceive others.

### **Neurological Bases of Self-Deception**

A sentiment that dates back nearly twenty centuries from the gospel according to Matthew holds: “But when you do merciful deeds, don’t let your left hand know what your right hand does.” One way to understand Jesus’s statement—as translated by Filson (1960)—involves the idea that giving should be automatic, without any consideration of potential rewards. To spend too much effort pondering charitable acts might lead individuals in search of praise to scheme to have even their secret donations made public. Thus the biblical quote might suggest the right hand should be generous without need for mental calculations—and, if the mind is avoided, so too is the left hand.

A neural underpinning exists for this odd verse. The left hand is connected to the right hemisphere of the brain, while the right hand is connected to the left hemisphere of the brain. There is a kind of gap that exists between the two sides of the brain, consisting of a bundle of nerve fibers called the corpus callosum. On the one hand, the corpus callosum connects the two sides of the brain, especially in coordinating the two sides of the body. But on the other hand, the corpus callosum also separates the two sides of the brain. The separation occurs higher up at the cortical level of conscious experience.

As vertebrate brains evolved to complete more and more complex tasks, so too did the division of labor. Researchers have detected specialization or laterality in the two halves of the brain not just in mammals but in all vertebrates (MacNeilage, Rogers, and Vallortigara 2009). In human beings, each half of the brain possesses a distinctive quality of subjectivity, separate motives, different styles of taking in and processing information, and differences in underlying neurophysiology. British psychiatrist and social historian Iain McGilchrist (2009), in his study of brain lateralization, has noted that when one cerebral hemisphere pushes forward in awareness, the perspective of the other cerebral hemisphere is inhibited and recedes into the background.

Recall that the right side of the brain is the emotional and social side, which develops during the first two years of life. During this critical phase of attachment, the right side of the brain facilitates the CARE circuit and social motives

of love and connection. Allan N. Schore (2012) describes this early phase as “right-brain to right-brain communication” between mother and baby. Indeed, across the globe and regardless of culture, mothers tend to cradle their babies on the left in order to better read their faces using right-lateralized processing of emotional cues. Significantly, the right side of the brain is better poised to accomplish emotional and social tasks because it is more connected deep into the body with our internal organs and outer sensory systems—and thus to our inner emotional cues, and to the inner feel of our own somatic functioning. The right brain is also more connected to the brain’s autonomic nervous system, which evolved to handle stress and regulate emotions.

Uniquely, the right side of the brain processes information holistically, often using images and other nonverbal forms. By contrast, the later developing left side of the brain, better at breaking down the whole picture to analyze its parts, specializes in language and logic. Whereas the left side likes to zoom in on details, the right side likes to broaden the focus to take in the whole picture. The evolution of these differences in humans relate to differences in predator-prey dynamics in animals. In most animals, the right side mediates a sense of danger and safety, thereby alerting potential prey to potential predators. By contrast, the left side of the brain more easily narrows its focus to a pinpoint, which allows, for example, predators to target their quarry. No wonder the words “sinister” and its variants in several languages often derive from words meaning “left-handed.”

As I mentioned, the two halves of the human brain connect and separate through a large mass of fibers called the corpus callosum. Classic experiments conducted during the 1960s reveal how this neural architecture sets up the potential for self-deception. Neuroscientists arrived at the idea of cutting the corpus callosum to stop grand mal epileptic seizures from jumping across its massive fiber tracts. The operation appeared to have little impact on either the subjectivity or the functioning of the subjects until more sophisticated methods allowed scientists to separate better input into the left from input into the right hemisphere. Because each eye connects to both the left and right hemispheres, scientists had to get beyond showing one thing to the left visual field and another to the right one. In a typical experiment, a researcher might expose an object, perhaps the picture of a broom, only to the vision of the left hemisphere. Then, researchers might place a different object, maybe the picture of naked women, solely in the visual field of the right hemisphere. When the subject was asked what he saw, he might reply, “A broom,” although he blushed as he spoke. If

asked why he blushed, he might typically respond, “Because my apartment has been dirty for months.”

The capacity of the left hemisphere to make up stories that seem plausible, regardless of underlying discrepancies, emerges from its propensity to assemble known facts, according to logic, as spun in the vacuum of conscious understanding. Because the right side of the brain is more fully connected both to the body and to cues from the outside world, in extreme circumstances—when the left and right sides of the brain are unable to cooperate—this can lead to self-deception. The tendency to fabricate stories led Michael Gazzaniga (1998)—one of the original split-brain researchers—to label the left-hemisphere as the “interpreter.” From a clinical perspective, high-level defenses against emotion, such as intellectualization and rationalization, result from this inclination of the left hemisphere when it becomes functionally disconnected from the workings of the right.

Deceiving oneself and deceiving others often go hand-in-hand, partly because developing self-awareness and other-awareness also go hand-in-hand. For example, developmental researchers assert that emergence of the capacity to lie happens simultaneously with development of a sense of self as separate from others (Chandler, Fritz, and Hala 1989). To lie, one needs to know what another person may be thinking. In this instance, sense of self and sense of other work in tandem. Russell Meares (2016) shares an endearing story about his granddaughter reaching the milestone of differentiating self from others. Prior to that point, when she played the “Waving Game” with her grandparents, she instinctively turned her hand to wave toward her own face, signaling confluence between her sense of self and sense of other. At eighteen months, she suddenly switched to turning her hand outward to face her grandparents.

This incipient awareness of others as possessing a separate perspective from self is the precursor to a full theory of mind, or the ability to attribute mental states, such as beliefs, intents, desires, pretense, or ideas, to oneself and others, as well as to understand that others have beliefs, desires, intentions, and perspectives that differ from one’s own. Theory of mind emerges around age four. Here is the prototypical test: A child watches two dolls, say Annie and Ernie, who play with a ball and then put it away together in a toy box. Annie leaves the room. Ernie next removes the ball from the toy box and places it in the closet. When Annie returns to the room, the child is asked, “Where will Annie look for the ball?” If the child replies, “In the closet,” she identifies Annie’s subjectivity as identical with her own. If instead the child replies “in the toy box,” she

understands the critical difference between her own perspective and that of the doll's and so possesses full theory of mind.

Because the right side of the brain is preverbal and more connected with implicit levels of body-based learning, Allan N. Schore (2003) and other neurobiologists view the right side as the neurological underpinning for Freud's deep unconscious, the territory of the id, which lies beneath preconscious and conscious aspects of self; meanwhile, the left side serves the domain of the ego, which Freud described as partly conscious and partly unconscious. This formulation relates to self-deception, in which we may consciously believe one thing yet unconsciously and even pre-consciously demonstrate a different understanding of ourselves. As I mentioned, McGilchrist suggests that the moment-to-moment subjectivity of people in general is colored by either a right-brain or a left-brain perspective—but not both at once.

The gap between left- and right-brain subjectivities, each with a separate track for experience and memory, lays the foundation between conscious and unconscious versions of understanding and suggests a path for self-deception. When our conscious, rational minds do not learn from our body-based, unconsciously mediated mistakes, we practice a common form of self-deception. This relates to a popular trope (attributed to Einstein): “The definition of insanity is doing the same thing over and over again but expecting different results.” When history repeats itself without learning from collective mistakes, humankind practices a related form of self-deception. In the brain, this sort of self-deception commonly emerges out of a traumatized right brain, unable to integrate the experience of the body and information from the world. In cases of extreme trauma, self-deception takes the form of dissociation, where a horizontal split occurs between cortical and subcortical levels, such that whole aspects of experience, whether in the form of memories or emotions, become completely walled off from self-awareness.

Presumably, this is what happened first to Jen's father and then subsequently to Jen. Because Jen's father was unable to stop the sexual and physical abuse of his own father, he learned how to separate himself from its horrors through dissociation. In turn, he became completely incapable of handling the repetition of trauma enacted by his own son.

Coates (2012) and Silber (2012) write that children can serve as triggers for evoking memories of unresolved trauma in the parent. The family itself becomes a “remembering context” for dredging up memories and affective schemas from the parents' families of origin. When children themselves become triggers for

reactivating parental trauma, intergenerational transfer of patterns depends vitally on the absence of recognition—of the trauma, of the trigger, and of the child’s own experience. As Coates (2012) describes it, parents will defend against the activation of dissociated memories by distancing themselves from their children, often to the extreme of blatantly abandoning their children’s needs. Schechter (2003) points out that when unresolved traumatic memories become involuntarily reactivated by a child, the parents’ attention necessarily shifts from helping a child to control his or her emotions to the parents regulating their own affective needs. When this occurs, “the breakdown in parental defenses often ushers in the collapse of reflective-functioning” (Coates, 2012, 124).

Both Jen’s mother and father remained consciously unaware of trauma as a means of preserving familial harmony. Jen received and embodied their implicit messages, which were all related to the pretense that nothing was wrong, that all was well. After others ignored Jen’s signals of danger, she quickly learned to ignore them herself. Let us now explore the role of early play between father and child in both reflecting and contributing to this sad state of affairs.

### **Facing toward Fantasy**

Jen’s father was a very imaginative man, and during Jen’s year at preschool, he played the “Button Game” with her. She sat on his lap and pressed parts of his face like buttons to make things happen. Her father pretended to transform into an elephant, or a rabbit, or Timothy the Shy Deer. When Jen had enough of one, she pushed the button again to conjure another. If she tired of the game altogether, she pushed the “Dad” button. No running narrative controlled this game.

As Jen approached kindergarten age and grew more verbal, the Queen Rose stories began. Each episode started with a ritual involving the same character. Jen-girl must ask her Dad for permission to follow Squirrel, who had knocked on her bedroom window. Once Dad granted permission, Squirrel would transport Jen-girl to the magical rose garden where Queen Rose lived. Queen Rose, in reality a red rose, would first describe the mission ahead to Jen-girl and then give her a kiss on the forehead to ensure her safe journey. Only then, after these two layers of protection had been firmly put in place was Jen free to tackle her mission.

When I first learned about the Queen Rose stories I was shocked. “No way,” I blurted. “You have got to be kidding.” I simply could not fathom how Jen’s

father allowed his daughter to endure the harm of incest in real life at the very same time as he was so actively displaying his wish to protect her from harm during the Queen Rose adventures. Jen was adamant about both the existence and timing of this form of their play together.

As I thought more about the Queen Rose game, I came to believe it was a clever way to acknowledge the danger implicitly while explicitly avoiding it in reality. A red rose seemed both an odd choice of color and a suspicious form to characterize a kind, benign queen. Although red is in truth the color of royalty in Western culture, it also symbolizes danger, arousal, and blood. A rose may be a beautiful, if not precious, flower, but it also sprouts dangerous thorns. In general, roses remain a symbol of innocence and purity, while specifically, according to Freud's interpretations of dreams, a red rose also symbolizes female genitalia.

The juxtaposition of the protection Jen's father offered in play with its abysmal absence in real life suggests that he had an unconscious understanding of the danger to which his daughter was exposed, yet he felt an infantile helplessness in addressing the issue outside their fantasy play. He acted much like the split-brain subject who blushes yet remains unaware of the sources of his behavior and who then deceives himself with an invented reason.

I find it illustrative to examine the father's puzzling behavior as a form of developmental arrest caused by his own trauma. Since Mildred Parten's (1932), early studies, several researchers have offered developmental stage models of play, including Jean Piaget (1962) and Sara Smilansky (1990). Although these models differ in detail, all posit increasing levels of complexity in sociality, symbolic engagement, imagination, and formal rules. The Rubin, Watson, and Jambor (1978) model seems particularly apt in the case of Jen's father. In their research, infants are characterized by solitary-functional play; toddlers by parallel-functional play; preschoolers by associative, constructive, and dramatic play; four- and five-year-olds by cooperative-constructive and socio-dramatic play, and the start of games with rules; and kindergarten and school age children by more elaborate cooperative, constructive, and socio-dramatic play plus games with more complicated rules.

At an emotional level, Jen's father seemed stuck between toddler and preschool levels—lost inside his own perspective and incapable of accepting that of his daughter's. His emotional development seems clearly arrested at a very early stage, which is not unusual in cases of severe trauma. In essence, Jen's father was playing side-by-side his daughter, caught in his own inner world and unable to play more cooperatively. To this day, Jen reports that her father remains incapable

of entering into a true dialogue. He tends to lecture instead, and he dismisses Jen's relational bids for a conversation. Instead, he answers her invitations to shared dialogue with random comments that throw her off track. To Jen, these comments often come from a subjectivity her father does not consider sharing. After a recent exchange with her father, Jen offered a lovely metaphor for this type of one-way interaction: "It's like we're playing a game of catch, but instead of tossing the ball back, my father insists on throwing it over the fence where it remains out of reach."

### **Jen's Fantasy Life**

Jen's father's parallel reality through fantasy play operated much like a fractal seed planted inside his daughter's psyche, one that came into full bloom only through dissociative symptoms. Jen's father appeared to use fantasy for denial and dissociation—to seek comfort from within as he distanced himself from real dangers outside. Like father, like daughter. After Jen was sexually molested, she began making up elaborate hurt-and-comfort stories in which she would lose herself inside her own mind for hours.

Here is how such a story might go: Someone gets terribly hurt, either emotionally or physically. Another individual then comes to the rescue by addressing the problem and comforting the victim. Jen never appears as a character in her own stories. Instead, much like her father, she remains in a parallel universe, standing perpetually outside her own drama as both creator and witness. Over the years, her stories became more elaborate with greater turns and twists in the plot. Whenever Jen hit upon a good plot line, she would stay with it for as long as she could until it no longer worked to hold her interest. Then she felt pressed to look for another, more compelling narrative.

As we explored this aspect of Jen's inner world, I came to understand that hurt-and-comfort storytelling is not unique to Jen. Some readers even consider it a genre of fan fiction (Pearson 2010). Fan fiction is a part of fan culture, like fan costuming (dressing up like your favorite characters) and fan art (creating artwork relating to your favorite stories), all of which spin off popular fantasy-tale and science-fiction magazines, books, games, television shows, and movies. As old as science fiction itself, fan lore has grown exponentially more popular over the past twenty years of the digital era. When fan fiction is at play, popular books like the Harry Potter series or television shows like *Star Trek* spawn



imaginative offshoots from enthusiastic fans. Hurt and comfort is one common theme especially popular among vampire story enthusiasts. Hurt and comfort is also a common trope for television writers, with multiple uses involving abusive parents, rape as drama, sickness and recovery, no-holds-barred beat-downs, or pity-inducing orphans.

Jen's hurt-and-comfort creations serve as a compulsive activity she can easily fall into for hours at a stretch. For Jen, this has never been a public activity that includes writing or sharing stories. Instead, it has remained a very private affair that takes place in her head. This sort of internal preoccupation frequently occurs when Jen faces unstructured time. The story-land adventure serves as an intermediary between the blankness of complete dissociation to a full engagement with the external world.

The peak of Jen's hurt-and-comfort preoccupations occurred in college. During this initial separation from her parents, Jen dealt with both the internal drama of her stories and the internal and external dramas of some highly traumatized friends to whom she was attracted. Although her hurt-and-comfort stories had always offered a symbolic space in which to feel safe, Jen in college became attracted to a space that grew more out of fear: she grew obsessed with serial killers. She felt driven to study and to understand something beyond her comprehension, no matter how awful the revelations.

Jen was fascinated by the inner life of Jeffrey Dahmer, infamous not just for killing but also for eating his victims. What enthralled Jen was Dahmer's claim that he felt compelled to murder his victims as an extreme response to the terrors of early abandonment. Dahmer claimed his parents were emotionally unavailable. His mother was often sick, he said, and his parents bickered frequently and eventually divorced. At eighteen, when Dahmer was left alone to live in the family house, he killed his first victim, a young hitchhiker. After striking and strangling the boy, Dahmer stripped him of his clothes and masturbated over his dead body. Dahmer's discovery that he was homosexual created in him a homophobia that perhaps contributed to his abandonment terrors. By killing and consuming his victims, Dahmer believed he was getting as close to them as he possibly could. With his victims literally inside him, he foreclosed any possibility they could leave him.

Although Jen found her preoccupation with serial murderers stimulating, she also feared that it was an addiction. Her fascination with the gruesome details triggered concerns that she, too, might be a psychopath, a worry she also felt about Zev. Jen simply could not imagine that her half-brother could do what he did without being a totally unempathic, cold-blooded psychopath. I never

believed Jen to be a psychopath. I even had serious doubts that Zev was clinically psychopathic. Indeed, as her therapist, I had a very different interpretation of Jen's fantasy life than she did. I suspected Jen was attracted to such material to gain mastery over her past.

### **Mastery of Trauma through Fantasy**

My perspective is largely informed by the work of Robert Stoller (1975), who specialized in sexual addictions and fetishes. Stoller spent decades interviewing subjects with various sexual fixations. He theorized that individuals develop such fetishes to master early traumatic blows to their core identities. Sometimes the fetish enacts the trauma directly, as when a sexually abused person continues to harbor rape fantasies. In other instances, the fetish reverses the trauma, as when an individual who was frequently spanked as a child becomes a dominatrix. In either case, mastery emerges from taking what began as an outside, involuntary matter and bringing it voluntarily inside, where what was terrifying and humiliating can be conquered by sexual excitement.

Stoller collected many case examples to support his theory. A young boy dressed in girls' clothing and treated like a doll by his sisters might become a cross dresser in adulthood. A young child teased with but deprived of his mother's breast might later develop a breast fetish. A youngster forced to play under the dining room table while the grown-ups eat dinner might develop a foot fetish later in life. I have written before (Marks-Tarlow 2008) about one of my patients whom a babysitter forced to strum his own penis like a guitar while rockin' wildly on his rocking horse. When he began treatment, he had not encoded these early events as abusive. Instead, they seemed exhilarating and sexually liberating. Yet, underneath his excitement, the unprocessed trauma of his childhood had developed into sexual addiction, including elaborate fantasies and serial seductions that usurped his capacity for a single, intimate relationship.

From this perspective I came to understand Jen's hurt-and-comfort fantasy world as a response to the assaults on her early sense of self and as a safe way to join with and explore connection to both her father's fantasy world and her brother's inner life. By retreating into hurt-and-comfort stories, Jen avoided real trauma on the outside while mastering it on the inside. She explored and tried to understand the mind and actions of the perpetrator in a safe context where no one actually got hurt.

Like Brian Sutton-Smith (1997) among others, I have previously speculated (Marks-Tarlow 2012, 2014a) that an important function of early fantasy play is to explore social roles from every vantage point. To learn about hospitals, children often take turns playing out all the roles of ambulance driver, doctor, nurse, and patient. Although Jen feared crossing the line from fantasy into reality as serial killers do, I believed that the effectiveness of Jen's fantasy life—much like the parallel play of her father—required her to hold the line between fantasy and reality as both defense and protection.

### **Imagination in the Service of Repair**

I have primarily explored the role of fantasy in contributing to the trauma of Jen's history and therapy instead of covering the details surrounding her healing. Lest the reader be left with the notion that the traumatized imagination reflects only wounds and not recovery, I devote this final section to a fuller picture of Jen's creativity. Ever at play in the background of her psyche and throughout the course of our psychotherapy, Jen's imagination has supplied images and words to describe something otherwise invisible, suppressed, and even inexpressible. Jen's creative self-expression has taken many forms, but here I offer her poetry. She wrote the following poem early in her psychotherapy.

#### ROBOT GIRL

Robot Girl drives to the grocery  
to retrieve a carton of milk.  
I am holding it in her hands,  
stepping out with her legs.  
She squints into the sun. Its light  
reaches me after a single second's delay.  
She's already turned her head  
and shielded her eyes, an instinctive  
retreat from sensation,  
but I am still seeing it.

She—no—I am an avatar of myself.  
I am crouching inside, out of synch,  
swatting at flies that have flown  
beyond my reach.

The next poem is more recent.

DISSOCIATION

Green plants lean into life, into light.  
See the tales their stems tell with their direction,  
of times their pot was turned toward or away. Fight or flight  
is seen as plainly by a masseuse's fingers. Don't mention

how you read the knotted muscles in my back like braille,  
how the fibers remember every clenched fist  
and the clouded ice set hard over it all like a veil.  
My eyes stayed open but didn't see when he kissed

me. I learned to leave the room while staying still.  
Like holding onto a leash so nothing strays where you can't follow,  
I rise up to the ceiling, tied as if with string to the sluggish flesh. Until  
I remember that I am underwater, until I swallow

the rising tide like bile in the back of my throat. I cannot move. I will never  
know the reason is because I am in suspended animation,  
waiting for it to be safe to surface, for someone to find the cure to whatever  
is wrong with me. I put myself here, under sedation,

where the morning frost doesn't know how to melt in the sun  
when darkness is done.

Jen's poetry has evolved over the course of our psychotherapy in quite a revealing way. The earlier poem connotes great distance from herself, evident in the words "Robot Girl" and in the line, "I am an avatar of myself." The earlier poem was also written in third person, confusedly moving between "she" and "I" in a way that not only connotes dissociation but also mirrors another of Jen's early symptoms: When she lived with her parents, at approximately age thirteen and most likely triggered by puberty, she stopped using the first-person "I." Instead, she referred to herself in third person—either by name or as "she." Apparently, when she got to college, she even started a trend with this habit, being emulated by a number of friends who themselves often had traumatic backgrounds. Only in recent years, has Jen grown re-connected enough with her core self to switch back to the more personal "I."

Jen's capacity for a more relational perspective becomes apparent in the second poem, which is not only written in the first person but also reaches out to

include the reader with the second person, you. Compared with the mechanical robot imagery of the first poem, the second seems more vital and intimate. The images of “green plants lean into life, into light” and of “how you read knotted muscles in my back like Braille” are organic, sensual, and interactive.

When Jen first started psychotherapy, her poetry used free-form structure with content that was restricted to the topic of trauma. More recently, and evident in the second poem, Jen’s style of writing has shifted. She now plays with the more constrictive structure of the sonnet yet has broadened out her content to include subjects other than trauma and its discontents. Please note, though, that for comparison purposes in this essay, I chose two poems on the topic of dissociation.

Jen and I share a similar understanding of these changes in form. When Jen first came to see me, she was heavily dissociative and highly invested in walling off her distress and primary emotions. At that time, Jen was neither safe inside her own psyche nor safe in her relationship with me. She relied on the free form of escape for protection; yet underneath, she was trapped by traumatic preoccupations, which dominated the poetry’s content. After years of productive psychotherapy—in which Jen now feels fully seen, heard, and understood—she has come to embody feeling safe and connected in a caring relationship. This allows Jen to feel more contained and better within the tight structure of a sonnet. At the same time, she is loosened from the grip of dissociation enough to broaden her scope of inquiry within her poetry’s content.

Jen’s artistic shifts demonstrate enhanced mental and physical health from the perspective of a complexity model (Marks-Tarlow 2008). The sciences of complexity, which include chaos theory, nonlinear dynamics, and fractal geometry among a host of other disciplines, represent a contemporary holistic view of mind, body, and brain function and growth. Rather than seeking to remove symptoms or chasing the flat line of normality, a complexity model posits that variability of response and the adaptive flexibility to move among multiple options are most important.

Emotional health does not entail finding eternal happiness or feeling positive all the time. In fact, the search for happiness alone produces some of the unhappiest people I know. Instead, it is important to feel the emotion—whether negative or positive—best suited to the present context. The freedom to experience what we feel from the inside produces the greatest contentment and satisfaction in life. From this perspective, emotional health means possessing the full range of feelings, both negative and positive, plus

the adaptability to switch nimbly between them in response to ever-changing social and environmental contexts.

I end with a metaphor I frequently share with patients. To play beautiful music, an accomplished piano player would never restrict his or her access to the white keys alone but instead will insist on access to the black keys as well. Complex works often encompass a full tonal (if not atonal) range between rejoicing and lament, aspiration and revelation. Composers talk frequently about emotional coloration. True freedom of personal expression emerges from accessing the full range of experiences, both positive and negative, plus ample possibilities for creative self-expression.

In the service of a well-integrated self, the healthy psyche should be able to freely compose nuanced emotions with relative equanimity, if not (always) with pleasure. No matter how filled with dark events and fantasies our internal, infernal dialogues might be, to use a line from Leonard Cohen, “There is a crack in everything. That’s how the *light* gets in.” When we seek the light and dedicate ourselves to finding truth and cultivating self-awareness as Jen did, we too may be blessed with opportunities quite literally to compose our selves anew.

#### REFERENCES

- Badenoch, Bonnie. 2008. *Being a Brain-Wise Therapist: A Practical Guide to Interpersonal Neurobiology*.
- Bruner, Jerome S. 1990. *Acts of Meaning*.
- Buzsáki, György. 2006. *Rhythms of the brain*.
- Chandler, Michael, Anna S. Fritz, and Suzanne Hala. 1989. “Small-Scale Deceit: Deception as a Marker of Two-, Three-, and Four-Year-Olds’ Early Theories of Mind.” *Child Development* 60:1263–77.
- Coates, Susan W. 2003. “Trauma and Human Bonds.” In *September 11: Trauma and Human Bonds*, edited by Susan W. Coates, Jane L. Rosenthal, and Daniel S. Schechter, 1–14.
- . 2012. “The Child as Traumatic Trigger: Commentary on Paper by Laurel Moldawsky Silber.” *Psychoanalytic Dialogues* 22:123–28.
- Cozolino, Louis J. 2002. *The Neuroscience of Psychotherapy: Building and Rebuilding the Human Brain*.
- Davies, Bronwyn. 1997. “The Construction of Gendered Identity through Play.” In *Encyclopedia of Language and Education: Oral Discourse and Education*, Vol. 3, edited by Bronwyn Davies and David Corson, 115–24.

- Filson, Floyd V. 1960. *A Commentary on the Gospel According to St. Matthew*.
- Fraiberg, Selma, Edna Adelson, and Vivian Shapiro. 1975. "Ghosts in the Nursery: A Psychoanalytic Approach to the Problems of Impaired Infant-Mother Relationships." *Journal of the American Academy of Child & Adolescent Psychiatry* 14:387-421.
- Gazzaniga, Michael S. 1998. "The Split Brain Revisited." *Scientific American* 279:51-55.
- Gholipour, Bahar. 2014. "Babies' Amazing Brain Growth Revealed in New Map." Live Science. <http://www.livescience.com/47298-babies-amazing-brain-growth.html>.
- Henricks, Thomas S. 2015. "Play as a Basic Pathway to the Self." *American Journal of Play* 7:271-97.
- Hill, Daniel. 2015. *Affect Regulation Theory: A Clinical Model*.
- Jones, Meaghan J., Sarah J. Goodman, and Michael S. Kobor. 2015. "DNA Methylation and Healthy Human Aging." *Aging Cell* 14:924-32.
- Levine, Peter A. 1997. *Waking the Tiger: Healing Trauma: The Innate Capacity to Transform Overwhelming Experiences*.
- . 2008. *Healing Trauma: A Pioneering Program for Restoring the Wisdom of Your Body*.
- MacLean, Paul D. 1990. *The Triune Brain in Evolution: Role in Paleocerebral Functions*.
- MacNeilage, Peter F., Lesley J. Rogers, and Giorgio Vallortigara. 2009. "Origins of the Left and Right Brain." *Scientific American* 301:60-67.
- Maguire, Eleanor A., Katherine Woollett, and Hugo J. Spiers. 2006. "London Taxi Drivers and Bus Drivers: A Structural MRI and Neuropsychological Analysis." *Hippocampus* 16:1091-1101.
- Marks-Tarlow, Terry. 2008. *Psyche's Veil: Psychotherapy, Fractals and Complexity*.
- . 2010. "The Fractal Self at Play." *American Journal of Play* 3:31-62.
- . 2012. *Clinical Intuition in Psychotherapy: The Neurobiology of Embodied Response*.
- . 2014a. *Awakening Clinical Intuition: An Experiential Workbook for Psychotherapists*.
- . 2014b. "Clinical Intuition at Play." *American Journal of Play* 6:392-407.
- . 2015a. "Games Psychotherapists Play: Hide-and-Seek in the Therapeutic Dialogue." In *The Handbook of the Study of Play*, edited by James E. Johnson, Scott G. Eberle, Thomas S. Henricks, and David Kuschner, 271-85.
- . 2015b. "From Emergency to Emergence: The Deep Structure of Play in Psychotherapy." *Psychoanalytic Dialogues* 25:108-23.
- . 2015c. "The Nonlinear Dynamics of Clinical Intuition." *Chaos & Complexity Letters*, 8, 2-3:1-24.
- Meaney, Michael J. 2001. "Maternal Care, Gene Expression, and the Transmission of Individual Differences in Stress Reactivity across Generations." *Annual Review of Neuroscience* 24:1161-92.
- Meares, Russell. 2005. *The Metaphor of Play: Origin and Breakdown of Personal Being*.
- . 2016. *The Poet's Voice in the Making of Mind*.
- Mesman, Judi, Marinus H. van IJzendoorn, and Marian J. Bakermans-Kranenburg. 2009. "The Many Faces of the Still-Face Paradigm: A Review and Meta-Analysis." *Developmental Review* 29:120-62.

- McGilchrist, Iain. 2009. *The Master and His Emissary: The Divided Brain and the Making of the Western World*.
- Nicolopoulou, Ageliki. 2005. "Play and Narrative in the Process of Development: Commonalities, Differences, and Interrelations." *Cognitive Development* 20:495–502.
- Ogden, Pat, and Janina Fisher. 2015. *Sensorimotor Psychotherapy: Interventions for Trauma and Attachment*.
- Ogden, Pat, Kekuni Minton, and Clare Pain. 2006. *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*.
- Panksepp, Jaak. 1998. *Affective Neuroscience: The Foundations of Human and Animal Emotions*.
- Panksepp, Jaak, and Lucy Bivens. 2012. *Archaeology of the Mind: Neuroevolutionary Origins of Human Emotions*.
- Parten, Mildred B. 1932. "Social Participation among Pre-School Children." *The Journal of Abnormal and Social Psychology* 27:243–69.
- Pearson, Roberta. 2010. "Fandom in the Digital Era." *Popular Communication* 8:84–95.
- Piaget, Jean. 1962. *Play, Dreams, and Imitation in Childhood*.
- Rubin, Kenneth H., Kathryn S. Watson, and Thomas W. Jambor. 1978. "Free-Play Behaviors in Preschool and Kindergarten Children." *Child Development* 49:534–36.
- Schore, Allan N. 1994. *Affect Regulation and the Origin of the Self: The Neurobiology of Emotional Development*.
- . 2003. *Affect Dysregulation and Disorders of the Self*.
- . 2011. "The Effects of Early Relational Trauma on Right Brain Development, Emotional Regulation, and Infant Mental Health." *Infant Mental Health Journal* 22:201–69.
- . 2012. *The Science of the Art of Psychotherapy*.
- . 2017. "All Our Sons: The Developmental Neurobiology and Neuroendocrinology of Boys at Risk." *Infant Mental Health Journal* 38:15–52.
- Schore, Judith R., and Allan N. Schore. 2008. "Modern Attachment Theory: The Central Role of Affect Regulation in Development and Treatment." *Clinical Social Work Journal* 36:9–20.
- Siegel, Daniel J. 1999. *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are*.
- Silber, Laurel Moldawsky. 2012. "Ghostbusting Transgenerational Processes." *Psychoanalytic Dialogues* 22:106–22.
- Smilansky, Sara. 1990. "Sociodramatic Play: Its Relevance to Behavior and Achievement in School." In *Children's Play and Learning: Perspectives and Policy Implications*, edited by Edgar Klugman and Sara Smilansky, 18–42.
- Spencer, Herbert. [1855] 1873. *The Principles of Psychology*.
- Stoller, Robert J. 1975. *Perversion: The Erotic Form of Hatred*.
- Sutton-Smith, Brian. 1997. *The Ambiguity of Play*.
- Trevarthan, Colwyn, and Kenneth J. Aitken. 2001. "Infant Intersubjectivity: Research, Theory, and Clinical Applications." *Journal of Child Psychology and Psychiatry* 42:3–48.



- Trivers, Robert. 2011. *The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life*.
- Tronick, Edward, Heidelise Als, Lauren Adamson, Susan Wise, and T. Berry Brazelton. 1978. "The Infant's Response to Entrapment between Contradictory Messages in Face-to-Face Interaction." *Journal of the American Academy of Child Psychiatry* 17:1–13.
- Winnicott, D. W. 1971. *Playing and Reality*.