

Review of *Awakening the Dreamer: Clinical Journeys* by Philip M. Bromberg

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The current paradigm shift in psychoanalysis and related sciences is generating more powerful models of psychopathogenesis and treatment. Toward that end, in *Awakening the Dreamer* Philip Bromberg masterfully integrates psychoanalytic, developmental, trauma, and neurobiological data to explore the bottom-line defense of dissociation. In this review I offer a neuro-psychoanalytic perspective of the origin of pathological dissociation, focusing on the enduring impact of this early defense against attachment trauma and its growth inhibiting impact on the development of the biological substrate of the human unconscious, the right brain. Patients with a history of abuse or neglect frequently access pathological dissociation in response to relational stressors to block the emotional pain that accompanies overwhelming affective states. And yet there is a cost. The characterological use of this affect regulating strategy induces a failure of integration of the higher right hemisphere with the lower right brain, thereby inducing an instant collapse of both subjectivity and intersubjectivity in the short term and a blockade of emotional development in the long term. Bromberg's creative book is an excellent example of how effective clinical work with such patients incorporates the current paradigm shift from not only cognition to affect but also repression to dissociation.

Ten years ago in an article in the *Journal of the American Psychoanalytic Association* I suggested that the time was right for a rapprochement between psychoanalysis and neurobiology (Schore, 1997). Over the course of the last decade there has been progress toward that goal, as reflected in the increasing incorporation of recent relevant scientific data into clinical models in both psychoanalytic journals and books. In this period, Philip Bromberg has offered a number of important contributions to relational psychoanalysis. His gift as a clinical writer has been expressed in

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his extraordinary talent for describing the unconscious intersubjective realms of both patient and therapist in such an evocative fashion that the reader can feel the emotional processes both between and deep within each member of the therapeutic dyad.

But now in his latest book Bromberg moves even further and even deeper, attempting to incorporate recent scientific findings into the theoretical core of his work and to show the clinical applications of these advances of knowledge. Indeed, this groundbreaking volume is an excellent example of a master clinician's integration of current relevant findings from the psychological and biological disciplines that surround and underlie psychoanalysis. His synthesis does more than validate a psychoanalytic approach—it deepens and transforms it into a more effective clinical approach to patients who were previously seen to be refractory to earlier insight models of treatment. Indeed, Bromberg calls for a major shift in the therapy of patient's who experience attachment trauma, and as I discuss, his clinical model is strongly supported by very recent developmental and neurobiological studies.

Within the structure as well as the content of the book Bromberg continuously weaves together concepts and data from developmental psychoanalysis (discoveries in the interpersonal neurobiology of attachment), neuropsychology (current models of the impact of relational trauma on the structural organization of the implicit self), and clinical psychoanalysis (the essential roles of affect dysregulation and dissociation in psychopathogenesis and treatment). Indeed, this developmental perspective appears in every chapter, in which he links various clinical phenomena to the seminal events at the beginning of human life, the critical period of development of the human unconscious, the implicit self (Schore, 2005). Describing recent work in attachment theory that emphasizes the centrality of affective processes, he observes,

The developmental achievement of a sense of self that is simultaneously fluid and robust depends on how well the capacity for affect regulation and affective competency has been achieved. ... When these early patterns of interpersonal interaction are relatively successful, they create a stable foundation for relational affect regulation that is internalized as nonverbal and unconscious. Thus, further successful negotiation of interpersonal transactions at increasingly higher levels of self-development and interpersonal maturity is made possible [p. 32].

At the very outset of the book Bromberg introduces a large body of interdisciplinary information on the negative impact of attachment trauma on the developmental trajectory just described. He notes, "The reason that developmental trauma (also termed relational trauma) is of such significance is that it shapes the attachment patterns that establish what is to become a stable or unstable core self" (p. 6). Citing recent findings on the psychophysiology of stress, he links trauma, at any point in the life span, to autonomic hyperarousal, "a chaotic and terrifying flooding of affect that can threaten to overwhelm sanity and imperil psychological survival" (p. 33). He then describes how dissociation is automatically and immediately triggered as the fundamental defense to the arousal dysregulation of overwhelming affective states.

Indeed a major theme of the book is the detailed exploration of the essential and unique role of dissociation in early development, psychopathogenesis, and particularly within the intersubjective field of the therapeutic alliance. He deduces, "In the face of psychological trauma, self-continuity is threatened, and this threat, for most human beings, is countered by the use of dissociation as an evolutionary response that is ... important to survival" (p. 113). Consonant with ongoing research in developmental psychopathology, affective neuroscience, and neuropsychiatry that demonstrates that pathological dissociation is found in all early forming personality disorders, he concludes that adult psychopathology is the end result of the prolonged necessity of an infant to control physiologic and affective states while lacking an experience of human relatedness and trust in the potential for reparation. In the very last chapter Bromberg offers thoughts on the central role of affect regulation in attachment communications and in the therapeutic alliance and cites my work on the interpersonal neurobiology of relational trauma and dissociation.

Expanding on this, in the following section of this review I give a brief but concise outline of my own work in this area. The reader will note there is a remarkable overlap between Bromberg's work in clinical psychoanalysis and my work in developmental neuropsychology, a deep resonance between his treatment model and my regulation theory. The focus of this neuropsychological perspective, as in Bromberg's book, is on early trauma and pathological dissociation, and their enduring impact on the unconscious right brain system over all later stages of the life span. At the end of this discussion, I return to some of Bromberg's essential ideas on the treatment of patients who present with an early history of attachment trauma.

Attachment Trauma, Dissociation, and the Right Brain

The fundamental problem of dissociation is now being viewed through an interdisciplinary lens that bridges the psychological and biological realms. Although an important distinction is made between nonpathological and pathological experiences of dissociation, the focus of my work (Schore, 2001, in press), like Bromberg's is on the latter. As Bromberg notes, the concept of dissociation traces directly back to the work of Pierre Janet in the late 19th century. Janet (1889) defined pathological dissociation as a phobia of memories, expressed as excessive or inappropriate physical responses to thought or memories of old traumas. This dissociation of cognitive, sensory, and motor processes is adaptive in the context of overwhelming traumatic experience, and yet such unbearable emotional reactions result in an altered state of consciousness.

Furthermore, Janet speculated that dissociation was the result of a deficiency of psychological energy ("la misere psychologique"). Due to early developmental factors, the quantity of psychological energy is lowered below a critical point, and thus individuals with characterological dissociation are deficient in binding together all their mental functions into an organized unity under the control of the self. Janet also posited that a history of early trauma plays a fundamental role in the psychopathogenic origins of hysteria. Although in his early writings Freud accepted the idea that developmental trauma is related to the characterological use of pathological dissociation, he later abandoned it and posited that repression and not dissociation was the primary mechanism of psychopathogenesis.

Recent developmental studies strongly support Janet's ideas about early trauma and dissociation and clearly indicate that experiences with a traumatizing caregiver negatively impact the child's attachment security, stress coping strategies, and sense of self. In a number of works I have suggested that recent data on the neurobiology of attachment must be incorporated into an overarching model of dissociation (Schore, in press). To summarize modern attachment theory, the essential task of the first year of human life is the creation of a secure attachment bond of emotional communication between the infant and the primary caregiver, and the subsequent expanded capacity for affect regulation. To enter into this communication, the mother must be psychobiologically attuned to the dynamic crescendos and decrescendos of the infant's bodily-based internal states of arousal. To effectively accomplish this interactive regulation, the mother must modulate nonoptimal high or low levels of stimulation,

which would induce supraheightened or extremely low levels of arousal in the infant.

In contrast to this optimal attachment scenario, in a relational growth-inhibiting early environment the primary caregiver induces traumatic states of enduring negative affect in the child. This caregiver is inaccessible and reacts to her infant's expressions of emotions and stress inappropriately and/or rejectingly and therefore shows minimal or unpredictable participation in the various types of arousal regulating processes. Instead of modulating she induces extreme levels of stimulation and arousal, very high in abuse and/or very low in neglect. And because she provides no interactive repair the infant's intense negative affective states last for long periods of time.

Interdisciplinary evidence now indicates that the infant's psychobiological reaction to trauma is comprised of two separate response patterns—hyperarousal and dissociation. In the initial hyperarousal stage the maternal haven of safety suddenly becomes a source of threat, triggering an alarm or startle reaction of the infant's right hemisphere, the locus of both the attachment system and the fear motivational system. The maternal stressor activates the hypothalamic-pituitary-adrenal stress axis, thereby eliciting a sudden increase of the energy-expending sympathetic component of the infant's autonomic nervous system (ANS), resulting in significantly elevated heart rate, blood pressure, and respiration, the somatic expressions of a dysregulated hypermetabolic psychobiological state of fear-terror.

But a second later forming reaction to relational trauma is dissociation, in which the child disengages from stimuli in the external world—traumatized infants are observed to be “staring off into space with a glazed look.” This parasympathetic dominant state of conservation-withdrawal occurs in helpless and hopeless stressful situations in which the individual becomes inhibited and strives to avoid attention to become “unseen” (Schoore, 1994, 2001). The dissociative metabolic shutdown state is a primary regulatory process, used throughout the life span, in which the stressed individual passively disengages to conserve energies, foster survival by the risky posture of feigning death, and allow restitution of depleted resources by immobility. In this passive hypometabolic state heart rate, blood pressure, and respiration are decreased, whereas pain numbing and blunting endogenous opiates are elevated. It is this energy-conserving parasympathetic (vagal) mechanism that mediates the “profound detachment” of dissociation.

It is now established that there are in fact two parasympathetic vagal systems in the brainstem medulla. The ventral vagal complex rapidly regulates

cardiac output to foster fluid engagement and disengagement with the social environment and exhibits rapid and transitory patterns associated with perceptive pain and unpleasantness, all aspects of a secure attachment bond of emotional communication. On the other hand, activity of the dorsal vagal complex is associated with intense emotional states and immobilization and is responsible for the severe hypoarousal and pain blunting of dissociation. The traumatized infant's sudden state switch from sympathetic hyperarousal into parasympathetic dissociation is described by Porges (1997) as "the sudden and rapid transition from an unsuccessful strategy of struggling requiring massive sympathetic activation to the metabolically conservative immobilized state mimicking death associated with the dorsal vagal complex" (p. 75). This work in psychophysiology fits nicely with Bromberg's assertion that trauma associated with autonomic hyperarousal elicits "a chaotic and terrifying flooding of affect that can threaten to overwhelm sanity and imperil psychological survival. The mind's normal capacity for dissociation is typically enlisted as a primary defense" (p. 33).

Porges (1997) described the involuntary and often prolonged characteristic pattern of vagal outflow from the dorsal vagal nucleus. This prolonged state of dorsal vagal parasympathetic activation accounts for the extensive duration of "void" states associated with pathological dissociative detachment (Allen, Console, and Lewis, 1999), and for what Bromberg calls dissociative "gaps" in subjective reality, "spaces" that surround self-states and thereby disrupt coherence among highly affectively charged states. These "gaps" are also discussed in the developmental psychoanalytic literature. Winnicott (1958) noted that a particular failure of the maternal holding environment causes a discontinuity in the baby's need for "going-on-being," and Kestenberg (1985) referred to this as "dead spots" in the infant's subjective experience, an operational definition of the restriction of consciousness of dissociation.

Hesse and Main (1999) pointed out that the disorganization and disorientation of type "D" attachment associated with abuse and neglect phenotypically resembles dissociative states. The underlying mechanism of this can only be understood in neurobiological terms. During episodes of the intergenerational transmission of attachment trauma the infant is matching the rhythmic structures of the mother's dysregulated arousal states. This synchronization is registered in the firing patterns of the stress-sensitive corticolimbic regions of the right brain, dominant for survival (Wittling and Schweiger, 1993). These right hemispheric structures are in a critical period of growth during the early stages of human development and are susceptible to interpersonal stressors (Allman et al.,

2005; Bogolepeva and Maolfeeva, 2001; Chiron et al., 1997; Schore, 1994).

In light of the fact that many of these mothers have suffered from unresolved trauma themselves, this spatiotemporal imprinting of the chaotic alterations of the mother's dysregulated state facilitates the downloading of programs of psychopathogenesis. This growth-inhibiting relational environment is a context for the real-time intergenerational transmission of an enduring susceptibility to attachment trauma and to the unconscious use of a dissociative defense against overwhelming and dysregulating affective states.

The massive psychobiological misattunement of attachment trauma between the infant and primary caregiver thereby sets the stage for the characterological use of right-brain pathological dissociation over all subsequent stages of human development. The characterological use of dissociation by certain personalities is described by Allen and Coyne (1995): "Although initially they may have used dissociation to cope with traumatic events, they subsequently dissociate to defend against a broad range of daily stressors, including their own posttraumatic symptoms, pervasively undermining the continuity of their experience" (p. 620).

In accord with this model, Draijer and Langeland (1999) documented that specifically severe early maternal (and not paternal) dysfunction is associated with level of dissociation in psychiatric patients. Other attachment studies reveal that individuals with a "type D" classification utilize dissociative behaviors in later stages of life. Indeed, hypoarousal and heart rate deceleration has been found in dissociating infants, adolescents, and dissociating adults (Schore, 2003a).

Neurobiological research also demonstrates continuity over the course of the life span of the expression of the primitive autoregulation defense of pathological dissociation in patients with a history of relational trauma. It is now well established that early childhood abuse specifically alters limbic system maturation, producing neurobiological alterations that act as a biological substrate for a variety of psychiatric consequences, including affective instability, inefficient stress tolerance, memory impairment, and dissociative disturbances (Schore, 2002a, b). In a transcranial magnetic stimulation study Spitzer et al. (2004) report, "In dissociation-prone individuals, a trauma that is perceived and processed by the right hemisphere will lead to a 'disruption in the usually integrated functions of consciousness'" (p. 168). And in functional magnetic resonance imaging research, Lanius et al. (2005) showed predominantly right-hemispheric activation in PTSD patients while they are dissociating and concluded that patients dis-

sociate to escape from the overwhelming emotions associated with the traumatic memory and that dissociation can be interpreted as representing a nonverbal response to the traumatic memory.

These and other studies are now exploring the evolution of a developmentally impaired regulatory system over all stages of life and provide evidence that prefrontal cortical and limbic areas of particularly the right hemisphere are centrally involved in the dissociative response. This hemisphere, more so than the left, is densely reciprocally interconnected with emotion processing limbic regions as well as with subcortical areas that generate both the arousal and autonomic (sympathetic and parasympathetic) bodily based aspect of emotions (Spence, Shapiro, and Zaidel, 1996). There is now agreement that sympathetic nervous system activity is manifest in tight engagement with the external environment and high level of energy mobilization and utilization, whereas the parasympathetic component drives disengagement from the external environment and utilizes low levels of internal energy (Recordati, 2003). The stress regulating dynamic uncoupling of the two components of the ANS thus underlies the description that “dissociation is conceptualized as a basic part of the psychobiology of the human trauma response: a protective activation of altered states of consciousness in reaction to overwhelming psychological trauma” (Loewenstein, 1996, p. 312).

Pathological dissociative detachment represents a bottom-line defensive state driven by fear-terror, in which the stressed individual copes by pervasively and diffusely disengaging attention “from both the *outer and inner* [italics added] worlds” (Allen et al., 1999, p. 164). I have suggested that the “inner world” is more so than cognitions, the realm of bodily processes, central components of emotional states (Schore, 1994). In line with the current shift from cold cognition to the primacy of bodily based affect, clinical research on dissociation is now focusing on “somatoform dissociation.” According to Nijenhuis (2000), somatoform dissociation is an outcome of early onset traumatization, expressed as a lack of integration of sensorimotor experiences, reactions, and functions of the individual and his or her self-representation. Thus, “dissociatively detached individuals are not only detached from the environment, but also from the self—their body, their own actions, and their sense of identity” (Allen et al., 1999, p. 165). This observation describes impaired functions of the right hemisphere, the locus of the “emotional” or “corporeal self.” According to van der Kolk and colleagues (1996), “Dissociation refers to a compartmentalization of experience: Elements of a trauma are not integrated into a unitary whole or an integrated sense of self” (p. 306).

In a number of works I have offered interdisciplinary evidence that indicates that the implicit self, equated with Freud's System *Ucs*, is located in the right brain (Schore, 1994, 2003b, c, 2005). The lower subcortical levels of the right brain (the deep unconscious) contain all the major motivational systems (including attachment, fear, sexuality, aggression, etc.) and generate the somatic autonomic expressions and arousal intensities of all emotional states. On the other hand, higher orbitofrontal-limbic levels of the right hemisphere generate a conscious emotional state that expresses the affective output of these motivational systems. This right lateralized hierarchical prefrontal system, the system *Pcs*, performs an essential adaptive motivational function—the relatively fluid switching of internal bodily based states (Bromberg's self-states) in response to changes in the external environment that are nonconsciously appraised to be personally meaningful.

On the other hand, pathological dissociation, an enduring outcome of early relational trauma, is manifest in a maladaptive highly defensive rigid, closed system, one that responds to even low levels of intersubjective stress with parasympathetic dorsal vagal parasympathetic heart rate hypoarousal and deceleration. This fragile unconscious system is susceptible to mind–body metabolic collapse, Janetian energy failure, and thereby a loss of energy-dependent synaptic connectivity within the right brain, expressed in a sudden implosion of the implicit self and a rupture of self-continuity. This collapse of the implicit self is signaled by the amplification of the parasympathetic affects of shame and disgust and by the cognitions of hopelessness and helplessness. Because the right hemisphere mediates the communication and regulation of emotional states, the rupture of intersubjectivity is accompanied by an instant dissipation of safety and trust.

Dissociation thus reflects the inability of the right brain cortical–subcortical implicit self-system to recognize and process external stimuli (exteroceptive information coming from the relational environment) and on a moment-to-moment basis integrate them with internal stimuli (interoceptive information from the body, somatic markers, the “felt experience”). This failure of integration of the higher right hemisphere with the lower right brain induces an instant collapse of both subjectivity and intersubjectivity. Stressful affects, especially those associated with emotional pain, are thus not experienced in consciousness (Bromberg's “not-me” self-states).

Kalsched (2005) described operations of defensive dissociative processes used by the child during traumatic experience by which “affect in the body is severed from its corresponding images in the mind and thereby an un-

bearably painful meaning is obliterated.” There is now agreement that “traumatic stress in childhood could lead to self-modulation of painful affect by directing attention away from internal emotional states” (Lane et al., 1997, p. 840). The right hemisphere is dominant not only for regulating affects but also for attention (Raz, 2004) and pain processing (Symonds et al., 2006), and so the right-brain strategy of dissociation represents the ultimate defense for blocking emotional pain. These dynamics are common in suicidal states of mind, and indeed studies now show a tight relationship between suicidal behavior, very high levels of dissociation, and right hemisphere dysfunction (Weinberg, 2000).

At all points of the life span, although dissociation represents an effective short-term strategy, it is detrimental to long-term functioning, specifically by preventing exposure to potential object relational learning experiences embedded in intimate intersubjective contexts that are necessary for emotional growth. As Bromberg notes, the function of pathological dissociation is to act as an “early warning system” that anticipates potential affect dysregulation by anticipating trauma before it arrives. If early trauma is experienced as “psychic catastrophe,” dissociation represents “detachment from an unbearable situation,” “the escape when there is no escape,” “a submission and resignation to the inevitability of overwhelming, even psychically deadening danger,” and “a last resort defensive strategy” (see references in Schore, 2003a). It thus represents a major obstacle to the emotional–motivational aspects of the intersubjective change process in affectively focused psychotherapy.

Some Thoughts on Bromberg’s Perspective of Treatment

Throughout this rich volume Bromberg repeatedly demonstrates the absolute necessity of attending to dissociative processes in the clinical encounter and convincingly demonstrates dissociation, and not repression, is the major driver of psychopathogenesis and thereby a major focus of therapy. Most of the clinical phenomena he describes are expressed in rapid nonverbal emotional communications at levels beneath conscious awareness within the dynamic intersubjective field. In recent writings in this journal I have described the essential role of the right and not left brain in the moment-to-moment transactions of affect engagement and disengagement within the intersubjective field (Schore, 2005). As I offer the following thoughts about Bromberg’s approach to treatment, I must admit a personal

bias, because his style of working with such patients is very similar to my own.

The book contains numerous case vignettes, with special attention to the emergence of dissociation in an enactment, a clinical moment “that requires an analyst’s closest attunement to the unacknowledged affective shifts in his own and the patient’s self-states” (p. 5). He notes that in these stressful co-constructed intersubjective contexts it is essential that the clinician is attuned to the patient’s ongoing experience of safety and danger, especially to the patient’s hyperarousal of affect, “*created by the therapy itself* [italics added]” (p. 122). In line with my own work on rupture and repair, he views enactments as not technical mistakes but opportunities for focusing on even low levels of dissociative defenses, negotiating the enactment, and potentially expanding the patient’s affect tolerance. Of interest, he observes that an interpretative stance actually “escalates the enactment and rigidifies the dissociation” (p. 8). Notice that a mistimed left hemispheric intervention exacerbates this right-brain survival response.

Bromberg emphasizes the importance of nonverbal affective communications across the co-constructed intersubjective field. He argues that when the therapist gives up trying to “understand” the patient (shifts out of the left brain), and instead creates (right brain) attempts to “know his patient through the ongoing intersubjective field they are sharing at that moment, an act of recognition (not understanding) takes place” (p. 11). In such dyadic work the most difficult task is the clinician’s detection of shame affect in both himself and the patient, shame that is intrinsic to the self-revelation of psychotherapy. “The reason that seemingly repeated enactments are struggled with over and over again in the therapy is that the analyst is over and over pulled into the same enactment to the degree he is not attending to the arousal of shame” (p. 80). Recall in the last section I stated that shame, like dissociation is mediated by the energy-conserving parasympathetic ANS. Shame has been a focus of my own work (Schore, 1991, 1998), and I absolutely agree with Bromberg’s assertion that the therapist’s awareness of her countertransferential shame dynamics is a fundamental though often overlooked factor in working effectively with patients who are exquisitely sensitive to shame-humiliation.

Furthermore, the clinician’s interactive regulation of the patient’s communicated affect is a central mechanism of the treatment:

One of our goals as analysts is to enable our patients to experience a spontaneous overflow of powerful feelings as safe rather than fearsome and shameful. If therapy is to provide a tranquil context for the

relieved emotion ... what is needed? My answer: a safe enough interpersonal environment. One that has room for both the analyst's affective authenticity and an enacted replaying and symbolization of early traumatic experience that does not blindly reproduce the original outcome. (p. 173)

Bromberg points out that when the dissociated affect is experienced on both sides of the intersubjective field he does not interpret it or give it meaning but rather focuses on the structural implications of the experience, the effect on the patient's mental functioning.

In ongoing intersubjective attunements, collisions, and repairs, the therapist's task is to facilitate the affect processing becoming safer and safer, "so that the patient's tolerance for potential flooding of affect goes up; that is, the threshold for autonomic hyperarousal increases" (p. 79). Consequently, "the patient can increasingly process, in the moment, the full complexity of the relational experience (in all its vivid here-and-nowness) with less and less need for dissociative process" (p. 79). Thus for Bromberg therapeutic change is not caused by insight but rather is scaffolded by "the felt immediacy and increased intimacy" of the attuned intersubjective context that allows for the interactive regulation of the patient's hyper- and hypoarousal. I would add that toward this end the clinician's ability to track somatoform dissociation is an important element of the somatic countertransferential processing of interoceptive stimuli triggered by the intersubjective context.

With less automatic access to the affect-deadening defense of dissociation the patient can now consciously experience, communicate, and interactively regulate a wider array of affects in the intersubjective field, and thereby integrate them into her right brain implicit self:

When the therapist is able to relate to each aspect of the patient's self in terms of its own subjectivity, each part becomes increasingly able to coexist with the rest and in that sense is more subjectively linked to the others. This linking of self-states necessarily increases a person's sense of wholeness, but the active ingredient in treatment that makes this possible is human-relatedness [p. 27].

Note the similarity of this conception to my own studies in right-brain interpersonal neurobiology on the effects of the expansion of the affect array: "The core of the self lies in patterns of affect regulation that integrate a sense of self across state transitions, thereby allowing for a continuity of inner experience" (Schore, 1994, p. 33).

Awakening the Dreamer is in essence a deep exploration of the central roles of early trauma and the survival defense of dissociation in the psychotherapeutic context, especially with patients who possess a limited self-reflective capacity. As such, it is the most important work on the topic since Henry Krystal's (1988) pioneering volume. In emphasizing the fundamental importance of trauma and dissociation Bromberg sets forth a challenge to the field:

If psychoanalysis is to remain a theory relevant to understanding the mind, and a therapeutic process relevant to healing the mind, certain concepts, such as unconscious conflict, interpretation of resistance, and unconscious fantasy, need to be rethought in light of our current understanding of self-states and dissociation. (p. 2)

The concepts of trauma and dissociation have been a source of controversy since the dawn of psychoanalysis, a seminal period in which Freud discovered and then discarded both Janet and his neuropsychanalytic "Project for a Scientific Psychology" (Schore, 1997). Recent clinical and experimental psychological and biological data clearly indicate that trauma, especially chronic trauma, elicits more than a disruption of conscious cognition and a disorganization of overt behavior. Rather, early relational trauma and dissociation negatively impact survival mechanisms that operate beneath levels of awareness, in the deep core of the unconscious. Bromberg's book represents a valuable contribution of psychoanalysis, the science of unconscious processes, to the ongoing interdisciplinary effort to formulate a clinically applicable model of trauma on mind and body.

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