Attachment as a Transformative Process in AEDP:

Operationalizing the Intersection of Attachment Theory and Affective Neuroscience

Benjamin Lipton, LCSW & Diana Fosha, PhD

Abstract. While many models of individual psychotherapy acknowledge the significance of attachment theory for clinical work, Accelerated Experiential Dynamic Psychotherapy (AEDP) seeks to operationalize the intersection of attachment and affective neuroscience to introduce innovations in its clinical practice. AEDP's stance and techniques aim to (i) foster attachment security through the clinical process and (ii) harness the transformative resilience of secure attachment to potentiate deep and lasting psychological change. Viewing secure attachment as a transformative experience, case vignettes offer examples of AEDP attachment-based work: moment-to-moment experiential work processing attachment security as a powerful new *experience*; and then, its meta-therapeutic processing. Integrating a new, positive relational experience in the here-and-now organically evokes the painful experiences of the original relational trauma. Thus, traumatic memories are also worked through in the service of positive psychological transformation

Key words: attachment, neuroscience, AEDP, transformation, trauma, experiential, stress, right brain.

Introduction

Many models of individual psychotherapy acknowledge the significance of attachment theory for clinical work. However, Accelerated Experiential Dynamic Psychotherapy (AEDP) has sought to clinically and technically *operationalize* the understanding emerging at the intersection (Schore, 1996, 2001, 2009) of attachment (Bowlby, 1977, 1982, 1988; Cassidy & Shaver, 1999) and affective neuroscience (Panksepp, 1998, 2009), and explicitly use that understanding to introduce innovations in its clinical practice (Fosha, 2000, 2001, 2003, 2006, 2008, 2009; Fosha & Yeung, 2006; Gleiser, Ford, & Fosha, 2008; Russell & Fosha, 2008). While AEDP certainly affirms the essential need for empathy, positive regard, support, responsiveness, etc. that are emphasized by so many of the models of psychotherapy that reference attachment theory (Cassidy & Shaver, 1999), it differs from them in the rootedness of its practice in affective neuroscience and the moment-to-moment phenomenology of attachment, and in its determination to apply the synthesis of these two strands of knowledge to clinical action. AEDP holds firmly in both heart and mind what Peter Fonagy once said in a different context: "If the present set of ideas is intended to simply to justify and entrench current methods of practice, they are of far less import than would be the case if changes in technical priorities follow from them" (1998, p. 352). In AEDP, "changes in technical priorities," as well as in the fundamental stance of the therapist, follow directly from the powerful constructs of attachment.

AEDP also differs from most models of psychotherapy in its belief that, even in adults with histories of attachment trauma, the capacity for secure attachment is there for the activating -- *in the right environment* -- from the get-go, and not *only* the eventual outcome of an unusually successful therapy. The recognition of the existence and force of our neurobiologically wired in strivings toward healing and self-repair, which exist as tenacious dispositional tendencies for transformation (Doidge, 2007; Fosha, 2009), is a defining aspect of AEDP's notion of *transformance* (Fosha, 2008). Facilitating those circumstances that entrain transformance strivings, and, more specifically, entrain the potential for secure attachment, is a fundamental intention behind AEDP's therapeutic stance.

In this paper, we first outline the theoretical and neuroscientific knowledge related to the concept of attachment, the platform upon which AEDP builds a primary component of its clinical orientation. We then discuss how AEDP harnesses this neurobiologically based understanding of attachment phenomena in the service of innovative techniques which aim to 1) foster attachment security through the clinical process and 2) harness the tremendous and transformative resilience that secure attachment engenders to potentiate deep and lasting psychological change for the better.

Case vignettes --transcribed verbatim from videotaped clinical sessions-- offer specific examples of AEDP attachment-based work in action: first, moment-to-moment experiential work with attachment security as a powerful new *experience* needing to be processed (Vignette 1); and then, metatherapeutic processing of the secure attachment

experience (Vignette 2). Viewing emergent secure attachment as a potentially transformative experience in and of itself, we show how to work with it both explicitly and experientially. Recognizing and integrating a new, positive relationship in the here-and-now organically evokes its historical contrast--the painful experiences of the original relational trauma. In so doing, it also allows traumatic memories to be worked through in the service of positive psychological transformation.

Attachment and Affective Neuroscience

A newborn infant clings to her caregiver. A baby gazes wide-eyed in his mother's eyes as he nurses. A toddler cries out for solace when overcome with distress, and finds comfort and reassurance in a soothing voice and warm embrace. It is well known by now that our brains are wired from birth to connect, not only at the microscopic level of synapses and dendrites, but also at the macroscopic level of primary relationships (Solomon and Siegel, 2003). Early attachment relationships shape an infant's neurobiology and set the course for his or her future biopsychosocial self (Schore, 1994, 2009). Mediated by the greater social environment, this bi-directional, dyadic process directly influences the final wiring of our brains and organizes (or disorganizes) our future social and emotional coping capacities.

> "The attachment relationship…directly shapes the maturation of the infant's right brain, which comes to perform adaptive functions in both the assessment of visual and auditory socio-emotional communication signals and the human stress response…The ultimate product of this social-emotional development is a particular system in the pre-frontal areas of the right brain that is capable of regulating

> emotions…including positive emotions such as joy and interest as well as negative emotions such as fear and aggression" (Schore, 1996, p. 63).

Because sub-cortical systems of the infant brain are dominant for the first three years of life, and because the neurobiology of emotional experiencing "resides" in the right brain, infant attachment, seen through the lens of neurobiology, occurs primarily through what have come to be known as right-brain-to-right-brain interactions (Schore, 1996, 2001, 2009; Trevarthen, 2001). Put simply, early history is recorded experientially, not linguistically, through *face-to-face*, *body-to-body* processes of affective communication between infant and caregiver.

Beginning at birth, right-brain-to-right-brain, contingent processes such as holding, touch, gaze sharing, face to face contact, entrained vocal rhythms, and spontaneous moments of play and delight are crucial for (i) the regulation of the autonomic nervous system, (ii) optimal brain development, (iii) the emergence of stress- and affect-regulation, and (iv) the creation of secure attachment (Lyons-Ruth, 2006; Porges, 2009; Schore, 1996). Our earliest perceptions of both safety and danger are pre-linguistic and somato-sensory: we carry these non-verbal markers of self-states with us throughout our lives. Additionally, because the hippocampus, a region of the brain responsible for organizing our memories in an "autobiography" of time and space, is not fully functioning until 1.5 to 3 years of age (Nelson, Thomas & De Haan, 2006), early organization of emotional experience remains quite literally a *felt* experience that emerges untethered by chronology or

geography.

Amidst this early environment in which a baby comes into being through her contingent relationship with her caregiver, it is essential to recognize that affect regulation is not only a process aimed at down-regulating the affective intensity of negative emotions. As Schore observes (2001), contingent affect regulation also demands an opposite response, namely the amplification and intensification of positive emotion as a pre-condition for more complex self-organization. Thus, adaptive attachment not only requires dyadic striving toward repair on the heels of a child's dysregulated, negative state. It also demands the dyadic amplification of positive states.

In AEDP, we conceptualize these emergent moments of an infant's positive experience as manifestations of transformance strivings: adaptive, self-righting strivings that are wired-in to the infant's brain from the get-go, but require attuned responsiveness to catalyze. The ability of the infant-caregiver dyad to successfully facilitate and amplify these transformance strivings not only creates an experience of safety, but also a positively charged curiosity that fuels the budding self's exploration of self, other and the environment at large. This ability to explore is a primary marker of infant mental health and an *in vivo* example of transformance in action.

Secure Attachment

When all goes well enough in the moment-to-moment relationship between infant and caregiver, the child is able to make good use of the caregiver's attuned efforts to help

regulate his bio-psycho-emotional state. As the child's brain grows, the infant has an increasing diversity of means by which to actively seek out his caregiver as a*secure base* during times of need or danger (Ainsworth et al., 1978; Bowlby, 1988). This experience of secure attachment provides the child with a feeling of safety in the world, readily de-activates the attachment seeking system, and motivates him toward ever widening exploration of the world around her.

What then is required of the infant-caregiver dyad in order to fuel this neurobiological engine of safe, secure attachment? Several decades of research on the moment-to-moment (and even millisecond-to-millisecond) interactions between mothers and their babies tells us that reiterative, ongoing cycles of attunement, disruption and repair in the context of emotional experiencing are the essential building blocks of secure attachment (Beebe and Lachmann, 2002; Tronick, 1989, 1998). While no parent can attune perfectly to their child's needs at every moment, a secure caregiver's overarching disposition toward *repair* and *responsiveness to their child's signals for help* lays the groundwork for a relationship that facilitates the internalization of safety and security in the world (Cassidy, 2001; Winnicott, 1965). Understood this way, disruption, an inevitable part of any interpersonal relationship, becomes an opportunity for repair, a necessary stop on the road to relational growth and the further strengthening of positive connection (Fosha, 2000; Tronick, 1998).

The caregiver's desire to repair a disruption is necessary, yet not sufficient, for

establishing secure attachment. The concept of *affective competence* (Fosha, 2000), the caregiving equivalent of a high emotional IQ, is useful to further elaborate the functional requirements for this optimal dyadic relationship to take root. In order for a caregiver to respond helpfully to a child's verbal or nonverbal cries for help, she must be able to regulate her own emotional experience simultaneously with that of her child's. A crucial aspect of the capacity for emotional self-regulation is what Fonagy (1999) used to label the "reflective self-function" and now calls "mentalization" (Fonagy, Gergely, Jurist, and Target, 2002), and what in the current zeitgeist is termed "mindfulness" (Siegel, 2007; Wallin, 2007). This reflective capacity needs to be online and in action. The caregiver's ability to experience her child as a separate individual with a resonant but distinct subjective experience is essential for affect regulation and self-development (Fonagy, 1999). Fosha (2000) emphasizes the relational thrust of these intrapsychic processes and describes the fundamental importance of "going beyond mirroring" and *actively helping* to facilitate the recovery from a rupture and the return to dyadic attunement and coordination. She writes,

> "The roots of security and resilience are to be found in the sense of being understood by and having the sense of existing in the heart and mind of a loving, caring, attuned and self-possessed other, an other with a heart and mind of her own (Fosha, 2003, p. 228)."

As we will see below, these constructs --affective competence, dyadic affect regulation, reflective self function, responsiveness to repair-- which are the constituent aspects of secure attachment, specifically and explicitly inform the AEDP therapist's clinical

stance and guide the specific clinical interventions through which these constructs become operationalized in AEDP.

Insecure and Disorganized Attachment

Thus far, we have described the processes at play in the development of secure attachment. But what happens when the necessary components for fostering security and safety during times of distress are absent or significantly impaired? What happens, for example, when a caregiver's own insecure or disorganized attachment style inhibits his reflective self-function and ability for affect regulation? In these caregiver-child dyads, chronic disruption may run roughshod over healthy relating.

In the absence of movements toward repair, attachment systems remain on bi-directional high alert. The inability of the caregiver to offer leadership in regulating intense emotions signals to the infant that it is unsafe to maintain full emotional connection in these moments. And yet, the baby is dependent upon the caregiver for survival. This predicament results in strategies on the part of the infant to establish at least a shadow state of safety and security with her caregiver. Thus, in order to salvage connection with her caregiver and the feeling of safety in her world, the child must resort to the*defensive exclusion* (Bowlby, 1988) of fundamentally adaptive affective experiences. The governing rule becomes that, regardless of the cost to the self, all emotions which dysregulate the caregiver must be banished: the child must not know what she knows and she must not feel what she feels (Bowlby, 1979). It is in these dark lands--where the perception of danger

lurks unchecked, where adaptive emotions prove too threatening, and where successful repair is often absent--that the seeds of psychopathology flourish. The familiar classifications of Insecure-Avoidant and Insecure-Ambivalent attachment are the result of strategies to repair a relational rupture in the caregiver-child dyad and reflect best efforts in untenable situations. In the realm of severe physical and relational trauma in which the terrified child is confronted with the impossible task of somehow seeking safety from a caregiver who is the source of the fright we find Disorganized attachment: it is the result of an untenable situation, where the child has to contend with "fear without solution" (Hesse & Main, 1999, 2000).

Just as the feeling and experience of secure attachment discussed earlier is rooted in the pre-linguistic, somato-sensory-motor structures of the right brain, so too is the feeling and experience of danger (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005), as well as the feeling and experience of rejection, abandoment, and neglect (Schore, 2009). Recalling that the hippocampus is not fully available for processing memories until a child is 18 to 36 months of age (Nelson, Thomas & De Haan, 2006), early attachment trauma can be understood as the result of a caregiver's failure to regulate body-based stimuli, and the feeling of danger and chronic stress that results. The child's perceived danger in these situations is right-brain mediated and, at this point in her development, implicitly, not explicitly, remembered (Ogden, 2009; Schore, 2009). As van der Kolk (1996) now famously states, "the body keeps the score." It is this recognition of the salient role of

somato-sensory-motor, right-brain mediated processes in chronic, early relational trauma that provides us with a neurobiological context for making sense of PTSD symptoms, i.e., flashbacks, body sensations, startle responses, behavioral impulses, shame; and*a fortiori*, of the symptoms of complex PTSD, i.e., somatic and emotional dysregulation, hyper- and/or hypoarousal, profound mistrust, shame, dissociation, etc. (Fosha, Paivio, Gleiser & Ford, 2009; Gleiser, Ford & Fosha, 2008).

In the absence of external assistance with affect regulation, or when the caregiver is the source of stress and danger, overwhelming emotional events suppress hippocampal activity and may cause permanent shrinking to this part of the brain; they also leave the amygdala, the part of the brain with the primary role of appraising danger and threat, on high alert in a chronic state of activation (Schore, 2003). We now know that chronic, unregulated affective, somato-sensory-motor experiences lead to hyperarrousal of the sympathetic nervous system (SNS) resulting in long-term symptoms such as sleep disturbance, chronic pain, muscle tension, panic, chronic rage, weakness, exhaustion, concentration deficits, etc. Overwhelming threat may also lead to the simultaneous activation of the SNS and PNS resulting in the dissociative freeze response (Levine, 1997; Ogden, Pain, & Minton, 2006; Porges, 2009). States of greatest threat may lead to the activation of the dorsal vagal branch of the parasympathetic nervous system (PNS) and accompanying symptoms of hypoarousal, such as muscle weakness, depression, chronic fatigue and gastro-intestinal symptoms, as well as the potentially life-threatening analgesic

effects of tonic immobility in the face of mortal danger (Porges, 2009). Later, the threshold lowered, traumatic events may then be more easily recorded in sub-cortical, implicit memory either because the amygdala does not succumb to stress hormones and/or because the hippocampus is under-developed due to earlier, chronic trauma.

Trauma also compromises the flow of information between the hemispheres: it activates the right brain, it deactivates the left brain (Lanius, Williamson, Densmore et al., 2001; Rausch, van der Kolk, Fisler et al., 1996); and it compromises the corpus callosum (Teicher, 2002). Traumatic experience and contingent communication are like oil and water: They don't mix:

> "Exposed to traumatic reminders, subjects had cerebral blood flow increases in the right medial orbitofrontal cortex, insula, amygdala, and anterior temporal pole, and a relative de-activation in the left anterior prefrontal cortex, specifically in Broca's area, the expressive speech center in the brain, the area necessary to communicate what one is thinking and feeling. {these studies demonstrated that] when people are reminded of their traumas, they activate brain regions that support intense emotions, while sharply decreasing the capacity to inhibit emotional expression and to translate experience into communicable language" (van der Kolk, 2006, p. 2).

Putting it all together: chronic misattunement between caregiver and child leads to non-optimal levels of stress and eventually to insecure or disorganized attachment; disorganized or insecure attachment both causes, and predisposes the individual to, trauma (i.e., being alone with and overwhelmed by unbearable, unregulated affective experiences); stress and trauma damage both cortical and sub-cortical structures of the brain, further reinforcing a cycle of persistent and pernicious stress in the absence of affect regulatory

strategies, which interferes with optimal attachment (Lyons Ruth, 2006), and regulated, contingent emotional expression and communication. Put simply, early relational trauma carves its way deeply into body, brain, and nervous system. At the microscopic level, this may look like a shrunken hippocampus, or an overactive right amygdala, or chronically high levels of cortisol wreaking havoc on one's physiology (Schore, 2009). At the macroscopic level, we are likely to see the familiar symptoms of affect dysregulation that present extreme challenges to developing safe, adaptive and satisfying relationships both intra-psychically and interpersonally (van der Kolk, et al., 2005).

AEDP: Applying Attachment Theory and Neuroscience in Clinical Practice

Grounded firmly in an understanding of the bidirectional relationship between neurobiology and the phenomenology of attachment, AEDP offers an attachment and brain-based, relationally rooted, affective model of how therapeutic change takes place (Fosha, 2000, 2003, 2006, 2008, 2009; Fosha & Yeung, 2006; Russell & Fosha, 2008). The primary agent of this change is a patient's emergent capacity for deep, somatically based connection to her emotional experience in the context of a safe, secure relationship with a therapist who embodies the characteristics of a loving, attuned and self-possessed other (Fosha, 2000). From the get-go, AEDP therapists strive to actively and explicitly foster secure attachment by offering a new experience of emotional safety. The stance is intentionally positive. In a clear-cut departure from neutrality, the AEDP therapist takes a page from security engendering mothers: the aim is to maximize time spent in positive

attuned interactions and the positive affects that accompany them, and to as rapidly as possible metabolize the negative affects associated with misattunements and disruptions, so as to restore coordination and positive affective experience. The positive tone of the relational experience is crucial. Positive vitalizing experiences and positive dyadic interactions are the stuff of secure attachment, the stuff of resilience, and the stuff of growth and expanding health and mental health (Fosha, 2009; Fredrickson, 2001; Lyons Ruth, 2006; Russell & Fosha, 2008; Schore, 2001).

> "... [T]he earliest phases of intentional sharing also involves the exchange of positive affects, with the goal of maintaining a predominantly positive shared state between the infant and the parent. The maintenance of an ongoing, positively toned engagement with the infant is foundational to the reduction of fearful physiological reactivity in the first year of life and therefore foundational to the infant's overall sense of felt security and stress modulation" (Lyons Ruth, 2006, p. 606).

Stance

The AEDP therapeutic stance is welcoming, encouraging, affirming, and emotionally engaged. It is focused not only on the patient's intrapsychic experience, but also on the "we-ness" of the therapeutic process (Fosha, 2000, 2001; Prenn, 2009). Recognizing relational trauma as a result of unbearable aloneness in the face of overwhelming emotions (Fosha, 2003), aloneness that stems from failures of earlier attachment relationships to sufficiently regulate affective experiences, an AEDP therapist explicitly conveys-- through his self-possessed warmth, emotional availability, and desire to know and embrace the full range of a patient's emotional experiences-- that, this time

around, things will be different (Fosha, 2000, 2003, 2009). To begin with, we want the patient to *experience* that we welcome all her feelings, including those which her relational history required her to disavow, defend against, or cordon off from experience and expression. This stance is crucial to facilitating the emergence of transformance strivings, self-righting, and entraining the self-at-best (Fosha, 2006, 2009), and thus having a more resourced patient for the journey ahead.

The dyadic regulation of emotional and relational experience

Generating both intrapsychic and interpersonal safety for a patient clearly requires more than desire, intention or intellectual understanding of a particular psychological theory, even when that theory is as robust as attachment theory. It requires specific clinical actions. Informed by what decades of developmentalists and attachment researchers have shown to directly facilitate secure attachment between mothers and their babies (Ainsworth et al., 1978; Beebe & Lachmann, 2002; Fonagy, 1999; Stern, 1985; Trevarthen, 2001; Tronick 1998), AEDP technique emphasizes right-brain-to-right-brain communication and bottom-up, experientially driven interventions for affect regulation and emotion processing. Implicit in this statement, but made explicit in AEDP treatment, is the understanding that the therapeutic process is not a solo act. The AEDP therapist, like the security-engendering caregiver, is proactively engaged, affirming, and available to actively help his patient

regulate difficult emotions and organize confusing experiences (Fosha, 2000, 2001). In addition, the AEDP therapist is on the lookout for transformance strivings and glimmers of resilience, which, when detected, are recognized, and amplified through affirmation and resonance in an acquisitive effort to build the self-at-best. Attuned to affect, somatic markers, and non-verbal communication, the AEDP therapist recognizes that the right-brain speaks a language of experience, not words, and thus would be much more likely to ask a patient, "What are you *experiencing* right now as we are here together?" than "What are you *thinking* right now [on your own]?"

Aware that psychological defenses against emotions and relatedness result from earlier attachment failures, and the patient's best attempt at survival in a prior, affect-inimical environment, the AEDP therapist does not often challenge defenses, but rather responds to them with empathy and compassion (Fosha, 2000). In doing so, the therapist opens the door to a newfound experience of safety for the patient. No longer under attack nor being disavowed, a patient's defenses are less necessary and therefore more readily relinquished. In order for these new ways of being to emerge, a patient needs to feel more than cared for and respected: She must also experience her capacity to successfully make a perceptible --and welcomed-- impact upon her therapist. The glue of attachment relationships, after all, is their bi-directionality (Beebe & Lachmann, 2002). Each member of the dyad is able to impact upon and contingently respond to the other, thus shaping each successive moment in the unfolding history of the relationship (Siegel, 2003; Winnicott,

1975). In order to catalyze a patient's sense of self-efficacy and relational competence, and in doing so, to undo aloneness and build trust, a therapist must also be willing to comfortably and mindfully self-disclose his own experience (Prenn, 2009, this volume).

Like the security engendering caregiver, the therapist who is able to receive and engage with all emotional communications (Cassidy, 1994) that the patient brings into the dyad fosters the patient's access to all those experiences in her/himself (Bowlby, 1991). Through thus exploring the experience and meaning of what the individual has just gone through, and sharing it with an accepting, affirming other, we do not only solidify, deepen and extend the transformational experience; we also further strengthen attachment security which is rooted in difficult experience, successfully traversed together.

Experience and reflection: Metatherapeutic processing of therapeutic experiences

The *experience* of secure attachment that results from the successful application of these techniques, *in and of itself*, is necessary but often insufficient to cement enduring psychological change. In processes of psychological transformation, experiential shifts and intentional reflection upon those shifts are *both* necessary in equal measure (Fonagy, 1999; Fosha, 2000, 2009; Wallin, 2007). The attachment researchers who have developed the extraordinarily successful *Circle of Security* Early Intervention program state this clearly as one of their basic treatment assumptions: "We do not learn from our experience, we learn from standing back and reflecting on our experience" (Circle of Security, 2009).

Likewise, AEDP asserts that in order for a patient to make use of an experience of

change for the better, first, she must have the experience, but then, she must also*know* that she has had the experience. In AEDP practice, once the experiential right-brain-to-right-brain work has yielded access to the core emotional and/or relational experience, and it has been processed thoroughly, we then seek to actively engage the representational level: we join in a collaborative process of reflecting upon the experiential process of change in the context of the therapeutic dyad. We call this dyadic endeavor ”meta-therapeutic processing” (Fosha, 2000, 2009).

> "Through meta-therapeutic processes, that is, through acknowledging and owning healthy functioning, resources and emotional capacities, patients gain access to solidly based self-confidence in being able to handle emotional situations, and even score an occasional triumph in the face of emotional adversity, without fear of being overwhelmed. They grow confident that they can participate in creating positive relational experiences, and that they can readily identify such situations when they arise. Confidence in one’s abilities and belief in the possibility of meaningful, mutually satisfying relating are important underpinnings of interpersonal relating" (Fosha, 2000, p. 177).

In this article, we focus specifically on an essential transformational experience for patients with relational trauma, namely the*patient's positive experiences of attachment itself within the here-and-now of the therapy relationship.* When brought to the foreground of the therapeutic dyad's mindful attention and then experientially explored, the*positive phenomenon of relational security* is itself a powerful, embodied affective experience. We want to metaprocess the patient's experience of attachment with the same interest and rigor we devote to the metaprocessing of any other transformational or therapeutic experience.

For many patients, experiencing and then reflecting on the experience of secure attachment, with the very person with whom it is being felt, often spontaneously catalyzes healing experiences of adaptive grief; the new process of positive relating sheds light on old attachment traumas which can then be mourned and worked through to completion (Fosha, 2000).

The patient's nascent capacity to generate an increasingly coherent, cohesive and complex autobiographical narrative, the single best predictor of security of attachment and resilience in the face of trauma (Fonagy, 1999, Main, 1999; Siegel, 2003), becomes increasingly robust through the *alternating rounds of experience and reflection*. Metaprocessing inculcates a self-reflective capacity, engages the *self-related processing* structures of the brain (Panksepp and Northoff, 2008), changes internal working models, and inscribes experience in time and space.

Through meta-therapeutic processing, or *metaprocessing* for short, the secure attachment relationship between patient and therapist becomes the vehicle through which a patient's right-brain experiencing of psychotherapy is integrated with her left-brain, conscious, verbal knowing that a therapeutic experience has just occurred. The dyadic affect regulation characteristic of metaprocessing entrains the integrative structures of the brain, i.e., the corpus callosum, the prefrontal cortex (especially the right prefrontal cortex shown to mediate emotionally loaded autobiographical narrative, Siegel, 2003), the insula, and the anterior cingulate (Lanius et al., 2004; van der Kolk, 2006). These structures, hypothesized

to play a central role in attachment, have been shown to be adversely affected by trauma (Teicher, 2002), and to play a significant role in the healing from trauma through the coordination of left-brain and right brain aspects of emotional experience, as well as of somatic and perceptual aspects (Lanius et al., 2004; van der Kolk, 2006).

The Functional Position of Secure Attachment in AEDP Practice

In AEDP, (i) the development of the attachment relationship, and (ii) the processing of heretofore unbearable emotions to adaptive completion are inextricably intertwined. Each fosters the deepening and solidifying of the other. In the emergent literature on attachment-informed experiential psychotherapies, including AEDP (Fosha, Siegel, & Solomon, 2009; Solomon & Siegel, 2003), the focus has been on secure attachment as a necessary pre-requisite and foundation for the deep, emotion-focused explorations into the darker places of unresolved relational trauma, as well as the lighter, brighter places of positive spiraling transformational experiences (Fosha, 2009; Hughes, 2009; Johnson, 2009).

However, here, we reverse figure and ground and focus on how experiential work with the *experience of attachment itself* can be transformational. Often, in the treatment of those patients for whom attachment trauma has wreaked great destruction on their psychological development, attachment security is established through the exploration and metaprocessing of the unprecedented *emotional experience of attachment.* For these patients, and the authors' anecdotal experience suggests that their numbers are greater than might historically have been recognized, the very experience of co-creating a safe and

secure relationship with a wiser, kind, and we add, affectively competent other*is the transformative process in and of itself.* Not merely the platform for psychological transformation, the co-created safety and trust *are* the transformation.

Many patients articulate the experience of psychological trauma as one of being broken at the core. For these patients, the capacity to know and testify to an authentic, felt sense of brokenness in the wake of trauma often provides a watershed moment of healing. For many, these moments may be the first time in their lives that they have been witnessed and validated as they stand in the truth of their subjective experience. The devil's bargain that required earlier experience to remain an incoherent, "unthought known" (Bollas, 1987) in exchange for survival, can finally be revoked as the heavy burden of shame can be brought out in to the light of day. And this new light, when accompanied by deep empathy and receptivity by a therapist, can lead the way to deep relief, newfound hope, and possibilities for profound healing.

In psychotherapy, the work of healing trauma emerges as an ongoing corrective emotional experience and process, not so much of reparenting as*facilitating an entirely different system of wired-in capacities for positive growth and transformation* A collective sigh of relief greeted Winnicott's concept of the "good enough" caregiver (Winnicott, 1965) as sufficient for establishing secure attachment. It eased the burden of therapists, particularly those working with patients with more intact attachment histories. And yet, the initial impetus for his remark is especially relevant when working with more traumatized

individuals. In the domain of severe relational trauma, being "good enough" is not about bringing to bear minimum necessary requirements, but rather about the inevitable ruptures and failures that arise despite even heroic attempts at attunement and contingent responsiveness. For these patients, great effort on the part of both members of the dyad is required in order to override previous attachment schemas and activate the transformance resources necessary for developing psychological safety and security. Careful, explicit, moment-to-moment attunement to a patient's affective and relational processes in session; owning lapses and being alert to opportunities for repair; active and at times frequent follow-up between sessions; explicitly giving the patient evidence of her existing in the "heart and mind" of the therapist (Fosha, 200, 2001); a willingness to creatively challenge technical constraints in the service of mindfully providing a real, contingently responsive relationship; and persistently demonstrating the capacity to hold in one's mind both the truth of brokenness and possibility of triumph; these are all essential tools for the simultaneous work of strengthening what has broken and catalyzing what has never had the opportunity to grow and flourish (Fosha, 2000, 2003). The work to develop secure attachment throughout the course of therapy *is* the therapy, and becomes the conduit for self-development and relational transformation. In this way, AEDP offers a two-pronged approach to healing trauma, simultaneously healing those parts of the self that have been injured, and catalyzing adaptive resilient parts that have patiently awaited facilitating environments to emerge.

Case Example

Daniel is a 40 year old, recently divorced father of one young boy. He came to treatment two years after a divorce, one year after his mother died of cancer, and six months after ending a 20-year drug dependency. As a brilliant but socially awkward and lonely boy whose parents were emotionally shutdown, career driven scientists, he reported a latchkey childhood of neglect and isolation. When he was 11 years old, he skipped two grades and entered junior high school where a teacher who at first took a paternal interest in him and seemed like a refuge from loneliness, then perpetrated a yearlong period of sexual abuse.

At the start of the first session, Daniel stated that he finally wanted to deal honestly with his life. He recognized that his long history of drug dependency and accompanying risk-taking behaviors functioned as a massive avoidance strategy for unprocessed emotions. He said he finally wanted to "come clean and be brutally honest about who I am and how I got to where I am so I can figure out how to get out of this mess." The following excerpt begins in the second session of treatment. Full of incoherency with pauses, confusion, and inconsistency, Daniel begins with a description of his parents that clearly illustrates his insecure attachment history. One of us (BL) is the therapist

[N.B.: The italics in parentheses describe the non-verbal aspects of the interaction, the bold comments in brackets are commentary on the process.]

Vignette # 1: "A new beginning. Hard, strange… but good"

P: My parents' marriage was fractured, y'now. We had a good family for a while…but there was always…you know…in many ways I feel like I repeated their existence to a degree. Umm….Y'know, I don't… I mean in terms of what I was seeing there was. I mean, there was, I mean this guy, he was an entomologist from Ireland checking his bird traps and weighing baby falcons and y'know looking for owls and it was great, it was fun. I mean, he was great, he was charming. He was this roguish, very attractive man who was funny. And there was a sense of…I don't know whether it was just background or breeding or….I've never had a sense of human tradition. I feel like so many of the people who I grew up with or went to school with in the end, they had families that were strong, doesn't mean that they were wealthy, although many of them were. They had a sense of tradition. There were actions that were okay and those that aren't. Maybe it was just fitting in. I'm not sure. I know that my dad just never fit in anywhere. He was awkward and weird. He resorted to science and he hid behind it and he's impossible to talk on the phone with. It makes you uncomfortable every second because he doesn't respond to anything. He's completely detached and he doesn't engage you. He just asks you questions as every second like an interrogation. He doesn't respond personally, he just lectures at you.

Th: [**interrupting the intellectual presentation and inviting patient to shift to affective, somatosensory awareness**] Daniel, what are you feeling inside right now as you share this with me? So that we, right away, in our work, Daniel, work against the sort

of detached, talking head experience and really help you stay connected to your body and your emotions? Which is what I really want to help you with and think you never really got help with before?

Pt: It's sad.

Th: (*Empathically*) Yeah.

Pt: It's…I wish things were different…on so many levels for so long.

Th: Mmm, hmm.

Pt: And I think my way of dealing with it is to say, to turn on myself to say, "You don't deserve it." [**Articulates defense against sadness**]

Th: And if you didn't turn on yourself, what would happen? [**Sidestepping defense and inviting access to imagine a positive alternative**]

Pt: I don't know.

Th: I understand that. [**Invoking safe base of our relationship for exploration of uncharted territory of his emotional landscape**] If you just imagined here with me for a minute that we just shared the feeling of sadness together, and we didn't turn on yourself… **[undoing aloneness]**

Pt: That I'd always be sad. That…I don't see how it helps? [**Defense returns**] Y'know, in many ways I've lived with a woman who thought I was pitying myself the entire time.

Th: Right. [**Affirming this element of a more coherent narrative**]

Pt: And I felt self-conscious that if she's right, I just need to grow up and deal with things.

[**Shame invokes defense to repress affect**].

Th: So what's it like to have me inviting you to be sad with me?**[Challenging dismissive stance of previous attachment figures with accepting stance of the therapist**]

Pt: I suppose it's like a forbidden action that you want to do but then feel like you're not supposed to. And…I spent a lot of time being sad, believe me, a lot of time…but just not necessarily with others in a constructive way. I can be depressed or whatever it is, but not in any way that I don't feel guarded or ashamed or, y'know, immediately want to have some sort of post-sad strengthening moment where I pretend that it's not affecting me.

[**Exquisite articulation of dilemma and strategy of avoidant attachment]**

Th: Such a key phrase, right? "Pretend." It brings me right back to you as a little boy.

Pt: Yeah, I mean it's just habit.

Th: [**Affirming, witnessing**] You had so much happen to you that you really earned the right to be sad about. You really did. It's not about being pathetic or weak or incapable or scattered or lazy or helpless…It's sad.

Pt: It's sad. And you know, I'm not a happy person (*pause*). I resort to humor or I try to make other people happy or…[**The therapist's affirmation catalyzes the patient's reflective self-function and capacity for his own defense analysis**].

Th: [**Titrating challenge to defense.**] So could we take literally like a minute to check out what it would be like not to try to make me happy, but just to feel…

Pt: I'll just fall about (*begins to cry*). I spend most of my time feeling like I could burst

into tears.

Th: Do you burst into tears?

Pt: Sometimes?

Th: Do you fall apart? Or do you feel sad? [**Cognitive restructuring**]

Pt: I feel sad. Yeah, it's not like I'm some wailing mourner. It's just, you know, sad.

Th: Yeah.

Pt: And I think there's just so much…the reservoir of sadness is just so huge and I steel up. [**Another round of increasing capacity for self-reflection and defense recognition**].

Th: [**Affirming historical value of defense**]. I was just thinking that. No wonder you steel up. There's so much to steel up against.

Pt: And I want so much not to feel this way. [**Emergence of adaptive action tendencies**]

Th: What way?

Pt: I don't want to feel alone.

Th: Do you feel alone right now? [**Offering reality of secure base of therapeutic dyad**].

Pt: Less so.

Th: Do you feel my presence with you?

Pt: Yeah

Th: [**Inviting meta-therapeutic processing of the patient's experience with the therapist**] What's that like for you? What's it like to have another man not abandoning

you and also not having an ulterior motive with you?

Pt: Unique.

Th: I bet.

Pt: I've had people who wanted to be there for me. It's, but, unless you…most people who want to be there for you then need you to tell them what to do, and its hard then not to feel like you're putting people out or dragging them along when you can't really explain it to them. [**Big green light—patient articulates his attachment needs—for help, guidance, organizing**]

Th: [**Affirming validity of these needs**] Are you sensing that from me?

Pt: No.

Th: So if you stay with me right here in this moment.

Pt: *(begins to cry deeply, powerfully)*

Th I'm right here, Daniel. Right here. [**Secure base affirmed**]

Pt: *(Sobs)*

Th: So much grief, so much held in for so long.

Pt: [**More crying for some time. Then, the wave completes—as waves of core affect always do. Shy smile. Shy look up into the therapist's eyes**]. Thank you. Wow! (*Deep sigh and body relaxes*).

Th: You are so welcome. [**Deepening self-reflection**] What are you thanking me for?

Pt: I think I've been needing to do that my whole life. I knew it, but I didn't know it.

Whew. [**Long pause, patient clearly integrating this experience and reworking his capacity to accept and honor his attachment needs**]. So this is what it's like, huh? (*Warm smile*).

Th: (*Warm smile in return*). **[Dyadic resonance and mutual affection, admiration, affirmation**]. Yes, this is what it's like. **[The therapist discloses impact of patient on his experience**]. It feels very good to share this with you, Daniel.

Pt: It's like a new beginning. Hard, strange… but good. Thank*you*.

The session begins with the patient sharing his life story. His intellectualized, fractured language reflects his incoherent autobiographical narrative, and suggests an insecure-avoidant attachment style. From the get-go, in the here-and-now, the therapist invites the patient to have a different experience of being positively seen, accepted, and affirmed. He invites the patient to shift from top-down to bottom-up processing, i.e., from thinking to feeling, and *focuses the patient on his emotional experience of the therapist's responsiveness to him*. This serves as a vehicle through which the dyad can then actively and collaboratively engage in a dual process of (a) relinquishing defenses against sadness and (b) unearthing, validating and amplifying the patient's dormant attachment needs in the service of further solidifying secure attachment. In the process, transformance begins to flourish as the patient, now emotionally connected to his experience in the context of a safe, secure, wiser and kind other, can embrace the positive results of relational security. He is open, vital, engaged, relaxed, and relieved.

In the vignette that follows, the burgeoning, felt sense of security that emerged in the first session now serves as a platform for the patient and therapist to explore more thoroughly what it is like for the patient to feel safe, encouraged, and helped. As the previous vignette illustrates, the patient's earlier attachment trauma in a milieu of neglect weakened the bridge between his experiences (right brain processes) and his capacity for coherent reflection upon them (left-brain processes). This neurobiological insult is manifest dynamically by the patient's defensive strategies of denial and shame in the face of healthy attachment needs. Thus, in the meta-therapeutic processing of the new, positive experience of secure attachment, we work to integrate right-brain experiencing with left-brain reflection upon that experiencing in order to create a deep, embodied, coherent sense of self in a given context. This process, in turn, opens the door to additional rounds of emotional experiencing and reflection in what Fosha (2009) has labeled the cascade of positive transformations.

As the patient has these positive experiences, he recognizes, by contrast, both what he didn't have in past attachment relationships and what he felt in the context of those relationships (the dark monster of psychopathology) that is so different from his experience in therapy. Some of those feelings were so horrible and so unbearable as to be literally unspeakable; for trauma suppresses left brain functioning, particularly Broca's area which is responsible for expressive speech (van der Kolk, 2006). The therapist's deep attunement, support, and active encouragement, all in the service of regulating heretofore unbearable

affective experiences, offer the patient a different lens through which to experience his history in the here-and-now safety of the therapy relationship. No longer unbearably alone, terrified and overwhelmed by the embodied memories of his earlier experience, the patient can now articulate them clearly, coherently, and with a deeply felt sense of subjective truth.

The following vignette occurs 2 weeks after the previous one. The patient, Daniel, has been describing and reflecting upon his long history of self-sabotage and under-achievement through avoidance-based coping skills in both work and interpersonal relationships. We enter the session about halfway into the hour: the therapist is articulating (in left brain language) the patient's procedurally longstanding defense strategy.

Vignette # 2: "The monster that's been stalking the neighborhood is caught"

Th: So what I'm thinking is your hopping from place to place to place is a long developed, longstanding strategy for protecting yourself in a certain way. **[Defense recognized and affirmed as a strategy for self-protection]**

Pt: Like walking across hot coals? **[The patient makes it his own and advances the co-constructed, collaborative process]**

Th: Yeah… [protecting you] from landing on any one thing that might have at one time been very upsetting or too stimulating or too difficult to handle. That's a perfect metaphor. The thing is, you're not the same guy now that you were whenever any particular coal was added to the pile. So, while it may very well be that *now* you can handle them and *now*

those things wouldn't be so unbearably upsetting, you're already inculcated into jumping across the coals as if they're still glowing embers **[Opening possibility of restructuring the defense…]**…and, of course, some of them might still be glowing embers **[…while also acknowledging potential for its necessity]**.

Pt: I think you're right. I think one of the things that have been happening is that I'm realizing they're not so hot (*smiles)*. I'm realizing that I'm capable of thinking about things differently…almost like strange levels of decompression/recompression going on with certain things. You know, I'm trying to be calmer **[Emergent self-reflective capacities give way to verbal, imagistic, and non-verbal affirmation of defense-relinquishing and emergence of pride**].

Th: I think you are. **[Actively affirming]**

Pt: I'm trying to *breathe* more, although sometimes I forget *(Smiles, takes deep breath and inhales with obvious expression of delight)* **[Dyad shares a non-verbal moment of resonant play and the shared positive affects of which secure attachment bonds are made]**

Th: Aahhh. It is so cool that you are trying. **[More affirmation]**

Pt: And…you're always trying to cut me some slack **[Affirmation signals attunement; the patient articulates his experience of the therapist's kindness and good will toward him],** or encouraging me to cut myself some slack. And I think I am trying to do that a bit. Um, or becoming more conscious…, y'know. I know that I've done some

things pretty well in my life. I've gotten a lot of accolades for a lot of the things I've done well in the past. There's never any swelling tide for that sort of feeling, though. It's very ephemeral. It may last for, like, 20 minutes and then go back to a neutral state… *(The patient goes on to speak about conversation with current business partner who challenges his under-estimation of his professional capacities.)* It comes down to feeling bad about any need for encouragement and I think, going back to the early issues, I didn't get any encouragement **[Safety of and acceptance within therapy dyad allows for reflection, by contrast, upon the cost and origin of shame]**.

Th: *(Leaning forward)* So, what's it like being with me as your therapist, who, I think, is very encouraging? **[Begin meta-therapeutic processing of the new, better experience in the therapy dyad]**

Pt: *(smiles)* Yeah!

Th: I mean that's certainly how I feel, that we're going to help you get to a better place and I feel a *great* desire to encourage you. I'm wondering what that's like for you to be on the receiving end of this?

Pt: *(Haltingly)* It's… how to describe it? I still feel like I'm underwater in a certain way.... *(Muscles in his chest twitch),* [**Somatic communication of something**]

Th: *(Gestures to chest, gently, with curiosity)* Did you just notice…

Pt: Yeah, twitchies…

Th: Yeah, so maybe there's still something stressful…? [**Attempt to attune and help**

organize non-verbal experience]

Pt: It's like, alright, it's like there's some pit and you're telling me I can walk across and I'm like, "No, it's a pit." And you're like, "No, there's an invisible glass floor"*(laughs with mixture of anxiety and evident delight)* I'm like, "OK, there's an invisible glass floor. …(p*ause*) And I'm starting to walk across it…in my time. I'm starting to believe more and more there's an invisible glass floor. Or I guess it could be an invisible steel floor, if it's invisible [**Patient and therapist laugh together, resonant in delight *and* simultaneously dyadically regulating the patient's anxiety about what is newly emerging**]." Um…I feel like in many ways I'm coming out of a nightmare, but I'm not all the way there. **[This is the territory of transformation in the facilitating safety of the securely attached therapy dyad**. **Something new, simultaneously scary and exciting, is emerging**]. Um… it's almost like I have this smidgeon of hope or something, or light *(gestures above his head in non-verbal articulation of where hope comes from)*like ceilings are cracking. I mean recently I've been through bouts of really bad depression, so maybe its about Newtonian reciprocity, you know, equal and opposite to the lows *(chuckle)... (long pause, then a clear declaration)* It's like I'm evolving…

Th: **[Recognizes an opportunity to deepen transformance strivings]** Yeah, can we just stay with that for a minute?

Pt: It's like I'm becoming more aware of, of…um….It's one thing to know how you operate or that you have certain defensive mechanisms, but this is like getting past that

certain point of pain… Like….playing something over and over and over and over again without doing something about it is really a waste of brain power and time. It's like being mentally anaerobic and suddenly you're filled with lactic acid or something, I don't know *(laughs)*.

Th: I mean you're saying such important stuff. And I want to bring you back for just a minute, to your experience. [**After a round of reflection, the therapist invites the patient to join in another round of right-brain experiencing]** You were just saying that you were evolving. And I notice that in between your articulating these really important thoughts and ideas that you've been articulating there have been these*pauses*. I don't even know if you were aware of them because you were trying to think.

Pt: Right.

Th: But in these pauses there just seemed like a lot of feeling present, a lot of emotion present. [**Patient nods, a signal from the right-brain that the therapist is on target**].

Pt: Mmm, hmm.

Th: [**Therapist responds contingently to green light and invites patient to deepen his awareness and felt-sense experience**] And I'm just wondering, when you kind of tune in to that idea that you are evolving and that you're being more compassionate with yourself, what does that *feel* like, what's it like to just take a moment to connect with that? To not think about it, but to feel it…to drop down below the neck and breathe.

Pt: (*big sigh*) It's a relief *(laughs with delight)* It's like the monster that's been stalking

the neighborhood is caught. **[So the body also tells the story of relief and delight as intrapsychic safety comes on line in the context of the secure attachment of the therapeutic dyad]**

Th: Wow! Will you just stay with that for a second? That's a powerful statement. I just want you to tune in to what that's like to be saying. **[Again, using affirmation to deepen the experience of having the experience, in this case, of relief and delight]**

Pt: It's freeing. It's, um, it doesn't have to be that bad, y'know. **[Declaration of liberation from previous insecure attachment strategies**].

Th: Where do you feel it?

Pt: It's like a deep breath (*big inhalation and gestures to lungs*). It's in the lungs. It's… It's…(*yet another deep breath*)

Th: It's like a deep breath. **[The body tells the story much more directly than the words. This feeling *is* the feeling of taking a deep breath]**

Pt: [**As the round of experiencing organically completes, another spontaneous round of reflection on that experience and the emergence of a coherent narrative unfolds]** And I guess what it's like to not feel so anxious all the time. I guess whatever physical state that is that you're not being hunted *(chuckle of recognition and relief),* y'know. And, y'know, I don't know what I'm gonna do on a lot of things, but maybe that's…ok. And… I think…I've…um, y'know I've tried to blame myself for a lot of things that intellectually I know, intellectually, were not my fault, just because its easier, I suppose. (*Speaks about*

past failed relationships with others who did not take ownership of their contribution to the failure.).

Th: So can we come back to—we're near the end of our time today, but I want to just come back to just this moment, just one more moment of that (*therapist takes a deep breath*) feeling …

Pt: *(mirrors the therapist's deep breath and open gaze*)

Th: I just wonder what it's like to be not only feeling that feeling that the monster that's stalking the neighborhood has been caught, but also what's it like to be sharing the experience here with *me*? To have that experience with me? **[The therapist invites the patient to reflect on the feeling of safety inherent in being able to share his feeling of safety in the context of the secure attachment of the dyad**]

Pt: *(clear, declarative)* Comfortable. Easy. **[Another round of meta-processing further elaborates the transformation in the context of the secure therapy dyad from unbearable aloneness and emotional suppression to interpersonal connection and dissipation of psychic pain and suffering**]. I can't… I'm finding I can't talk to anyone else about what I'm going through right now. Because I can't describe it to anyone else because they're not there to understand what the initial problems are. So being able to talk about it is relieving. I think I've suppressed so much that a lot of emotion that was leaking out of me…or stored up pain…is just going away in many ways. Y'know, I think there are still wounds, but the sort of like thick, black blood from the infection that's been

collecting is gone. Y'know it's hard. I still have lonely feelings, but its less urgent. There's less panic. [**A moment of deep clarity re: the transformation from traumatic to adaptive response to inevitable stress**]. That's it, there's less panic. I'm having a much better time enjoying. (*Patient smiles).* **[Spontaneous emergence of positive affects**] And I got better anti-inflammatories finally for my shoulder, too (*The patient has long history of neglecting physical health concerns*).

Th: So you're taking better care of yourself.

Pt: I *am.* It feels good. I'm not destroying myself. And *I don't want to destroy myself.* [**Huge transformational statement. The patient articulates Self-at-Best desire for self-affirmation and self-compassion.**] I've done that…and it didn't help…and it hurt a lot. God knows what the long-term ramifications are going to be from all that [**This is truth—the very opposite of the denial that had for so long wreaked havoc through avoidance and self-sabotage]**.

Th: That really touches me, Daniel. You've really accomplished something amazing here. You are speaking your truth in such a deep, honest way. This touches my heart .

Pt: (*Beaming smile)* I know. Me too. Me too. [**In this simple statement brimming with positive dyadic resonance, patient articulates internalization of the secure attachment relationship. He is able to know and embrace the therapist's positive affects, as well as his own].**

In this vignette, the therapist simultaneously entrains and attunes to right brain-to-

right brain communication in the therapeutic dyad. In so doing, he sees and radically affirms previously unseen capacities in the patient. This process softens defenses and invites the patient to drop down into a somatically-based, emotionally vibrant experience of relief. He is allowing himself to have an experience that -- based on his procedural attachment history-- we (and he) would have never thought possible. Yet here he is, feeling deeply and reflecting clearly, all in the context of a bidirectional milieu of openness, risk-taking and deep connection. Here, on the other side of the patient's procedural history, transformance strivings are actualized and the monster no longer stalks the neighborhood.

Metaprocessing locks in this new and better experience, adding to it a corresponding narrative reflection on that experience. The patient now is able to tell a coherent and cohesive story of himself and of the significant others in his life. There are fewer lacunae in his autobiographical narrative as a result of his ability "to think thoughts that his parents discouraged or forbidden him to think, to experience feelings his parents have discouraged or forbidden him to experience, and take actions his parents had forbidden him to contemplate" (Bowlby, 1985, p. 198) for fear of breaking the attachment bond. Here, in the therapeutic dyad, the attachment bond is solid and thriving, strengthened through rounds of meta-therapeutic processing and internalized in the patient's felt experience—a deep sigh of relief. This internalization opens the door to an autobiographical narrative that is coherent and cohesive and signals the deeply rooted embodiment of the patient's reflective self function (i.e., mindfulness) at work--the

hallmark of internalized security, not only within the dyad, but within the self.

Conclusion

> "It takes a lot of courage to release the familiar and seemingly secure, to embrace the new. But there is no real security in what is no longer meaningful. There is more security in the adventurous and exciting, for in movement there is life, and in change there is power" (Cohen, 2009, paragraph 1).

We have shown how in both AEDP theory and practice, neurobiologically informed attachment theory and research come to life and are applied in a specific and direct manner. What we have been asserting throughout this article, and illustrating in the two clinical vignettes above, is that for people with histories of relational trauma, it is the very attachment experience itself—the experiential co-creation of safety and trust--that both frames and comprises the specific, detailed, moment-to-moment coloration of the therapeutic endeavor. Attachment phenomena remain in focus from beginning to end. Actively facilitating a new, better experience from the get-go, the AEDP therapist simultaneously disrupts trauma-based procedural expectations of relating to self and other, while he fulfills others, i.e., the heretofore neglected organismic, neurobiological, dispositional tendencies toward self-righting and authentic engagement. Given their having in some way given up the hope for attachment security as a result of their wrenching past experiences, the opportunity for safe yet deep emotional relating that an AEDP therapist offers patients with relational trauma is *literally* mind-boggling. In these cases, attachment security is established through the exploration and meta-therapeutic processing of the

unprecedented emotional experience of attachment (i.e., attachment as emotional experience). In turn, deeply felt and newly known experiences of secure attachment transform procedural expectations and herald a re-organized, better integrated, more complex and flexible mind (Siegel, 2003). When deep attachment security is in play, we become our selves through being together with, truly together with, another. Aloneness undone, we can be both easily separate and delightfully together. Feeling seen and witnessed, we can see and witness ourselves. Feeling safely felt (Siegel, 2003), we can feel, and feel safe in being all of who we are. informed with newfound vitality, curiosity, openness, resilience and healthy risk-taking,

References

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.

Bollas, C. (1987). *The shadow of the object: Psychoanalysis of the unthought known*. New York: Columbia University Press.

Beebe, B. & Lachmann, F. M. (2002*). Infant research and adult treatment: Co-constructing interactions*. Hillsdale, NJ: Analytic Press.

Bowlby, J. (1977). The making and breaking of affectional bonds: aetiology and psychopathology in the light of attachment theory. *British Journal of Psychiatry, 130,* 201-210.

Bowlby, J. (1979). On knowing what you are not supposed to know and feeling what you are not supposed to feel. *Canadian Journal of Psychiatry*, *24*, 403-408. Reprinted in J. Bowlby (1988), *A secure base*. New York: Basic Books.

Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2d ed.). New York: Basic Books.

Bowlby, J. (1985). The role of childhood experience in cognitive disturbance. In M. J. Mahoney & A. Freeman (Eds.), *Cognition and psychotherapy* (pp. 181-200). New York: Plenum Press.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human*

development. New York: Basic Books.

Bowlby, J. (1991). Post-script. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 293—297). London: Routledge.

Cassidy, J. (1994). Emotion regulation: Influence of attachment relationships.*Monographs of the Society for Research in Child Development, 69*(240), 228—249.

Cassidy, J. (2001). Truth, lies, and intimacy: An attachment perspective.*Attachment and Human Development, 3 (2)*, 121-155.

Cassidy, J. & Shaver, P. R. (Eds.,) (1999). *Handbook of attachment: Theory, research and clinical applications.* New York: Guilford.

Circle of Security (2009) Retrieved March 21, 2009, from Circle of Security.org. Website: http://www.circleofsecurity.net/treatment_assumptions.html.

Cohen, A. (2009). Retrieved on April 15, 2009, from AlanCohen.com. Website: http:// www.alancohen.com/total_access.php

Fonagy, P. (1998). Moments of change in psychoanalytic theory: discussion of a new theory of psychic change. Infant Mental Health Journal, 19 (3), 348-353.

Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and research. In J. Cassidy & P. R. Shaver, (*Eds*.), *Handbook of attachment: Theory, research and clinical applications*, pp. 595-624. New York: Guilford.

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002).*Affect regulation, mentalization, and the development of the self.* New York: Other Press.

Fosha, D. (2000). *The transforming power of affect: A model for accelerated change*. New York: Basic Books.

Fosha, D. (2001). The dyadic regulation of affect.*Journal of Clinical Psychology/In Session*, *57 (2)*, 227-242.

Fosha, D. (*2003*). Dyadic regulation and experiential work with emotion and relatedness in trauma and disordered attachment. In M. F. Solomon & D. J. Siegel (Eds.).*Healing trauma: Attachment, trauma, the brain and the mind*, pp. 221-281. New York: Norton.

Fosha, D. (2006). Quantum transformation in trauma and treatment: Traversing the crisis of healing change. *Journal of Clinical Psychology/In Session, 62(5),* 569-583.

Fosha, D. (2008). Transformance, recognition of self by self, and effective action. In K. J. Schneider, (Ed.) *Existential-integrative psychotherapy: Guideposts to the core of practice*, pp. 290-320. New York: Routledge.

Fosha D. (2009). Emotion and recognition at work: Energy, vitality, pleasure, truth, desire & the emergent phenomenology of transformational experience. In D. Fosha, D. J. Siegel & M. F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practice*. Chapter 7. New York: Norton. *In press*.

Fosha, D., Paivio, S. C., Gleiser, K. & Ford, J. (*2009*). Experiential and emotion-focused therapy. In C. Courtois & J. D. Ford (Eds.), *Complex Traumatic Stress Disorders: An Evidence-Based Clinician's Guide*. Chapter 14, pp. 286-311. New York: Guilford

Press.

Fosha, D., Siegel, D. J. & Solomon, M. F. (Eds.) (2009) *The healing power of emotion: Affective neuroscience, development, clinical practice*. New York: Norton. *In press*.

Fosha, D. & Yeung, D. (*2006*). AEDP exemplifies the seamless integration of emotional transformation and dyadic relatedness at work. In G. Stricker & J. Gold (Eds.),*A casebook of integrative psychotherapy* (pp. 165-184). Washington DC: APA Press.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56,* 211-226.

Gleiser, K., Ford, J. D., & Fosha, D. (2008). Exposure and experiential therapies for complex posttraumatic stress disorder. *Psychotherapy: Theory, Research, Practice, Training, 45 (3),* 340-360.

Hesse, E., & Main, M. (1999) Second-generation effects of unresolved trauma in nonmaltreating parents: dissociated, frightened, and threatening parental behavior. *Psychoanalytic Inquiry*, *19* (4), 481-540.

Hesse, E., & Main, M. (2000). Disorganized infant, child, and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic Association*, *48*(4), 1097-1127.

Hughes, D. A. (2009). The communication of emotions and the growth of autonomy and intimacy within family therapy. In D. Fosha, D. J. Siegel & M. F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practice*.

Chapter 11. New York: Norton. *In press*.

Johnson, S. M. (2009). Extravagant emotion: Understanding and transforming love relationships in emotionally focused therapy. In D. Fosha, D. J. Siegel & M. F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practic*e. Chapter 10. New York: Norton. *In press*.

Kaufman, G. (1996). *The psychology of shame: Theory and treatment of shame-based syndromes*. 2nd edition. New York: Springer Publishing Company.

Lamagna, J. This volume

Lanius, R. A., Williamson, P. C., Densmore, M., et al. (2001). Neural correlates of traumatic memories in posttraumatic stress disorder: a functional MRI investigation. *American Journal of Psychiatry*, *158*, 1920-1922.

Lanius, R. A., Williamson, P. C., Densmore, M., Boksman, K., Neufeld, R. W., Gati, J. S., & Menon, R. S. (2004). The nature of traumatic memories: A 4-TfMRI functional connectivity analysis. *American Journal of Psychiatry*, *161 (1)*, 1-9.

Levine, P. (1997). *Waking the tiger: Healing trauma.* Berkeley, CA: North Atlantic Books.

Lyons-Ruth, K. (2006). The interface between attachment and intersubjectivity: Perspective from the longitudinal study of disorganized attachment.*Psychoanalytic Inquiry, 26(4),* 595-616.

Main, M. (1999). Epilogue. Attachment theory: Eighteen points with suggestions for future studies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory,*

research and clinical applications (pp. 845—888). New York: Guilford.

Nelson, C.A., Thomas, K.M. & de Haan, M. (2006). Neural bases of cognitive development. In W. Damon, R.M. Lerner, N.E. Kuhn, & R. Siegler (*Eds.), Handbook of child psychology* (6th ed., pp. 3-57).

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the body: A sensorimotor approach to psychotherapy.* New York: Norton.

Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.

Panksepp, J. (2009). Brain emotional systems and qualities of mental life: From animal models of affect to implications for psychotherapeutics. In D. Fosha, D. J. Siegel & M. F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practic*e. Chapter 1. New York: Norton. *In press*.

Panksepp, J. & Northoff, G. (2008). The trans–species core self: the emergence of active cultural and neuro-ecological agents through self related processing within subcortical-cortical midline networks. *Consciousness & Cognition.*

Prenn, N. (2009). I second that emotion! On self-disclosure and its metaprocessing. In A. Bloomgarden & R. B. Menutti, (Eds.), *The therapist revealed: Therapists speak about self-disclosure in psychotherapy.* Chapter 6, pp. 85-99. New York: Routledge.

Prenn, N. (This volume).

Porges, S. W. (2009). Reciprocal influences between body and brain in the perception and

expression of affect: A polyvagal perspective. In D. Fosha, D. J. Siegel & M. F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practic*e. Chapter 2. New York: Norton. *In press*.

Prenn, N. (2009). I second that emotion! On self-disclosure and its metaprocessing. In A. Bloomgarden & R. B. Menutti, (Eds.), *The therapist revealed: Therapists speak about self-disclosure in psychotherapy*. Chapter 6, pp. 85-99. New York: Routledge.

Rausch, S, van der Kolk, B. A., Fisler, et al. (1996). A symptom provocation study of posttraumatic stress disorder imagery in Vietnam combat veterans.*Archives of General Psychiatry*, *44*, 970-975.

Russell, E. & Fosha, D. (2008). Transformational affects and core state in AEDP: The emergence and consolidation of joy, hope, gratitude and confidence in the (solid goodness of the) self. *Journal of Psychotherapy Integration. 18 (2), 167-190.*

Schore, A. N. (1996). The experience-dependent maturation of a regulatory system in the orbital prefrontal cortex and the origins of developmental psychopathology. *Development and Psychopathology*, *8*, 59-87.

Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation and infant mental health.*Infant Mental Health Journal*, *22*, 7-66.

Schore, A. N.. (2009). Right brain affect regulation: An essential mechanism of development, trauma, dissociation, and psychotherapy. In D. Fosha, D. J. Siegel & M.

F. Solomon (Eds.), *The healing power of emotion: Affective neuroscience, development, clinical practic*e. Chapter 5. New York: Norton. *In press*.

Siegel, D. J. (2003). An interpersonal neurobiology of psychotherapy: the developing mind and the resolution of trauma. In M. F. Solomon & D. J. Siegel (Eds.).*Healing trauma: Attachment, trauma, the brain and the mind*, pp. 1-54. New York: Norton.

Siegel, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being.* New York: Norton.

Solomon. M. F. & Siegel, D. J. (Eds.). (2003). *Healing trauma: Attachment, trauma, the brain and the mind.* New York: Norton.

Sorce, J. F., Emde, R. N., Campos, J., & Klinnert, M. D. (1985). Maternal emotional signaling: Its effect on the visual cliff behavior of 1-year-olds.*Developmental Psychology, 21*(1), 195-200.

Teicher, M. (2002). Scars that won't heal: the neurobiology of child abuse.*Scientific American*, *286 (3)*, 68-75.

Trevarthen, C. (2001). Intrinsic motives for companionship in understanding: their origin, development, and significance for infant mental health.*Infant Mental Health Journal*, *22*, 95-131.

Tronick, E. Z. (1989). Emotions and emotional communication in infants. *American Psychologist*, *44*(2), 112—119.

Tronick, E. Z. (1998). Dyadically expanded states of consciousness and the process of therapeutic change. *Infant Mental Health Journal, 19*(3), 290—299.

van der Kolk, B. A. (1996). The body keeps the score: approaches to the psychobiology of posttraumatic stress disorder. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth. *Traumatic stress: The effects of overwhelming experience on mind, body and society* (pp. 214-241). New York: Guilford.

van der Kolk, B. (2006). Clinical implications of neuroscience research in PTSD.*Annals of the New York Academy of Sciences, 1298*, 1-17.

van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S. & Spinazzola, J. (2005). Disorders of extreme stress: the empirical foundation of a complex adaptation to trauma.*Journal of Traumatic Stress*, *18 (5)*, 389-399.

Wallin, D. (2007) *Attachment in psychotherapy.* New York: The Guilford Press.

Winnicott, D. W. (1960/1965). Ego distortion in terms of true and false self. In*The maturational processes and the facilitating environment*(pp. 140—152). New York: International Universities Press.

Winnicott, D. W. (1965). *The maturational processes and the facilitating environment*). New York: International Universities Press.

Winnicott, D. W. (1975). *Through paediatrics to psycho-analysis.* New York: Basic Books.

We prefer the earlier term "reflective self-function" to "mentalization" because it is less linked in its connotations with primarily cognitive, cortical left brain processes. We wish to reference complex

integrative processes that synthesize both left and right brain mediated phenomena as well as up (cortical) and down (subcortical) aspects of affective functioning.

This is a reference to the famous title of a paper by John Bowlby (1979): " On knowing what you are not supposed to know and feeling what you are not supposed to feel."

Lack of space prevents us from a full outlining of specific attachment based interventions. The interested reader is urged to go to Fosha (2000, chapters 9-12) for a full listing and discussion of interventions, and to Prenn (this volume) for work on a right brain language for working with attachment in AEDP.

It is the attachment figure's own active desire to be with the child that undoes the child's shame (Kaufman, 1996; Trevarthen, 2001).

This is an uncanny metaphor the patient generates, suggesting the visual cliff experiments designed to study social referencing in infants. The look on the mother's face tells babies what they need to know. Research has shown that babies use visual information from the faces of their caregivers to make sense of situations that are new or unclear (Sorce, Emde, Campos, & Klinnert, 1985). This discovery was made on the surface of an apparatus called *the visual cliff*. The latter is a table divided into two halves, with its entire top covered by glass. One half of the top has a checkerboard pattern lying immediately underneath the glass; the other half is transparent and reveals a sharp drop of a yard or so, at the bottom of which is the same checkerboard pattern. The infant is placed on a board on the center of the table. The mother stands across the table. The crying and anxiety that eight-month-olds display when confronted with the need to cross the deep side are the result of their newly burgeoning ability to perceive depth. This si where social referencing comes in: If the mother is confident, smiling, and communicates joy or interest, i.e., conveys the message "this is safe," babies overcome their fear and crawl across the "cliff" to her. If the mother non-verbally communicates fear or anger, i.e., "this is not safe," babies stay frozen on the other side of the plexi-glass-covered cliff and will not cross. In the case we are presenting, the patient's unconscious intuitively understands that it is the trust in the other, here, his therapist, that allows one to take risks and, in the process, discover that it is safe to do so.