

**PSYCHOANALYTIC RESEARCH: PROGRESS AND PROCESS**

**NOTES FROM ALLAN SCHORE'S GROUPS IN DEVELOPMENTAL**

**AFFECTIVE NEUROSCIENCE AND CLINICAL PRACTICE**

**Preface by ALLAN N. SCHORE, PhD EDITOR**

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The crucial importance of current developmental and neurobiological data to the creation of more effective clinical models is now well established. In the following contribution by a long-standing member of one of the Los Angeles groups, Stan Tatkin echoes the ongoing shift from purely cognitive to bodily-based, affectively focused mechanisms to the treatment of couples. This groundbreaking work, greatly expanded in an upcoming volume (Tatkin & Solomon, in preparation), creatively integrates regulation theory, developmental neuroscience, and psychoanalysis by exploring the neurobiological mechanisms that underlie the attachment dynamics of marital relationships. The major thrust of this original work is Stan's elaboration of the fundamental role of the autonomic nervous system in the marital dyad.

Over 30 years ago Michael Basch (1976) speculated that "the language of mother and infant consist of signals produced by the autonomic, involuntary nervous

system in both parties.” In my own work I suggested that the insecure-avoidant infant is parasympathetically-biased, while the insecure anxious is sympathetically-biased (Schore, 1994), and that ANS-to-ANS communications continue in all later intimate relationships, including the patient-therapist relationship (Schore, 1994). Recent studies show that the ANS controls visceral organs, effectors in the skin, and the cardiovascular system, and that these systems are not under voluntary direction, and that sympathetic dominance is expressed in a tight engagement with the external environment and high levels of energy mobilization, while parasympathetic dominance is manifest as disengagement from the external environment, and low levels of internal energy (Recordati, 2003). In line with current intersubjective models, Tatkin, a leading expert on the clinical application of recent neurobiological knowledge of the autonomic nervous system, expands relational theory into a bodily-based, psychodynamic marital psychotherapy.

In closing, I am delighted to announce that I have accepted an invitation to present a plenary address, “The Paradigm Shift: The Right Brain and the Relational Unconscious” to the 2009 American Psychological Association Convention this summer in Toronto.

Basch, M. F. (1976). The concept of affect: A re-examination. *Journal of the American Psychoanalytic Association*, 24, 759-777.

Recordati, G. (2003). A thermodynamic model of the sympathetic and parasympathetic nervous systems. *Autonomic Neuroscience: Basic and Clinical*, 103, 1-12.

Schore, A.N. (1994). *Affect regulation and the origin of the self*. Mahweh NJ: Erlbaum.

Tatkin, S., & Solomon, M. (in preparation). *Love and war in intimate relationships: how the mind, brain, and body interact*. New York: Norton.

**A PSYCHOBIOLOGICAL APPROACH TO COUPLE THERAPY:  
INTEGRATING ATTACHMENT AND PERSONALITY THEORY AS  
INTERCHANGEABLE STRUCTURAL COMPONENTS**

**STAN TATKIN, PSY.D.**

Couple therapy provides fertile ground for working with the past, present, and future. Adult romantic partners eventually form a primary attachment system wherein each individual becomes a powerful proxy for the other's early childhood attachment experience. No other dyad can reanimate one's earliest attachment relationships the way an adult romantic relationship can. The therapeutic relationship between analyst and analysand strives to approximate this highly charged intersubjective experience, and yet even at its best still runs but a close second to that of the ongoing romantic attachment relationship. We might say that in the world of dyads, adult primary attachment partners occupy the one and only seat at what is at most a two-seat table, at least for the time being. Depending upon each partner's internal working models, a seat opens only after an occupant has fully left and been grieved.

A psychobiological approach to couple therapy (Tatkin, 2004; Tatkin & Solomon, in preparation) focuses on early attachment as a blueprint that both acts and is acted upon by the autonomic nervous system (ANS) and neuroendocrine system in response to interpersonal stress. This reciprocal action between attachment organization and the ANS can be experienced and observed via preparatory rising and falling of arousal states and the conscious and unconscious activation of both smooth and striated muscles in the face and body as expressive efforts to move toward or away from a primary figure. Approach and avoidance mechanisms, as informed most fundamentally by an individual's internal working model, are "wired in" as experience in the somato-sensory-motor systems of the body; namely, the peripheral nervous system, right hemisphere, and frontolimbic areas of the brain (Schore, 2001a). The human attachment system, which includes needs for deep interpersonal connection as well as for safety and security, engages with the human arousal system for purposes of both love and war.

Psychoanalytic theories, particularly those pertaining to personality, are quite compatible with attachment theory and arousal/affect regulation theory and can easily be integrated with various components of the psychobiological approach (see figure 1), such as developmental neuroscience and therapeutic enactment (Tatkin, 2004; Tatkin & Solomon, in preparation). Using attachment and arousal and affect regulation theory as a backdrop, I will discuss some of their similarities to personality theory, as relevant to the overarching psychobiological approach.

## **SECURE ATTACHMENT**

Secure attachment refers to an ongoing intersubjective experience within a primary attachment relationship that idiosyncratically generates frequent, mutually amplified positive encounters and absorbs, attenuates, and foreshortens negative events for both participants. In the adult romantic relationship, both individuals can turn to one another for stimulation and quick distress relief. The high positive/low negative feature of secure attachment forms the gravity, by way of attraction rather than fear, that maintains the relational orbit between romantic partners. In addition, secure individuals and relationships characteristically evoke little interpersonal stress, thereby leading to appropriate levels of energy expenditure and conservation. Rarely are threat mechanisms engaged at the level and duration commonly endured by insecure individuals and partnerships. Consequently, secure primary partners tend to exhibit more frequent proximity-seeking and contact-maintenance behaviors over longer durations than do their insecure brethren (Sroufe, 1986).

Similarly, normal (i.e., secure) and psychoneurotic individuals (i.e., secure and insecure), considered to have achieved whole object relations, have long overcome intense dyadic needs and injuries to emerge as both dyadic and triadic in orientation, and experience minimal distress over intimacy and separateness. Because their conflicts reside primarily in post-oedipal development, they operate equally well in primary dyadic relationships and in triadic relationships involving three or more people simultaneously. This developmental ability of moving from twos to threes and more has

been noted by many investigators, including Sigmund Freud, Jean Piaget, Erik Erikson, Lawrence Kohlberg, Margaret Mahler, Melanie Klein, and others. In individual treatment, normal and psychoneurotic patients are able to maintain a dyadic relationship with the clinician while including a third object (the patient's mind and the therapeutic relationship), upon which both patient and clinician jointly attend (Lyons-Ruth, 1999; Ogden, 1986). For this patient, shifting between dyads and triads is relatively effortless, without experiencing loss. In couples treatment, normal and psychoneurotic partners maintain dyadic integrity while using the couple therapist as a third object and do not merely switch between dyads.

Secure and psychoneurotic partners are better able to tolerate ambiguity and resolve ambivalence without splitting than are those with disorders of the self (Kernberg, 1976, 1980; J. F. Masterson, 1985). In couple therapy, these partners are able to make decisions that clarify one another without risking the safety and security of the relationship. Like a game of chess, each partner is comfortable making moves that induce the other to make counter moves and can do so without fear of a premature end to the game. Partners are unafraid of pushing and pulling on the relationship because of their fundamental, explicit commitment to the relationship.

The developmental shift into object constancy reveals an ability to hold a sense of self and other that is both good and bad at the same time. In addition, partners who have achieved whole object relations experience more guilt than shame when responsible for harming their primary relationship; this then leads to a subsequent drive

to repair the injury or right the wrong. These partners are able to grieve loss and regret mistakes; they possess a good balance between healthy self-entitlement and fairness; they show resilience in the face of disappointment and failure; they can tolerate periods of disorganization (Piaget's accommodation and disequilibrium) as leading to reorganization and complexity (learning and being small); they stick with tasks through frustration; and they are able to modulate painful affects.

Securely attached individuals, particularly those deemed secure at infancy, are generally better able to shift internal states and manage transitions between states than are insecure (Tatkin, 2009a, 2009b). This is largely due to early, prolonged interactive experiences with caregivers who provided a reliable and highly adjustable regulatory function of the infant's real and potential arousal, ranging from high sympathetic to low parasympathetic states. The attuned co-regulatory play between infant and caregiver contains both the high positives and attenuated negatives mentioned earlier. This co-regulatory function by the early caregiver, acting as both expander and limiter of arousal states, leads to the infant's developing ability to tolerate an expanded range of internal and shared experience that includes separations and reunions with the primary attachment figure. Insecure, by contrast, suffer deficits in arousal and affect regulation and struggle with transitions involving separations and reunions with primary others.

Similarly, secure/normal/psychoneurotic individuals who have achieved object constancy also are described as experiencing minimal distress with separations and reunions (Kernberg, 1975, 1993; Masterson, 1981). When separated from their primary

attachment figure, these individuals actively miss the other while simultaneously being able to care for themselves and focus on tasks. In other words, while separated from their attachment figure, secure and psychoneurotic individuals experience a temporary loss that is endured by holding their loved one in mind. While separated, there is no appreciable difference in their self-care (eating, sleeping, and maintaining a daily structure). With respect to separations and reunions, secures are also better able than insecure individuals to shift back-and-forth from being alone and autoregulating to interacting with their primary figure and using interactive regulation.

#### **AUTOREGULATION, SELF-REGULATION, AND INTERACTIVE REGULATION**

*Autoregulation*, a non-relational form of self-care, is a fully internal strategy for self-stimulation and self-soothing. Strategies for autoregulation begin in infancy and become more complex throughout the lifespan. Because autoregulation does not require people, it tends to be dissociative, energy conserving, and by definition serves only internal needs (Schorer, 2009; Tatkin, 2006). The autoregulatory mechanism for down-regulation from hyperarousal is the dorsal motor vagal complex, a phylogenetically older branch of the vagus nerve, which when activated, can cause withdrawal, a collapsed dissociative state, or syncope. Autoregulation is an insufficient strategy for attuned relating precisely due to its non-relational, dissociative nature. The use of autoregulation as both normative and defensive has been identified in normal development, the creative and expressive arts, meditation practices, and the like, but also in lower-level defenses characteristic in various disorders of the self such as the schizoid's reliance on fantasy,

the narcissist's polymorphously perverse sexual practices, and the borderline's self-mutilation (Buchholz & Helbraun, 1999; Mahler, 1979; Person, Fonagy, Figueira, & Freud, 1995; Schore, 2001a, 2001c, 2002c; Weissman, 1967; Winnicott, 2002; Winnicott, Davis, Shepherd, & Winnicott, 1987).

*Self-regulation*, by contrast, is a pro-social strategy for consciously regulating the self while interacting with objects, such as relationships and other people. Self-regulation is largely a function of the orbitofrontal and ventromedial prefrontal areas which provides faculties for holding and waiting, frustration tolerance, moral choice, and contingent response to interpersonal challenges (Schore, 2001b). Recovery from hyperarousal is aided by the ventral vagal system through self-awareness and relaxation muscle tension, deep breathing, and other conscious strategies of staying within a social range of arousal. The ventral vagal complex is a phylogenetically newer branch of the vagus nerve originating in the nucleus ambiguus (Porges, 2003). Without the ability to self-regulate, one would be unable maintain social-emotional rapport with another human being. Individuals with disorders of the self demonstrate, in varying degrees, difficulties with self-regulation. Borderline, narcissistic, schizoid, and antisocial disorders often rely on lower-level defenses such as acting out, withdrawal, avoidance, denial, splitting, and dissociation (Gunderson & Ridolfi, 2001; Kernberg, 1975; Posner, et al., 2003). Painful affects are poorly managed and contained making relationships difficult to sustain. Similarly, insecurely attached individuals and those who suffer

disorganized/disoriented states demonstrate varying degrees of self-regulatory difficulty (Diamond, 2004; Feld, 2004; Fonagy, Target, & Gergely, 2000).

*Interactive regulation* involves two or more nervous systems in close physical proximity maintaining or trying to maintain attuned, implicit (nonverbal) communication (Beebe & Lachmann, 1998; Beebe et al., 2003; Schore, 1994, 2002b). At its best, interactive regulation involves a series of non-conscious micro-moments made up of fast-acting somatosensory experiences within and between individuals, resulting in fast-acting adjustments and error corrections. If successful, interactive regulation results in a mutual perception of attunement. If done badly, however, the result is varying degrees of mutual dysregulation, which if unrepaired quickly, will lead to heightening arousal and eventual threat response. Successful interactive regulation relies upon the mutual use of near senses, the most important of which is the face-to-face visual data stream, multimodal perceptual matrix, which also includes prosody, smell, taste, and touch. The emphasis on direct eye-to-eye contact for effective interactive regulation is due to the role of the ventral visual stream and the limitations of the fovea. Studies have demonstrated amygdala activation due to viewing faces at angles other than straight on (Morris, Ohman, & Dolan, 1999; Vuilleumier, 2007).

Normal and psychoneurotic individuals often rely on interactive regulation in their primary attachment relationships to securely attached individuals and romantic partners with mild secure attachment. However, partners at the far ends of the insecure attachment spectrum resemble individuals with disorders of the self in the sense that

their regulatory strategies are non-mutual and non-relational. For instance, on the distancing end of the attachment spectrum, the avoidant relies primarily on autoregulation similar to that seen in narcissistic, schizoid, and antisocial personality disorders. In contrast, on the clinging end of the attachment spectrum, the angry-resistant relies primarily on non-reciprocated external regulation similar to that seen in borderline, histrionic, and dependent personality disorders.

The ability of secure individuals to shift back and forth is partly due to their relatively few encounters with interpersonal stress. Because autoregulation is in an energy-conserving strategy with several dissociative aspects to it, a shift to interaction requires neurobiological resource expenditures and changes in autonomic nervous system arousal. This shift may be akin to the experience of awakening from a hypnopompic to one that is fully awake. Conversely, a shift back from interaction to autoregulation (being alone) results in a psychobiological state shift that may be akin to moving from full consciousness to a hypnogogic state, which involves a transition from external interaction to an entirely internal process (sleep). Again, the secure individual is able to transition between various psychobiological states without undue pain or feelings of threat.

For secure and psychoneurotic individuals, a sense of true mutuality is indelibly imprinted upon the nervous system as experience rather than merely as an idea. Having had the experience of an attuned caregiver who valued attachment needs, repaired injuries to the relationship, and maintained a regulated interactive relationship

throughout early childhood, true mutuality is an entitlement born out of real experience. A two-person psychological system functions in such a way that both individuals must prosper and benefit from the union or no one benefits. From a psychobiological perspective, this mutual system makes full use of the face-to-face and skin-to-skin physical proximity that is necessary to interactive regulation.

### **INSECURE ATTACHMENT: THE AVOIDANT**

Psychobiologically speaking, insecure attachment refers to a compromised safety and security system within a primary attachment dyad. This compromised safety and security system, often attributed to insensitive caregiving, creates an ongoing psychobiological burden, such as interpersonal stress, and involves arousal and neuroendocrine systems that are too often engaged in threat.

Mahler's study of mother-infant pairs revealed normative developmental struggles with separations (Mahler, Bergman, & Pine, 1975). During her separation-individuation subphases, Mahler traced a developmental course whereby the infant's internal self and object relations move from fully fused representations, to split part-object/self representations, to eventual whole object representations, all the while dealing with internal and relational challenges and milestones (Masterson, 1981). The avoidant/narcissistic adult has much in common with the toddlers in Mahler's practicing subphase proper, a harbinger of secondary narcissism wherein the child's newly discovered upward mobility provides him or her with an inflated sense of power and ability rivaling that of his or her giant-sized parents. The child, according to Mahler, feels

that “the world is his/her Oyster” (Mahler, 1974a; Stern, 2000, p. 269). Under normal circumstances, the child’s omnipotence gradually and gently becomes frustrated by limitations set by caregivers as well as by reality itself. The caregiver’s proper handling of the child’s fall from omnipotence provides the necessary scaffolding for painful disappointment and frustration. In contrast, improper handling of the child during this period either enables an ongoing sense of omnipotence (exhibitionistic narcissism) or leads to a crushed, narcissistically injured self who, at best, can only bask in the glow of an omnipotent other (closeted narcissism) (Masterson, 1981).

There are two major points to consider in Mahler’s practicing phase as relevant to the avoidantly attached child. The first refers to the fantasy of caregiver omnipresence during this period, and the second refers to fused self-and-other split part-objects. The fantasy of caregiver omnipresence enables the practicing child to tolerate extended periods of separation from his or her caregiver because the realization of separation is not yet existent. The child imagines the mother is everywhere and therefore is not separated from her. As the child develops, the fantasy of omnipresence is replaced by an acute awareness of separation, resulting in sadness, grief, and increased clinging. The child’s ambivalence develops into ambivalence, resulting in an oscillation of clinging and distancing behaviors.

The fantasy of omnipresence is often a part of the avoidant child’s ongoing defense against real separation. Dismissive parenting results in a neglect of attachment behaviors that fail to respond to the infant’s bids for connection, such as proximity

seeking and contact maintenance. These bids eventually extinguish due to repeated non-reciprocal caregiver actions and responses. The dismissive caregiver is often physically present and available for non-attachment needs, and so the neglect is not necessarily material. Avoidant children are often well cared for and “loved,” after a fashion in which a narcissistic mother can do. However, interactive regulation is neither encouraged nor developed by ongoing interactive play with a primary caregiver. The avoidant child is therefore left to autoregulate; that is, to self-stimulate and self-soothe as their principal strategy of self-care. The physically present parent (often but not always a stay-at-home mother) consolidates the child’s omnipresent fantasy (“she was always home”) and leads to the adult avoidant’s rendering of a pseudosecure attachment (Tatkin, 2007).

The pseudosecure platform upon which the avoidant bases romantic relationships is fundamentally non-mutual; that is, it is a one-person psychological system. Indications of this particular internal working model may remain latent up to the moment of marriage. For the avoidant, as any attachment relationship becomes more permanent, at least in perception, implicit threats around feeling trapped, being approached, and feeling used begin to emerge and show in areas of proximity avoidance, contact avoidance, somatosensory aversions toward the partner, and often dramatic and sudden declines in libido.

The other important feature of Mahler’s practicing subphase is that of fused self-and-other split part-objects. Practicing toddlers operate out of a one-mindedness with

the caregiver, aware only that he or she and the caregiver share the same thoughts, feelings, and intentions (Masterson & Klein, 1995). Though normative at this age of development, the avoidant may maintain a fantasy of one-mindedness that carries over into adult romantic relationships. The fact that minds only approximate one another may make intellectual sense to the avoidant and cause no distress, but that is only during periods of the relationship when shared positive feelings prevail. However, during periods of relational distress, he or she may experience the approximation of minds as an assault on the self. The exquisite sensitivity to real separation, which is processed as good and bad split part-objects, is experienced as shameful and disintegrating.

The avoidants' reliance on autoregulation provides them with a false sense of autonomy and self-reliance. Their autoregulatory skills may give them the impression they have won their independence; however, their self-reliance is really an adaptation to neglect and therefore cannot be true independence. In actuality their fear and shame around dependency form a "do it yourself" attitude toward everything and everyone. Although appearing to be engaged in interactive regulation, avoidants often autoregulate while interacting with their primary partner much in the same way narcissists can interact while using others as self-objects. The dissociative properties of autoregulation often give the impression of interaction when, in fact, the interacting partner is engaged in self-stimulating and self-soothing.

The avoidant's tendency toward one-mindedness greatly contributes to repeated, misattuned, unrepaired moments in adult primary attachment relationships. For

instance, an avoidant may ignore or fail to detect conflicting social-emotional information, originating both internally and externally, due in part to defenses against negative experience (avoidance of unregulated or dysregulated affects) and due in part to deficits in right brain, frontolimbic social-emotional processing that cannot respond properly or fast enough to detect errors and make rapid adjustments (Schoore, 2003a).

Finally, as mentioned at the beginning of this paper, attachment organization and personality structure interact with the peripheral nervous system, neuroendocrine system, and musculoskeletal system in response to interpersonal stress. This manifests in the body, face, and voice as expressive attempts to move toward or away from a primary attachment figure. The avoidant's reflex is to move back and away, particularly when approached. These movements occur in both separations and reunions, big and small. The recoil reflex is non-conscious and immediate and can be expressed in a variety of ways to avoid, withdraw, comply, ignore, or attack the intruding partner. Approaches by the attachment figure can be visual, vocal, tactile, and even olfactory (Tatkin, 2009a). Due to the avoidant's default autoregulatory state and difficulty with shifting out of that state, intrusions can be startling and experienced as attacks. In addition, the non-mutual nature of the avoidant's early attachment experience leads him or her to anticipate approaches as non-reciprocated demands. Similar sensitivities to approach have been noted in both narcissistic and schizoid personality disorders (J. Masterson & Klein, 1995).

## **INSECURE ATTACHMENT: THE ANGRY/RESISTANT**

Extreme forms of angry-resistant insecure attachment contain both clinging and distancing defenses, marked by considerable anger, fussiness, ambivalence, and negativism. As with the avoidant, the angry-resistant partner struggles with separations and reunions; however, the experience of distress with both is much more acute. The angry-resistant partner experiences fussiness and ambivalence while in the presence of a partner, anger just prior to and during separation, and anger upon reunion. These individuals often report feeling surprised and baffled by their own angry reactions to separation and reunion (Tatkin & Solomon, in preparation). Their partners often report unavoidable fights started by the angry-resistant in anticipation of being left or of being approached with something positive.

The angry-resistant features of fussiness, anger, negativism, ambivalence, and problems with separations and reunions bear a remarkable resemblance to disorders along the borderline spectrum, especially more an unresolved loss or trauma is involved. The negativistic response to positive approach resembles Fairbairn's anti-libidinal self in response to the libidinal self (exciting object)—an immediate sabotage to an anticipated positive event in order to defend against disappointment (Fairbairn, 1966; Rinsley & Grotstein, 1994). Indeed, the caregiving style of the angry-resistant child is preoccupied, often irritable, and overwhelmed. Preoccupied caregivers themselves have difficulty with separations and reunions. At times emotionally available and at other times not, the preoccupied caregiver is inconsistent with his or her attention, patience,

and self-regulatory functions. Mahler noted that preoccupied mothers during the rapprochement period often elicited clinging behaviors by their toddlers, who could not emotionally refuel due to the mother's low libidinal energy or inattentiveness (Mahler, 1974b; Mahler, et al., 1975). Sroufe and others found preoccupied mothers who were unable to physically calm their infant, prematurely put them down or withdrew from them in frustration (Duggal et al., 2001; Slade, 2000; Sroufe, 1985).

Adult angry-resistant partners have a reflex response that moves toward and then abruptly back away from their primary attachment partner. They commonly report feeling like a burden, and like the toddler, anticipate being dropped prematurely by a frustrated other. Their sadness and longing for their partner during separation is replaced by an angry reaction upon reunion. Positive approaches by their partner are both longed for and rejected, in much the same manner as reunions.

The adult angry-resistant partner also tends to be highly verbal and at times tangential, overly expressive and histrionic, can often perseverate on personal injuries, and tends to rely on external regulation. Whereas the avoidant has trouble shifting from autoregulation to interaction, the angry-resistant has trouble shifting from interaction to being alone. Both have trouble tracking and managing implicit, nonverbal right brain activity that arises in the form of body sensations, images, implicit memory, impulses, and the like (Schoore, 2003a). The angry-resistant's strategy for managing implicit somatosensory experience is constant interaction, whereas the avoidant's strategy is various forms of autoregulation.

## **DISORGANIZED ATTACHMENT**

In contrast with organized insecure who are products of insensitive parenting, *type D's*, or disorganized insecure, are products of scary parenting. Their presentation is not unlike that of lower level personality disorders, such as borderline, which have a high prevalence of psychotic and paranoid ideation, post-traumatic startle, and instantaneous re-experiencing of relational trauma. In a relationship, these disorganized/disoriented partners react to almost ubiquitous, ambient threats and rapid misappraisals of meaning and intension. They commonly misread neutral faces as negative and hostile and react instantly and strongly to threatening prosodic cues and threatening movements and postures. Lagging behind these more implicit, nonverbal cues are sensitivities to dangerous words and phrases.

Chronic dysregulation is the intersubjective experience of disorganized couples. Their daily interactions are, to a large extent, managed subcortically (hyperactive amygdala and hypoactive hippocampus), with a highly kindled threat response and a disabled high right hemisphere error-correcting system. Despite the acute and chronic mutual dysregulation, disorganized partners often see in one another their only hope for reparation, safety, and peace, and for that reason often hold together.

## **AROUSAL BIASES**

Further mention should be made with regard to a particular issue of arousal and affect regulation vis-à-vis personality and attachment organization; arousal biases. Arousal

bias occurs when a partner tends to favor a particular array of arousal and affective states, which can be either in the sympathetic or parasympathetic range. This preference also can include a phobic response to the opposite end of the spectrum. For instance, some individuals and couples favor high sympathetic states (e.g., excitement, ecstasy, mania, rage). These couples I call *high arousal* because they demonstrate characteristics of high vitality, high libido, and high conflict, with significant deficits of soothing and calming. In our previous secure example of mutually amplified positive moments and mutually attenuated negative moments, the couples had high positives and high negatives (distress that is both high in intensity and lasts too long). High arousal partners and couples seek stimulation and avoid parasympathetic states such as alert tranquility, sadness, shame, and depression. These parasympathetic affective states are often *unregulated* in childhood, meaning, primary caregivers avoided these states as well. As a result, these “lower” affects threaten disorganization.

High arousal bias appears throughout psychoanalytic literature. A partner, for example, may present a high arousal preference similar to Melanie Klein’s (1984a) *depressive position* with a manic defense, or may present with the more primitive *paranoid-schizoid position*, referring developmentally to Mahler’s (1975) late practicing and rapprochement subphases, wherein the child has yet to achieve object constancy. Individuals with narcissistic, borderline, and antisocial personality disorders may be predisposed to high arousal, much like bipolar. Masterson (1981) has described individuals with narcissistic disorders as preferring expansive states and with little to no

tolerance for shame or depression. For the narcissist, experience of either shame or depression often results in a rapid sympathetic spiking upward to anger or rage. This sudden spike upward is a defense against a disorganizing parasympathetic collapse directed by the dorsal motor vagal complex, an experience not unlike bleeding out. Many borderlines show high arousal preference. Their ability to generate high positives in relationship, combined with their clinging defenses, helps to keep high intensity relationships going. High arousal couples often consist of two angry-resistant partners, which is consistent with a high positives/high negatives relational product. The continual clash of two preoccupied, angry-resistant partners under separation and reunion stress makes for a real-life tango of rapidly oscillated clinging and distancing.

In contrast, partners and couples with a low arousal bias tend to move at ease with lower parasympathetic affects and more aversive to sympathetic vitality states. These individuals tend to be contact-avoidant and have low conflict, low libido, and generalized anxiety. They tend to be more depressive, anxious, and obsessive. Their contact-avoidance seems to reflect early neglect with regard to skin-to-skin caregiver contact, particularly during Mahler's symbiotic phase (1974b). These partners and couples tend to be avoidantly attached. Because of aversive reactions to frequent and prolonged physical contact, a problem involving the near senses, they cannot achieve lasting relief and relaxation on their own or with others. Under normal circumstances, the hypothalamic-pituitary-adrenal axis (HPA), which is the neuroendocrine stress response and recovery system, responds best to touch for recovery purposes. The

human reflex to use touch as a means to comfort and calm others is evident in all cultures. The low arousal couple cannot make full use of touch due to their strong aversions to all the near senses.

Examples of low arousal individuals can again be found in psychoanalytic literature and personality theory (Guntrip, 1961; Klein, 1984b; Masterson, 1981). Schizoid personalities commonly appear low arousal, as do some closet narcissistic personalities, and some borderlines.

## **CONCLUSION**

The psychobiological approach to couple therapy incorporates psychological and biological components that influence development and drive primary attachment relationship. Attachment organization and personality development are but two aspects of this theoretical approach. Neurobiology and arousal regulation are other important components necessary to understanding human relationships. Attachment and personality theories have much in common and can augment and reinforce one another within a psychobiological paradigm.

## **REFERENCES**

Beebe, B., & Lachmann, F. (1998). Co-constructing inner and relational processes: self- and mutual regulation in infant research and adult treatment. *Psychoanalytic Psychology, 15*, 480-516.

- Beebe, B., Rustin, J., Sorter, D., & Knoblauch, S. (2003). An expanded view of intersubjectivity in infancy and its application to psychoanalysis. *Psychoanalytic Dialogues, 13*, 805-841.
- Buchholz, E. S., & Helbraun, E. (1999). A psychobiological developmental model for an "alonetime" need in infancy. *Bulletin of the Menninger Clinic, 63*, 143-158.
- Diamond, D. (2004). Attachment disorganization: the reunion of attachment theory and psychoanalysis. *Psychoanalytic Psychology, 21*, 276-299.
- Duggal, S., Carlson, E. A., Sroufe, L. A., & Egeland, B. (2001). Depressive symptomatology in childhood and adolescence. *Development and Psychopathology, 13*, 143-164.
- Fairbairn, W. R. D. (1966). *Psychoanalytic studies of the personality*. London: Tavistock Publications.
- Feld, B. (2004). Holding and facilitating interactive regulation in couples with trauma histories. *Psychoanalytic Inquiry, 24*, 420-437.
- Fonagy, P., Target, M., & Gergely, G. (2000). Attachment and borderline personality disorder. A theory and some evidence. *Psychiatric Clinical North American Journal, 23*(1), 103-122.
- Gunderson, J. G., & Ridolfi, M. E. (2001). Borderline personality disorder. Suicidality and self-mutilation. *Annals of the New York Academy of Sciences, 932*, 61-73.
- Guntrip, H. J. S. (1961). *Personality structure and human interaction*. New York: International Universities Press.

- Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- Kernberg, O. F. (1976). *Object-relations theory and clinical psychoanalysis*. New York: Jason Aronson.
- Kernberg, O. F. (1980). *Internal world and external reality: object relations theory applied*. New York: Jason Aronson.
- Kernberg, O. F. (1993). The couple's constructive and destructive superego functions. *Journal of the American Psychoanalytic Association, 41*, 653-677.
- Klein, M. (1984a). *Envy and gratitude, and other works, 1946-1963*. New York: Free Press.
- Klein, M. (1984b). *Love, guilt, and reparation, and other works, 1921-1945*. New York: Free Press.
- Lyons-Ruth, K. (1999). The two-person unconscious: intersubjective dialogue, enactive relational representation, and the emergence of new forms of relational organization. *Psychoanalytic Inquiry, 19*, 576-617.
- Mahler, M. S. (1974a). On the first three subphases of the separation-individuation process. *Psychoanalysis and Contemporary Science, 3*, 295-306.
- Mahler, M. S. (1974b). Symbiosis and individuation—the psychological birth of the human infant. *Psychoanalytic Study of the Child, 29*, 89-106.
- Mahler, M. S. (1979). *Separation-individuation*. New York: Jason Aronson.

- Mahler, M. S., Bergman, A., & Pine, F. (1975). *The psychological birth of the human infant: symbiosis and individuation*. New York: Basic Books.
- Masterson, J., & Klein, R. (1995). *Disorders of the self: new therapeutic horizons: the Masterson approach*. New York: Brunner-Routledge.
- Masterson, J. F. (1981). *The narcissistic and borderline disorders: an integrated developmental approach*. Larchmont, N.Y.: Brunner/Mazel.
- Masterson, J. F. (1985). *The real self: a developmental, self, and object relations approach: structure, function, development, psychopathology, treatment, creativity*. New York: Brunner/Mazel.
- Morris, J. S., Ohman, A., & Dolan, R. J. (1999). A subcortical pathway to the right amygdala mediating "unseen" fear. *PNAS*, 96, 1680-1685.
- Ogden, T. H. (1986). *The matrix of the mind: object relations and the psychoanalytic dialogue*. Northvale, N.J.: J. Aronson.
- Person, E. S., Fonagy, P., Figueira, S., & Freud, S. (1995). *On Freud's "Creative writers and day-dreaming."* New Haven, CT: Yale University Press.
- Porges, S. W. (2003). The Polyvagal theory: phylogenetic contributions to social behavior. *Physiology and Behavior*, 79, 503-513.
- Posner, M. I., Rothbart, M. K., Vizueta, N., Thomas, K. M., Levy, K. N., Fossella, J., et al. (2003). An approach to the psychobiology of personality disorders. *Development and Psychopathology*, 15, 1093-1106.

- Rinsley, D. B., & Grotstein, J. S. (1994). *Fairbairn and the origins of object relations*. New York: Guilford Press.
- Schore, A. N. (1994). *Affect regulation and the origin of the self: the neurobiology of emotional development*. Hillsdale, N.J.: L. Erlbaum Associates.
- Schore, A. N. (2001a). 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. (2001b). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22*, 201-269.
- Schore, A. N. (2001c). Minds In the making: attachment, the self-organizing brain, and developmentally-oriented psychoanalytic psychotherapy. *British Journal of Psychotherapy, 17*, 299-328.
- Schore, A. N. (2002c). Dysregulation of the right brain: a fundamental mechanism of traumatic attachment and the psychopathogenesis of posttraumatic stress disorder. *Australian and New Zealand Journal of Psychiatry, 36*, 9-30.
- Schore, A. N. (2003a). *Affect dysregulation and disorders of the self*. New York: Norton.
- Schore, A. N. (2003b). *Affect regulation and repair of the Self*. New York: Norton.
- Schore, A. N. (2009). Attachment trauma and the developing right brain: Origins of pathological dissociation. In P.F. Dell, & J.A. O'Neil (Eds.), *Dissociation and the dissociative disorders: DSM-V and beyond* (pp. 107-141). New York: Routledge.

- Slade, A. (2000). The development and organization of attachment: Implications for psychoanalysis. *Journal of the American Psychoanalytic Association*, 48, 1147-1174.
- Sroufe, L. A. (1985). Attachment classification from the perspective of infant-caregiver relationships and infant temperament. *Child Development*, 56, 1-14.
- Sroufe, L. A. (1986). Bowlby's contribution to psychoanalytic theory and developmental psychology; attachment: separation: loss. *Journal of Child Psychology and Psychiatry* 27, 841-849.
- Stern, D. N. (2000). *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. New York: Basic Books.
- Tatkin, S. (2004). A developmental psychobiological approach to therapy. *Psychologist-Psychoanalyst*, XXIII, (No. 4), 20-22.
- Tatkin, S. (2006, November 9-11). *The prevalence of dissociation in low arousal-avoidant couples*. Paper presented at the International Society for the Study of Dissociation, Los Angeles, California.
- Tatkin, S. (2007). Pseudo-secure couples. *The Therapist*, 19 (1).
- Tatkin, S. (2009a). Addiction to "alone time" - avoidant attachment, narcissism, and a one-person psychology within a two-person psychological system. *The Therapist*, 57 (January-February).

- Tatkin, S. (2009b). I want you in the house, just not in my room...unless I ask you: the plight of the avoidantly attached partner in couples therapy. *New Therapist Magazine* (Couples Edition).
- Tatkin, S., & Solomon, M. (in preparation). *Love and war in intimate relationships: how the mind, brain, and body interact*. New York: Norton.
- Vuilleumier, P. (2007). Neural representation of faces in human visual cortex: the roles of attention, emotion, and viewpoint. *Object recognition, attention, and action—Osaka N, Rentschler I, Biederman I, eds*, 109–128.
- Weissman, P. (1967). Theoretical considerations of ego regression and ego functions in creativity. *Psychoanalytic Quarterly*, 36, 37-50.
- Winnicott, D. W. (2002). *Winnicott on the child*. Cambridge: Perseus Publications.
- Winnicott, D. W., Davis, M., Shepherd, R., & Winnicott, C. (1987). *Babies and their mothers*. Reading: Addison-Wesley.

FIGURES

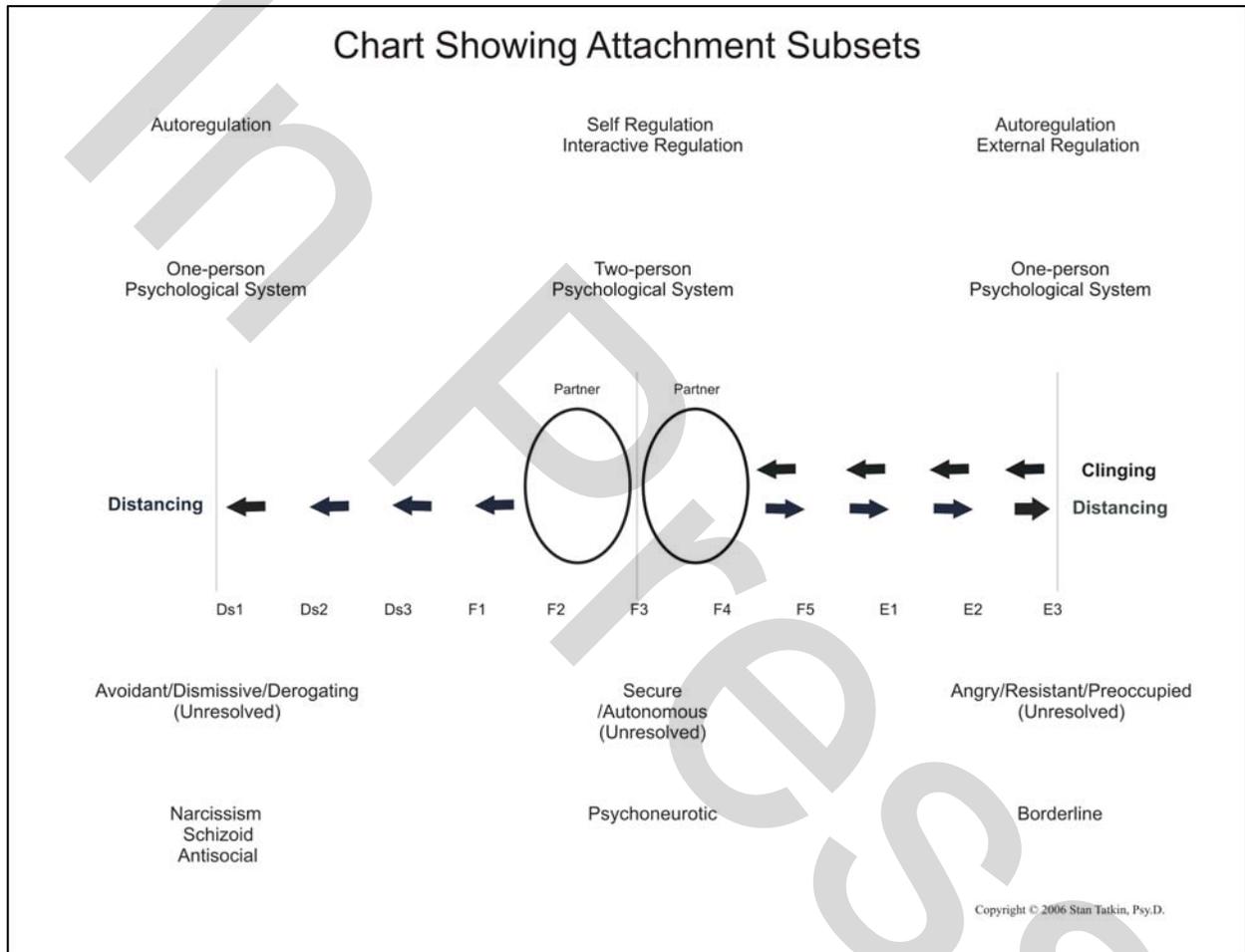


Figure 1

*Dr. Stan Tatkin integrates neuroscience, infant attachment, arousal regulation, and therapeutic enactment applied to adult primary attachment relationships. He is an assistant clinical professor at the UCLA David Geffen School of Medicine, Department of Family Medicine, maintains a practice in Calabasas, California, and trains clinicians in a psychobiological approach to couple therapy.*

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