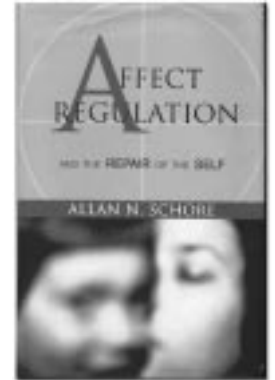


## *Affect Regulation and The Repair of the Self*

By Allan N Schore

Review by Milton Richlin, PhD



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ISBN: 0-393-70407-6.  
363 pages; \$45

In this most recent volume in his series, Allan Schore of the University of California at Los Angeles describes an extensive body of research and clinical observations supporting the idea that early development of the brain's right hemisphere plays a critical role in an infant's attachment to its primary caregiver. During the first three years of life, the centers in the prefrontal cortex of the infant's right hemisphere respond to the interaction with the mother's emotions in guiding the infant's own emotional development.

In the preface, Schore explains the purpose and plan of the current book in the context of earlier volumes<sup>1,2</sup> in the series:

In this book ... I offer further exposition in the fields of developmentally-oriented psychotherapy and developmental neuropsychology ... The rich body of data that emerged from basic brain research, as well as from psychobiology and psychophysiology was now, perhaps more so than any time before, relevant to clinicians.<sup>3:pxiii</sup>

An important theme of the book is that many aspects of Freud's original theoretical and clinical models have been substantially updated and, in some cases, even radically altered. Schore places great emphasis on Attachment Theory (as set forth and developed by Bowlby) and its use of the concept of nonconscious internal working models. Schore seems to believe that any biases held by his readers must be measured against the ever-growing neurobiological evidence that Freudian theory and our understanding of brain function are no longer incompatible. As a nonpsychoanalytic psychotherapist, I appreciated learning of the great efforts being made to scrutinize and revise psychoanalysis in neuroscientific terms—an effort that supplements the experimental approach within psychoanalysis itself.<sup>5,6</sup> Also interesting is the fact that a new journal, *Neuro-Psychoanalysis* (which began publication in 1999) lists an impressive editorial board, including psychoanalysts Schore, Otto Kernberg, and Arnold Modell as well as neuroscientists Antonio Damasio, Joseph LeDoux, Eric Kandel, Karl Pribram, and Oliver Sachs.

Another important theme is the neurobiological development of the self. On this topic, Schore presents a nearly overwhelming volume of research findings. From

these findings, two particularly important subthemes emerged. The first is the greater role of the right prefrontal cortex as compared with the left during the first three years of life—with regard to influencing development of a sound emotional base:

This prefrontal region comes to act in the capacity of an executive control function for the entire right cortex, the hemisphere that modulates affect, nonverbal communication and unconscious processes ... In this manner, the child's first relationship, the one with the mother, acts as a template for the imprinting of circuits in the child's emotion-processing right brain, thereby permanently shaping the individual's adaptive or maladaptive capacities to enter into all later emotional relationships ... Indeed, the right brain is thought to contain the essential elements of the self system (Mesulam and Geschwind, 1978; Schore, 1994).<sup>3:p18-19</sup>

A second major subtheme is the key role of the mother's face and emotional expressions in determining the emotional development of the infant. The mother's face—particularly her eyes—is the most potent stimulus in the infant's environment. Schore quotes studies by Hoffman (1987) and Panksepp, et al (1985), which show that interactive mutual gazes between the mother and her infant trigger high levels of endogenous opiates in the child's growing brain. These findings are related to Schore's Regulation Theory, which emphasizes that attachment is essentially the right brain regulation of biological synchronicity between organisms.

Another theme discussed in the book addresses the relation between the right hemisphere and the lower brain centers, particularly the autonomic nervous system (ANS). Physicians whose patients have an illness with a strong psychosomatic component will be especially interested. The following quotation is representative of Shore's presentation:

... the infant's psychobiological response to trauma is comprised of two separate response patterns, hyperarousal and dissociation ... In the initial stage of threat an alarm reaction is initiated, in which the sympathetic component of the ANS is suddenly and significantly activated, resulting

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in increased heart rate, blood pressure, and respiration. Distress is expressed in crying and then screaming ... This state of fear-terror is mediated by sympathetic hyperarousal, and it reflects increased levels of the major stress hormone corticotrophin releasing factor, which in turn regulates noradrenaline and adrenaline activity ....

But a second, later-forming, longer-lasting traumatic reaction is seen in dissociation, in which the child disengages from stimuli in the external world and attends to an "internal" world .... Traumatized infants are observed to be staring off into space with a glazed look. This parasympathetic dominant state of conservation-withdrawal occurs in helpless and hopeless stressful situations in which the individual becomes inhibited and strives to avoid attention in order to become "unseen." ...

This primary regulatory process for maintaining organismic homeostasis ... is characterized by a metabolic shutdown ... and low levels of activity .... It is used throughout the lifespan when the stressed individual disengages in order "to conserve energies ... to foster survival by the risky posture of feigning death, to allow healing of wounds and restitution of depleted resources by immobility" (Powles, 1992, p 213).<sup>3p124</sup> ...

In evaluating the potential value of Schore's book for readers of *The Permanente Journal*, I would like to compare the book to *A General Theory of Love* by Lewis, Amini, and Lannon,<sup>7</sup> a book reviewed favorably here recently by Vincent J Felitti, MD.<sup>8</sup> Both books cover the same basic material: the human infant's development of a self on the basis of brain development; and interactions with the primary caregiver. But Shore's book can be seen as the full

text, whereas *A General Theory of Love* is more like a good abstract of the scientific materials. For many purposes (eg, saving time), the abstract may be sufficient. However, there are several deficiencies in the Lewis et al book that might incline an interested reader to spend the extra time required to read Schore's book. The latter is more scholarly, far more fully referenced,<sup>9,10</sup> and represents a more complete attempt to explain how evolving psychodynamic ideas are integrating with the field of neuroscience. To paraphrase an old expression, "You pays your money [\$39 vs \$24] and your time [363 pages vs 274], and you takes your choice." ♦

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## Banish The Clouds

When I am attacked by gloomy thoughts, nothing helps me so much as running to my books. They quickly absorb me and banish the clouds from my mind.

— Michel de Montaigne, 1533-92, French philosopher