

2 **The Implicit Realm in Couples Therapy: Improving Right**
3 **Hemisphere Affect-Regulating Capabilities**

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7 **Abstract** Attachment theory, viewed through the lens of
8 neurobiology, explains how infants learn, through uncon-
9 scious, rapid, non-verbal interactions with caretaking
10 adults, to successfully manage their own emotional energy.
11 These neurological affect-regulating mechanisms formed
12 in early childhood shape later-forming attachment rela-
13 tionships, including those of adult romantic dyads which
14 depend, for intimacy and stability, on the same right brain,
15 nonverbal, modulating capacities. Psychoanalytic
16 researchers have identified healing, implicit, unconscious
17 psychobiological mechanisms, other than verbal insight,
18 explanation and interpretation that can be learned remedi-
19 ally in couples' therapy. This paper examines an implicit,
20 emotion-focused approach to couples' work that brings
21 unconscious affect center stage.

22
23 **Keywords** Affective neuroscience · Attachment ·
24 Couples therapy

25
26 Psychotherapy is physiology ... a somatic state of
27 relatedness ... Mammals ... become attuned to one
28 another's evocative signals and alter the structure of
29 one another's nervous systems ... Speech is a fancy
30 neocortical skill, but therapy belongs to the older
31 realm of the emotional mind, the limbic brain.
32 (Lewis and Amin 2002, pp. 168–169).

Introduction 34

Attachment Theory Through a Neurobiological Lens: 35
Experience-Dependent Maturation of the Brain 36

The infant's capacity to regulate affect emerges within a 37
delicate, non-verbal, interactive dance, choreographed 38
unconsciously, between her parents and herself (Beebe and 39
Lachmann 1998) as parents contingently match and attune 40
with their infant's changing affect states. When parents fail 41
to do this with enough consistency, the infant's capacity to 42
regulate affect is compromised. Years later, therapists see 43
these residual distortions in the couples who seek our help. 44

Early relational experiences have dramatic consequences 45
for later development because affect regulating circuits of 46
the fetal/neonatal brain are developing between the third 47
trimester of pregnancy and the second year of life, a period 48
of time when the total volume of the brain more than 49
doubles (Knickmeyer et al. 2008). Much of this growth, 50
especially of the white matter (the myelinated tracks con- 51
necting and communicating between structural centers in 52
the brain), is driven by experience (Schore 2009b). Neu- 53
rological circuits of emotional regulation including the 54
insula, the anterior cingulate (AC), and the orbital frontal 55
cortex (OFC), create cortical and subcortical pathways 56
down into the amygdala; these calm the child by turning 57
down the neuromodulating autonomic nervous system 58
(ANS) and the neurosteroid hormones of the hypothalam- 59
us–pituitary–adrenal axis (HPA) stress response (Schore 60
1994, 1997, 2001a). 61

When early relationships are insecure (non-contingent 62
and non-attuned) less than optimal connections are made 63
between these regulation and arousal centers. As a 64
result, more periods and higher frequencies of dysregula- 65
tion ensue (Schore 1994, 1996, 2003a). When chronically 66

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67 hyperactivated and hypersensitized in critical periods of
68 infancy, an individual's stress response, especially in reac-
69 tion to relational injuries, launches more quickly, reaches
70 higher levels, and persists (Schore 2003a) setting the stage
71 for rapid bouts of dysregulated conflict in distressed adult
72 couples. These eruptions are marked by anger, blame and
73 defensiveness and may jeopardize or destroy relational
74 intimacy and trust.

75 A single human skull houses two virtually separate
76 brains, distinct in both structure and functioning with major
77 differences between our rational, logical, verbal, analytical,
78 conscious left hemisphere (LH) and our largely uncon-
79 scious, affective, non-logical, non-verbal right hemisphere
80 (RH). The latter is dominant for empathy, attachment, and
81 affect-regulation, and stores an internal working model of
82 the earliest attachment relationships and the strategies of
83 affect regulation that were learned in them (Schore, personal
84 communication, November 19, 2005). The verbal process-
85 ing of the infant's LH does not initiate until the second year.
86 Thus, in secure attachment interactions between an upset
87 child and a responsively attuned adult, comfort is mediated
88 entirely by nonverbal signaling between right hemispheres.

89 More of the human cortex is devoted to vision and touch
90 than to verbal language (Damasio 1999). This is the lan-
91 guage of the RH, affective and body-based, transmitted by
92 the primary process communications of face, gesture,
93 posture, touch and prosody (the vocal qualities of volume,
94 rhythm, pitch, timber, tone and speed). Thus, the earliest
95 parent-infant communications occur as body-to-body, skin-
96 to-skin contact, deep mutual gazing, facial expressivity,
97 and the melodic "music of the voice" that we call "baby
98 talk" or "parentese," with its high-pitched intonations and
99 glissando, sliding sounds.

100 In 250-millisecond splits of video-frame-analysis of
101 mother and infant interactions, Beebe and Lachmann (1994)
102 demonstrated that mothers engage in a synchronous dance of
103 this primary-process attunement with their infants, yet are
104 not aware of, and cannot describe, what they are doing
105 because it is happening too quickly for consciousness to
106 track. Templates of secure attachment are built through
107 these repeated moments of affect synchrony as the child, for
108 example, lost momentarily in his own uncomfortable arousal,
109 experiences the neuromodulating, energy-regulating
110 face, voice and touch of the adult in soothing interaction
111 with him. As the nurturing adult holds, rocks and strokes the
112 child, cooing soothing sounds, or singing lullabies, the
113 child's body is thus calmed. Over time, with many repeti-
114 tions of this experience, she introjects the capacity to calm
115 himself. In this way, the capacity for regulating affect is
116 gradually transmitted from the caretaker's to the infant's
117 brain stimulating optimal development (Schore 1994).

118 Even the most sensitive parents do not always respond
119 contingently, but their misattunements are followed by

120 timely and empathic repair (Fonagy et al. 2002) as the
121 briefly misattuned adult finds a way to calm and soothe the
122 child. These repetitive interactions of attunement and
123 repair are recorded implicitly in deep subcortical structures
124 in the infant's RH, as templates for how to be, and what to
125 expect, in healthy, intimate relationships.

126 In the absence of this attuned resonance, the child is left
127 in extended states of dysregulated affect (Beebe 2000), and
128 the attachment system evolves as insecure, or worse—
129 when the parent is frightening, abusive or neglectful—as
130 disorganized (Lyons-Ruth et al. 1999). The infant left in
131 extended states of disrupted affect eventually learns to
132 defend himself through a dissociative shutting down
133 (Tronick and Weinberg 1997). Under these conditions, the
134 early developing regulating structures of the infant's brain
135 fail to mature (Schore 1994, 2001b) leaving the child
136 unable to regulate his own, or other's arousal states.

137 These deep subcortical RH templates of affective experi-
138 ence continue to exert influence over both behavioral and
139 emotional aspects of our lives, though they remain largely
140 outside our conscious awareness, encoded in implicit
141 (unconscious) procedural (body) memory (Schore 2003b).
142 They shape the choices that we make (Damasio 1999)
143 including our selection of potential mates, and the means by
144 which we manage conflicts in these intimate relationships.

Romantic Love Conceptualized as an Attachment Relationship: Experience-Dependent Remediation of the Brain

145 Romantic love has been, for some time, conceptualized as
146 an attachment relationship (Hazan and Shaver 1987;
147 Shaver and Hazan 1993; Johnson 1996, 2004; Johnson and
148 Denton 2002) and theories designed to treat adult rela-
149 tionships have drawn heavily from these attachment para-
150 digms (Erel and Burman 1995; Johnson 2004). While the
151 earliest attachment relationships initially wire the brain
152 initially for affect regulation (Schore 1994; Trevarthen
153 2001), new attachment relationships can reorganize neural
154 circuits, enhancing this capacity. This wiring of one brain
155 through resonant interaction with another brain is the
156 psychoneurobiological basis for the healing potential of
157 important adult relationships, including romantic partner-
158 ships, the deeply attuned dyad in psychotherapy (Safran
159 and Muran 2000) and the triad of a couple and their psy-
160 chotherapist. Thus, effective couples therapy uses the same
161 processes that occur between parents and infants in secure
162 attachments (attunement, empathy, and resonance) to
163 reactivate and rewire RH procedural templates from
164 childhood (Schore 2003b; Atkinson 1999, 2002; Cozolino
165 2002; deBellis et al. 2002). This rewiring requires activa-
166 tion of the pathways involved in regulating affect, the
167 subcortical, emotional centers, primarily in the RH. Since
168
169
170

171 most affect-regulating capacities reside in the RH, this
 172 paper will elaborate on the important corollary that emo-
 173 tionally-charged conflicts must be experienced during the
 174 couples' therapy hour and not just discussed (Johnson
 175 2004; Goldman and Greenberg 1992; Makinen and
 176 Johnson 2006; Tatkin 2005b).

177 **The Neurophysiology of Affect Regulation in Couples**
 178 **Therapy**

179 The brain is constructed to save and support our lives. In an
 180 emergency where split-second assessments and reactions can
 181 make the difference between life and death, the subcortical
 182 areas of our brain prepare us for instant, life-preserving
 183 reactions of fight, flight or freeze. These regions within the
 184 RH are both fast enough to appraise potential threat and able
 185 to mobilize massive neuromodulatory responses through the
 186 sympathetic nervous system (SNS) and via the release of
 187 stress chemicals (catecholamines and glucocorticoids).

188 When couples merely disagree, the brain has time to
 189 route its findings cortically where they can be assessed
 190 more carefully, permitting attentive listening and the
 191 capacity to empathetically hold the partners point of view
 192 (Fonagy et al. 2002). At such times, communication occurs
 193 more or less calmly frontal lobe to frontal lobe. But rela-
 194 tional conflict, especially in the primary attachment of a
 195 romantic pair, can feel deeply threatening and can trigger
 196 an emergency response that shuts down the frontal lobes
 197 leaving only a subcortical appraisal system with no input
 198 from higher cortical centers to evaluate or regulate that
 199 energy. The amygdala has, in essence, hijacked the brain
 200 into a self-protective flight, flight or freeze response
 201 (LeDoux 2002) that threatens the couple's intimacy. Here,
 202 partners likely fall back upon their more primitive internal
 203 working models of relationship learned in childhood
 204 (Bowlby 1988).

205 Gottman (1999) used the term "diffused physiological
 206 arousal" (DPA) to illustrate such a surge of hyperactivation
 207 sufficient to shut down cortical appraisal and problem-
 208 solving strategies, rational thought, and impulse control.
 209 Repeated failures to curb such escalations can result in the
 210 emergence of destructive rage and expressions of disgust,
 211 contempt and blame (Gottman and Gottman 2008; Ogden
 212 and Minton 2000). In the absence of successful efforts at
 213 repair, these eruptions eventually damage the couple's
 214 empathic bond (Tatkin 2005a).

215 This capacity for repair requires that at least one person
 216 in the couple regain their own affect-regulating ability.
 217 With neither able to self-regulate, interactive strategies for
 218 calming down can fail, especially if they are too dissimilar.
 219 Some individuals, for example, may want desperately to
 220 stay engaged, to express their hurt or fears in hopes of

221 finding an understanding and sympathetic ear. Their ability
 222 to hold arousal and regulate their feelings independent of
 223 their partner may be minimal. Others become emotionally
 224 overwhelmed and need time to withdraw and settle down
 225 before they can once again think and talk coherently. Given
 226 these disparate coping styles, one member looks precipi-
 227 tously for interactive repair to a partner who has focused
 228 internally to self- or auto-regulate; the former may feel
 229 abandoned and the latter invaded or intruded upon, esca-
 230 lating rather than reducing the dysregulated energy.

The Hyperarousal/Dissociation Continuum 231

Affective styles in couples differ. When both are quick to
 232 hyperactivate, conflict erupts frequently; when both move
 233 reflexively toward hypoactivation, the relationship will
 234 likely have a deadened quality as conflicts are collusively
 235 avoided and conversations kept superficial and polite
 236 (Tatkin 2007). And where the neuroaffective styles are
 237 mixed, we might see a fearful or angry pursuit of a partner
 238 who is perceived as abandoning, and/or an avoidant retreat
 239 away from a partner who threatens to overwhelm.

240 Where tendencies toward hyperactivation are present in
 241 both members of the romantic pair, they likely manifest in
 242 mutual irritability, quick tempers, and disagreements
 243 marked by aggression and defensiveness. If energy surges
 244 too high too quickly it can trigger states of dissociated rage
 245 where violence can, and sometimes does ensue. But for
 246 most people, when these exchanges of mutual escalating
 247 rage reach a critical level, the brain protects itself by
 248 launching a neuronal circuit breaker. Neural connections
 249 are cut off between the prefrontal cortical and subcortical
 250 limbic structures, particularly in the RH (Schore 2009a)
 251 trapping the intense energy beneath a deadened or numbed
 252 dissociative state (Porges 2001). In romantic relationships,
 253 where partners were subjected to early relational trauma in
 254 insecure, or disorganized, attachment paradigms (Fosha
 255 2003) dissociative rage or numbing can be triggered
 256 instantly. These reactions develop as survival strategies
 257 mediated unconsciously in lower centers of the brain. If
 258 repeated frequently, such dissociative patterns can become
 259 chronic traits (Perry et al. 1995).
 260

Applications: Using the Neurological Literature 261
on Affect Arousal, Affect Regulation, and Regulation 262
Theory to Work with Dysregulation in Couples 263
Therapy 264

LH Approaches to Dyadic Dysregulation 265

Couples enter therapy with betrayals and affairs, bouts 266
 of eruptive emotionality, or deadening distance that has 267

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268 defensively grown up over repeated ruptures without
 269 repair. Therapists are frequently presented with enormous
 270 discrepancies in the stories that are told, and may feel
 271 pulled to take sides or referee. With these couples, thera-
 272 pists often see the limitations of purely cognitive approa-
 273 ches. Tools of negotiation, compromise and improved
 274 communication skills presuppose separate nervous systems
 275 that can operate independently and that can, in high arousal
 276 states, follow helpful guidelines that encourage listening
 277 well and communicating nondefensively. This is not true of
 278 many couples who present for therapy.

279 Neuroscience, in a variation on systems theory, offers a
 280 paradigm shift from the idea of separate individuals in
 281 conflict, to what Allan Schore calls a “single fused neural
 282 circuitry.”

283 Rather than viewing the couple as two separate
 284 people, the contemporary neuroscience picture is of a
 285 single, emotionally fused system whose coupled
 286 chemistry tunes the brains and minds of each. Just as
 287 a caretaker’s precise responses tune the brain and
 288 mind of the newborn baby, so too do the dynamics of
 289 the couple ... set the stage either for well-regulated or
 290 dysregulated emotion within individuals (Schore,
 291 personal communication, September 17, 2005).

292 In moments of high emotionality, cortical centers in the
 293 right and left hemisphere disconnect, and couples lock into
 294 their subcortical RHs, reverting to primitive styles of
 295 defensiveness. What we “know” and what we “intend to
 296 do,” like lists of good communication skills, are processed
 297 through words in the neo-cortex of the LH, and become
 298 inaccessible during heightened arousal states.

299 Structuring RH Implicit & Affect-Based Approaches 300 in Couples’ Therapy

301 Partners in most couples who seek therapy grew up inse-
 302 curely attached and their relationships are dysregulated by
 303 too little or too much energy. A scowl, a cutting tone of
 304 voice, or a rolling of the eyes can evoke anger, blame and
 305 defensiveness at lightning speed in that “bottom-up
 306 hijacking” of the brain by the amygdala (LeDoux 2002).
 307 This pours powerful stress chemicals into the bodies of
 308 each, leaving them trapped in subcortical structures in the
 309 RH. Although this occurs in secure and insecure systems
 310 alike, the latter can not repair and interactively regulate
 311 these breeches, and so they become heightened and long-
 312 lasting states of shared emotional negativity.

313 Couples therapy must activate those deep subcortical
 314 recesses of our unconscious mind where affect resides,
 315 trauma has been stored, and preverbal, implicit attachment

316 templates have been laid down. Such RH activation within
 317 distressed relationships implies the need for therapeutic
 318 approaches that are affective and deeply relational, with an
 319 emphasis on RH resonance, rather than cognitively con-
 320 structed LH interventions and analysis (Schore 2003b).
 321 Therapists who want to modify those early neural patterns
 322 must work in RH modalities, utilizing the same affective
 323 primary-process attunement, mediated by facial expres-
 324 sions, eye-contact, verbal-prosody, body-posture, gestures
 325 and general vitality that are being rapidly and uncon-
 326 sciously exchanged. We slow the interactive pace, and
 327 refocus couples from the verbal content to the process that
 328 is occurring beneath the verbal dialogue. We take them into
 329 the meanings behind their words and into a closer rela-
 330 tionship with their own feeling states.

331 Evidence is mounting for the efficacy of such implicit
 332 and affect-based approaches in couples’ therapy (Byrne
 333 et al. 2004; Denton et al. 2000; Johnson and Talitman
 334 1997; Johnson 2005). Collectively they point to the need to
 335 enhance the ability for affect-regulation in our patients with
 336 approaches that activate and reorganize higher and lower
 337 centers on the right side of the brain.

338 Implementing RH Implicit & Affect-Based Approaches 339 in Couples’ Therapy

340 Because distressed relationships are characterized by
 341 repeated ruptures that are not repaired, it is essential that,
 342 once dysregulated, couples be able to successfully recon-
 343 nect. Partners must learn to track both externally- and
 344 internally-arising energies, by recognizing environmental
 345 triggers and their own visceral-response-arousal signs.
 346 As somatic approaches demonstrate (Ogden and Minton
 347 2000; Levine 1997) the body knows how to do this auto-
 348 matically, provided the escalating or falling energy can be
 349 contained.

350 In the initial stages of therapy, the couple’s therapist
 351 functions as the external regulator, providing containment
 352 by helping them to pause, observe, and wait until they’re
 353 calm enough to think. We assist them to get their entire
 354 brain turned on, arousal and regulating centers functioning
 355 simultaneously. This strengthens affect-regulating centers
 356 in the prefrontal cortices with their modulating pathways to
 357 lower, emotional centers in the brain. These are the very
 358 functions, and subsequently structures that, as infants, they
 359 did not internalize and grow. In the vignette below, the
 360 husband, in a moment of agonizing pain, manages to slip
 361 momentarily into an OFC-mediated observer state and
 362 separate his past trauma from the present dysregulating
 363 exchange. In that instant, his whole brain is activated and

364	functioning in an integrated way and his affect shifts	Therapist's Need to Self Regulate	412
365	immediately, though temporarily, toward calm.		
366	Self- and Interactive Regulation		
367	Dysregulated couples require considerable coaching at first,	Therapists working closely with couples' relational distress	413
368	with less intervention on our part as they acquire the more	are immersed in, and occasionally on the receiving end of	414
369	sophisticated self and co-regulatory capacities they would	powerful energies that may activate reciprocal feelings in	415
370	have ideally developed in childhood. Our initial goal is to	response. This can happen when energy erupts precipi-	416
371	actively assist, then to teach them how to regulate them-	tously, locking clients into a destructively escalating cre-	417
372	selves and, finally, to help them co-regulate with one another	scendo of desperation and hostility, when they turn away	418
373	at moments of distress. Through practice, higher neural	from one another in a steely silent rage, or when their	419
374	regions on the right become better at turning down more	energy collapses into despair or hopelessness. Fear, reac-	420
375	primitive centers of arousal, improving the individual's	tive anger, shame, or a sense of helplessness can briefly	421
376	capacity for regulation, discernment, and impulse control	flare in the therapist who might feel overwhelmed by the	422
377	(Beer and Lombardo 2007).	intensity of the interactions, or even dissociate into dis-	423
378	Co-Regulation Strategies: Teaching Interpersonal	traction or confusion under a momentary sense of threat.	424
379	Regulation Skills	The therapist's capacity to track not only the non verbal	425
380	Co-regulation bids for soothing and repair made by one	social emotional cueing in the couple, but also her own	426
381	intimate partner to another are generally more powerful	RH-based visceral experiencing, and to re-regulate, is	427
382	than attempts by either to self-regulate, and often more	paramount to providing the couples with the "container"	428
383	effective than those made by the therapist to soothe. They	that Bion (1962) talked about.	429
384	do, however, require that at least one member of the couple		
385	at a time be able to set their own emotions temporarily	Couples Vignette	430
386	aside, to listen to what their partner is saying affectively,		
387	and to hear the pain beneath their partner's defensiveness.	<i>Presenting Patterns</i>	431
388	They must learn to track their partner's non-verbal mate-	Eleanor and Leonard have recently moved to the west coast	432
389	rial, and understand the triggers that serve to dysregulate	for his new executive position, a move that took her away	433
390	both their partners and themselves.	from her family, work and friends. Eleanor blames Leonard	434
391	It helps to position them face to face, inviting them to	for her loss though she agreed to move, and alternates	435
392	speak with their posture, their eyes (Harrison et al. 2006,	between reactive grief and rage at him. They fight fre-	436
393	2007; Demos et al. 2008) their empathic tears, and their	quently and he is almost always the one to re-approach and	437
394	entire face; to use softened expressions, smiles, and calming	offer to repair. Their 6-year old son, Eric, is stuttering and	438
395	voices (all RH modalities), as well as their words, to soothe.	has begun to act out aggressively. They know the tensions	439
396	They must learn to listen deeply, to pace themselves, to wait	in their relationship are affecting him, but early relational	440
397	patiently when their partner turns away, to allow each other	trauma has left them both with highly reactive nervous	441
398	time to recover, and then reengage, deepening their empathic	systems and insufficient affective resiliency.	442
399	bonds and creating a sense of safety in the relationship.	These are extracts of therapy sessions 2 months part.	443
400	Touch is also mediated in the RH; encouraging a couple to	The couple has been encouraged to have, rather than to	444
401	hold hands as they struggle through a conflict can calm their	describe, the discord they experience at home, and the first	445
402	nervous systems and make it harder for them to fight.	of two sessions begins along a well-rehearsed path as the	446
403	To be successful, the partner initiating re-contact and	conflict comes alive in an embodied way.	447
404	repair must be able to hold their sense of calm for two,	<i>Session 2:</i> Speaking of her isolation since the move,	448
405	three, or even four repeated bids allowing their partner's	Eleanor's voice grows shrill. As she repeats this apparently	449
406	nervous system time to soothe so that defensiveness can	well-rehearsed complaint, her voice rises, her face distorts	450
407	drop and connection can be resumed. Watch in the second	in anger and her eyes fill with tears. I try to ask a question,	451
408	session of the vignette that follows as the wife, Eleanor's	but she brushes me aside and continues to escalate.	452
409	soothing reaching out fails to register and her partner	Leonard sits passively, staring straight ahead. He appears	453
410	continues to escalate. In this case, she manages to hold on	to be partly in genuine hypoarousal, and partly to be	454
411	and tries again, the second time more successfully.	holding still as a conscious strategy. Watching him for	455
		some sign of recognition and finding none, she becomes	456
		angrier and yells, "You have your work; you don't know	457
		what it's like for me!" He grimaces and turns away. She	458
		bites her lip, narrows her eyes, and her rage dissolves in	459
		tears. Her bid for interactive regulation fails when she finds	460

461 no compassion on his face for her, and triggers in her
462 feeling of abandonment. Leonard is “down regulating” and
463 is apparently unaware of being provocative and a source of
464 dysregulation for her. He later says he believed that by
465 being silent, he was preventing her from becoming angrier
466 and more upset, that is, that he could avoid escalating her.

467 “I think she needs to know you’ve heard,” I say,
468 encouraging him to turn his body back toward her again.
469 Though she will not look at him, he sees her bent forward
470 in pain and in a softened voice he says, “I’m sorry, I know
471 you miss your parents and your friends and that the move
472 has been hard for you.” She is regulated enough to look
473 briefly up then down again. Even in this instant of con-
474 nection, there is a drop in tension, and she appears more
475 sad than angry now, which seems to further soften him.
476 “No, look at me,” he invites. “I do know you’ve felt lost
477 and are having trouble making friends.” They talk together
478 for a minute or two as he continues in a soothing voice, but
479 she has to be frequently cued by me to hold his gaze, and
480 looks down repeatedly. When he says, “I just wish you
481 weren’t so sad,” she hears an edge of exasperation in his
482 voice, and her tone sharpens instantly with a sarcastic
483 reply, mocking him, “Yes, just smile, Eleanor, and leave
484 me alone!”

485 The first hyperarousal I have seen in him occurs here
486 when he erupts, “I’m tired of being blamed. I was miser-
487 able in Des Moines. You knew that I was sinking in that
488 job. You’re not trying to help yourself or Eric to adjust.
489 You think I should be grateful if you manage 2 days in a
490 row without completely melting down.” These few min-
491 utes of dialogue illustrate the level of dysregulation that
492 they, and their child, are subject to repeatedly.

493 *Neurological Commentary on Session 2*

494 Unable to resolve her loss, Eleanor triggers into hypera-
495 roused states and turns on Leonard in repeated episodes of
496 blame and rage. Typically, he copes by shutting down into
497 unavailable hypoarousal, until, under her relentless bad-
498 gering, he explodes into his own hyperaroused reactive
499 rage which leaves her feeling even more abandoned and
500 shut out (Lewis 2000). In this session, encouraged by the
501 therapist, he begins to co-regulate with her, but they have
502 become so hypersensitized that the slightest edge of
503 impatience in his voice sets her off again and this triggers
504 him. Over the years of marriage, they have become that
505 “emotionally fused system” Schore described, and the
506 thresholds for HPA hyperactivation have dropped in each
507 of them.

508 (Note: The couple has previously agreed that whenever
509 dysregulated arousal occurs, they will allow me to redirect
510 their focus from the verbal argument to their physiological
511 arousal and that we will not return to the content until have

calmed enough to listen and to think. This agreement must
be enforced repeatedly in early sessions when arousal
spikes are frequent and instantaneous.)

Session 6: They enter the room to take their customary
places across from one another and instantly the air is ripe
with tension. Sensing what feels mildly dangerous in the
steely silence, I say, “When did this one begin?” “Last
night,” she snarls. As she begins recounting the details of
their fight, I’m listening less to content and more to the
metaconversation of her body and her voice. As her face
contorts, her voice escalates, the words racing out in
pressured speech; bursts of phrases like machine gun fire.
She is breathing in gasps, sucking in air, and then holding
her breath.

“Eleanor” I say, “I want you to look at me. Can you do
that?” Here I have raised my voice so that it is slow, but
strong and firm, and repeat myself several times until I
break through her escalating crescendo and she looks at me.
“Good,” I say, “now can you breathe with me? I want to
help you slow down a bit, so we can work this out.” She can
maintain eye contact with me to about the count of 3 when
her eyes dart away, her energy shoots back up and she tries
to return to a description of the fight. “Not yet,” I say, “This
is the time to calm, not to talk. Try to keep my eyes. That’s
good. I’m right here with you.” It takes several more rounds
until she will fully engage. And I can begin to walk her
through a body scan to anchor her proprioceptively.

Neurological Commentary on Session 6

In the silence as they enter the room, I can feel my own
visceral response, an implicit body knowing, a subcortical
sensing of danger before higher conscious centers have had
time to process the incoming stimuli. This somatic coun-
tertransference reaction of fear in me sets off a well-
rehearsed sequence of self-regulating shifts as I slow my
breathing and let my shoulders drop. Imaging research
demonstrates that the right orbitofrontal cortex activates as
a mother decodes her infant’s emotional cues in order to
respond sensitively to them (Nitschke et al. 2004). My own
regulating centers have come onto both assess the situation
and to calm myself enough to think.

I use my own RH modalities of face and prosody to help
her regulate. Getting her to look at me is critical; regulating
face-to-face interactions of parents and infants begin
bi-directionally around 8 weeks of life as the face-pro-
cessing centers of the RH come online, and this remains a
major regulatory pathway throughout life (Schore 1994).
Another regulating modality is auditory prosody. I have
raised my voice to meet her frantic energy until she hears
and looks at me, then I stair-step down the activation when
I see her able to follow me. I know here to keep my sen-
tences simple as LH processing is impaired at elevated

563 levels of arousal, and to rely on more RH non-verbal means
564 to connect with her. Somatically scanning her own body
565 brings her into her own RH where process information
566 coming up somatically gets “read” first in the higher cortical
567 centers on the right (Schore and Schore 2008). Her
568 breathing slows and becomes more regular as her parasympathetic nervous system (PNS) turns on.

570 *Session 9:* Eleanor begins by complaining that Leonard
571 has been overly critical that week. “I couldn’t even do a
572 simple thing like pass out Halloween candy,” she says.
573 I was putting handfuls into the children’s bags and in a
574 murderous tone he told me I’m too controlling, to let the
575 children take their own. I thrust the bowl at him and
576 stormed away.”

577 I glance at him; he looks ready to explode.

578 “Where are you right now, Leonard?” I ask. He has
579 practiced self-regulating skills for weeks, and manages to
580 step into an observing state of mind. His OFC is turned on,
581 and he can describe the rage, even as it’s happening.

582 “I’m that raging child, trying and not being heard by
583 mom or dad. I feel the same frustration and helplessness.
584 I had only one solution then; they were never going to hear,
585 so I separated out myself.” He’s tearing up now and his
586 body droops. “When I can distance for a minute like that,
587 and get the associations back to my parents growing up ...”
588 But then he dysregulates again, losing the observer stance
589 and slipping back inside the pain. “I could have done it
590 differently with them ... if only ... I could have made it
591 different.” The pitch of his voice goes up, his throats
592 tightens, he looks away and down (the classic position of
593 shame) and hunches forward in his chair clutching his
594 stomach as though in agony. His auditory prosody, gestures,
595 and posture—all those non-verbal, RH signals—are flashing
596 pain. I glance at her, prepared to help her regulate her
597 arousal state, but this time she’s already there. She leans
598 into him and whispers, “it’s all right, sweetheart.” But he’s
599 swept away and misses the co-regulation bid.

600 He begins to sob, “I can’t take this anymore. I’m not a
601 person, my needs don’t get addressed. I’m about to go into
602 a board meeting with my boss, when she calls. She has no
603 awareness of where I am and that I may be nervous or
604 absorbed and not want to deal with this right then.” He’s
605 now crying openly.

606 “You look sad and small,” I say. His higher observing
607 centers aren’t on just now, so I bring mine in instead.
608 “Notice what’s happening,” I suggest, “your voice, your
609 body and where and how you feel this pain. And try to look
610 at Eleanor, try to hold her gaze.” I sense it’s safe to do this
611 because she appears, as I glance at her, to have managed to
612 hear the accusation without losing her focus on his pain.
613 She leans in again, coming close to his face until he looks
614 up and then she smiles reassuringly, and mirrors his sad
615 expression.

616 “She has more capacity to respond than my parents
617 did,” he concedes. He’s able for a moment to discriminate
618 between the current relationship and those of his childhood.
619 “I’m reacting to old neglect,” he says.

620 For the first time in over 2 months of therapy, they have
621 a tender moment here in front of me. She gathers him in,
622 and he cries and then he apologizes and thanks her for
623 something I cannot quite hear. “You just thanked her
624 Leonard?” I inquire. “Yes,” he says, “for letting me be the
625 one who falls apart.”

626 *Neurological Commentary on Session 9*

627 From fragments of autobiographical memories stored in
628 Leonard’s RH, there awakens an image of him at eight or
629 ten experiencing an implicit whole-body sense of power-
630 lessness in his family of origin. After these months of
631 practice, his higher cortical, regulatory centers stay
632 engaged and he maintains an awareness of himself at forty,
633 watching the torrent of emotional despair, and responds to
634 himself with empathetic tenderness. He then brings to bear
635 his well-articulated LH to construct a coherent narrative
636 and languages the right-brain flood he is experiencing.

637 His ability to feel and hold his pain triggers an empa-
638 thetic softening in Eleanor. She reaches out to him and
639 holds her openness until the repair attempt is heard and
640 used by him to further regulate, and they are able to con-
641 nect and calm. Visual contact is a central element for the
642 establishment of a primary attachment The facial mirroring
643 that Eleanor does for Leonard is reminiscent of the attuned
644 interactions of a mother who not only imitates an emotional
645 display, but produces an exaggerated “marked” version of
646 his expression (Fonagy et al. 2002), creating an intersub-
647 jective resonance, a kind of “biological mirror” (Papousek
648 and Papousek 1979) or an “amplifying mirror” (Schore
649 1994). These high-intensity mirroring exchanges create a
650 “merger” experience between two systems attuned to each
651 other (Sander 1991). This calming is echoed both neuro-
652 logically and psychophysiological as Schore reminds us,
653 “The experience of feeling cared about in a relationship
654 reduces the secretion of stress hormones and shifts the
655 neuroendocrine system toward homeostasis” (Schore,
656 personal communication, June 9, 2007).

657 **Summary**

658 Couples therapists must learn to work in the immediacy of
659 affective states, of repeated ascending and descending
660 spirals of energy. Entering into these shared arousal states,
661 we choreograph consciously and unconsciously, regulating
662 first one member, and then the other, toward a dance of
663 primary-process attunement and into moments of affect

664 synchrony. For it is only in the closeness of intimate
 665 encounters, in the deep subcortical recesses of our right
 666 hemispheres, when the most primitive of old relational
 667 wounds have been touched, and oldest attachment template
 668 have come to life, that they can soothed and healed. It is
 669 these repeated experiences that allow couples to regain and
 670 deepen their empathic bond.

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