Meissner (1991) wrote, “The nature of change in psychoanalysis and the explanation for the effectiveness of psychoanalytic interventions has been one of the perennial problems in the understanding of the psychoanalytic process” (p. 4). Meissner traced the trend from a strict adherence to the concept of mutative (transference) interpretations (Strachey, 1934) to the current emphasis on relational factors that began with Loewald (1960) and received greater impetus in the postulates of many object relations and self psychology theorists. Modell (1984, 1986) contributed a valuable suggestion of one way to avoid being trapped in the insight versus relationship polarization. He suggested that the content of an interpretation is not mutative in itself. Rather, the implementation of the symbolic actualization of a holding environment provides the basis for the effectiveness of transference interpretations. In addition, the complex nature of therapeutic action was debated by eight analysts (Fischer and Fischer, 1996) with respect to the centrality or balance among three factors: the attainment of insight, the intensity of the emotions evoked, and the interpersonal nature of the experience. Adding to the complexity, the “insight” cited as most relevant varied with the theoretical base: ego psychology, Kleinian, Lacanian, self psychology, Mahlerian, and social constructivist. Fischer and Fischer pose two possibilities to explain the enigma of positive results despite such clinical and theoretical differences. One explanation is “Like a broad spectrum antibiotic, the treatment approaches, though different, would nevertheless have a sufficient spectrum of ‘curative’ qualities to promote growth and therapeutic change.” The second possibility is: “the commonalities of the treatment approaches . . . would allow the patient to take from the treatment experience that which was most useful for him
or to mold the treatment situation to best suit his conflict resolution and/or growth promoting needs" (pp. 309–310).

We approach the mode of therapeutic effectiveness of psychotherapy and psychoanalysis differently. We begin with the hypothesis that a strong correspondence must exist between techniques empirically found to be effective in facilitating positive change and processes that ensure or stimulate growth. We cast our net more broadly than trying to identify from the treatment experience itself whether insight, affective experience, or relational experience is central. Because growth can be recognized in many domains, we look for correlations between biological, neurophysiological, and psychological development. We identify three processes of growth that can be identified in each of these domains and that can be described in the clinical exchanges we have presented. The three processes are self-righting, shared expanding awareness, and the rearrangement (recategorization) of symbolic representational schemas or configurations (Lachmann and Beebe, 1992). If these three modes of therapeutic action are substantiated by further investigation, then principles of technique derived empirically from the various psychoanalytic theories can be examined to see to what extent each promoted the growth inherent in each mode.

**SELF-RIGHTING**

Clinically, self-righting refers to an intrinsic tendency during psychoanalysis to rebound from an altered (lower level) state of functioning to a more adaptive state. The phenomenon of rebounding to a more adaptive state is often referred to as “resilience” (Fajardo, 1988, 1991). The innate potential for self-righting is measured by the category of “soothability” in the Brazelton examination of infants. As analysts and therapists, we depend on the capacity for self-righting to enable a patient (and ourselves), after an hour of intense affective involvement, to resume the state of adaptive functioning needed to leave and return to other occupations (and to prepare our receptivity for the next hour).

Throughout our clinical account, we have emphasized the significance of the disruptions in the clinical exchange that follow a perception of empathic failure by either or both participants. Self-righting is crucial to the recovery that enables the restoration of attachment and exploratory motivations. “These highly affectively charged episodes represent ‘central moments’ in the therapy. They are points of potential stress, yet at the same time potential episodes of growth” (Schore, personal communication, 1995).
In the second hour (83:2) of the initial week presented, Nancy and the analyst were exploring her aversive state. When the analyst had "unconsciously been drawn into an enactment in which seducer-seduced roles became confused" (83:2:19–26), a disruption occurred. Then, with the analyst’s sensing into her affect state of anger and the fear aroused by her being so angry at him, she was able to self-right. Her self-righting took the form of her being able to be fully and freely expressive of her antagonism and its source in the present and past. For the analyst to have made his contribution to Nancy’s self-righting, he too had to self-right. He first had to recognize that a disruption had occurred, and that he had been responsible by his intervention. A second step was required in that he had to recognize not only that his original intervention had been perceived by Nancy as an empathic failure but that he had been manipulative, and, in saying “seems,” further indicated he was reluctant to face it. Her refusal to accept his partial evasion forced him to complete his own restorative effort. He then placed himself more fully in consonance with Nancy’s experience (although he did not verbalize it). He was therefore able to enter her experience of anger in a manner that she experienced as facilitative.

As a factor in development, "self-righting" refers to an inherent tendency to rebound from a state of disequilibrium, of impairment, in growth with a developmental advance when a positive change occurs in a previously inhibiting condition. The term "self-righting" was coined by Waddington (1947), an embryologist who observed that a genetic program in surrounding cells will turn off a developing tendency toward abnormal growth, allowing a rebound toward normal cell structure. In normal development, steps in physiological regulation, attachment, exploration, and assertion, control of aversion, and sensual-sexual seeking that had not been taken become possible under favorable circumstances.

A dramatic example of this is that of infants raised in the Guatemalan highlands (Kagan et al., 1978). These babies, although always close to their mothers, are restricted for over a year inside a windowless hut, often in a back sling with no toys and little human interaction. At one year of age they are quiet, unsmiling, minimally alert, and physically passive. They are far behind American children in cognitive development. In the middle of the second year, however, when they become mobile and are allowed to leave the hut, their development leaps forward dramatically. When the children were tested at 10 to 11 years of age, their cognitive and perceptual abilities were at the same level as American urban middle-class children.
Within the clinical exchange, self-righting occurs in response to many nonexploratory aspects of the treatment. The analyst's reliability and willingness to accept responsibility, to listen with care and concern, to be tactful, and to communicate affective involvement and interest, individually and together, may constitute a positive change in an inhibiting experience for patients who have experienced an absence of these relational experiences. In the 85:3 session, Nancy was depressed, limp, still and silent. At first the analyst intervened by demonstrating in his interventions his interest in her feelings—he made a direct request that she describe what she was experiencing. She said, "Fog. I feel I'm in a fog when I try to think about my sexual problems" (85:3:1). Then, with the analyst's invitation to penetrate the fog or describe it further (85:3:2), she responded by gradually self-righting and offering a very productive sequence of associations. The self-righting that ensues in such examples can be considered to be a corrective emotional experience (Marohn and Wolf, 1990). As a result of many comparable experiences, patients often learn to supply themselves with what they need for self-righting. Nancy begins the 85:4 hour by saying, "I'll spend five minutes complaining about the process and then get to work," indicating her belief that the analyst, unlike her parents, will accept her aversiveness to what he asks of her. With that acceptance, she can self-right with no further intervention required.

Commonly, self-righting can be demonstrated as it occurs in response to specific endeavors of the analyst. In the example of the 83:2 hour already presented, the analyst responded directly to the disruptions in the treatment process that followed Nancy's experience of an empathic failure. The analyst helps in the recognition of the altered self-state and, if possible, in identifying the triggering source of the disruption, including the analyst's participation and contribution. "The reliable and apt recall of details from the patient's previous discourse is part of what convinces him that we hear, think, and care about him; he can now begin to experience himself as worth paying attention to, understanding, and caring about" (Levin, 1991, p. 6). The continuity of the effort to recognize, understand, and identify will often in itself lead to self-righting.

We believe that self-righting to a restored state facilitates the expanded awareness of the meaning of the disruption rather than the reverse, that understanding leads to self-righting. Schore (personal communication) proposes an intriguing source for both disruptions and restorations. Both result from affective transactions between therapist and patient involving spontaneous right hemisphere to right
hemisphere communications that occur below the level of awareness. The analyst’s loss of empathic perception of the patient’s state of mind, especially if the analyst’s aversiveness is triggered, becomes communicated to the patient by tone, gesture, facial expression, breathing rate, and so on. The change in the analyst, possibly not realized by him or her reflectively, contributes to the patient’s altered state of engagement. The patient’s changed state is then communicated, often nonverbally, to the therapist. Once perceived, the analyst must deal with the aversiveness triggered by the patient’s withdrawal or antagonism. Schore believes that the analyst’s capacity to regulate his or her own aversive affect, especially shame and humiliation, constitutes the decisive factor in whether self-righting occurs. Following Schore’s reasoning, the direct right hemisphere to right hemisphere communication provides an interactive repair with recognition and exploration as consequences, not causes.

Weiss and Sampson (1986) explain the state change we call self-righting through their postulate of a largely unconscious plan of patients to change their pathogenic beliefs by testing them in their experience with their analyst. “If the analyst’s responses to the tests are experienced by the patient as disconfirming the pathogenic beliefs, the patient is likely to become less anxious, more relaxed, more confident in the analyst, and bolder in tackling his problems” (p. 223). Weiss and Sampson note that generally analysts do not set out specifically to disconfirm the pathogenic beliefs since often they only become aware of them after the test has been passed via the analysts’ empathically directed responses. As the danger anticipated in the pathogenic belief is disconfirmed, the patient’s inherent inclination to reduce anxiety and move forward [self-right] is activated. After no longer feeling endangered, the patient “was able to experience the contents fully, think about them, and use them therapeutically” (p. 185). In our terms, the analyst’s successful employment of the empathic mode of perception led to self-righting. In turn, the state change of self-righting permitted greater access to inner experience and the ability to communicate, and thus to the expanded awareness of both analyst and patient. The expanded awareness is then confirmed by the interpretive sequence that follows.

An adult’s capacity for self-righting is an outgrowth of intersubjective experiences from birth on. In the first year, caregiver responsiveness to the infant’s needs in each of the motivational systems facilitates the repeated transition from aversive states to positive affects of intimacy, interest, physiological regulation, and sensual enjoyment. In the second year, as caregiver and toddler become
increasingly involved in controversy over agendas, the ability of each
to activate a degree of altruistic responsiveness serves to promote
the restoration of intimacy. These state-transforming experiences are
critical to the formation of the child’s brain systems that come to
autoregulate switches in affective states in response to the appraisal
of environmental stressors (Schore, 1994). The burgeoning of internal
coping mechanisms involves the limbic system (Hadley, 1989), the
autonomic nervous system, and the orbitofrontal cortex, the hier-
archical apex of the limbic system that is expanded in the early developing
right hemisphere (see Schore, 1994, for an extensive explanation of
these seminal developments). The progressive development of the
brain’s regulatory functions occurs in continuous mutual regulation
with intersubjective experience. Looking at the brain, the limbic
system and its cortical connections are involved; looking at experi-
ence, affective transitions are central to the recovery capacity that
we refer to as self-righting.

What guides self-righting? Waddington (1947) suggests that for
cells self-righting is guided by the genetic plan and the influence of
the existing structure. In broader biological terms, if, for example,
puberty is delayed because of illness or malnutrition, when the illness
or malnutrition is reversed the genetic design will guide the self-
righting recovery. But what guides the adult to a restoration of sleep,
or friendliness and trust, or the willingness to explore, or a renewed
interest in sexuality after a wounding rebuff? We suggest that the
form of the self-righting is oriented to approximate an optimal prior
state. As each motivational system organizes and stabilizes, state
changes occur. The state changes that self psychology refers to as
selfobject experiences of maximum cohesion and vitalization
(Lichtenberg, Lachmann, and Fosshage, 1992) become an intrinsi-
cally valued goal for re-creation. These states of physiological regulation,
attachment intimacy, exploratory-assertive efficacy and competence,
and sensual satisfaction, when re-created, become hallmarks of desired
self-experience. During analysis, we can expect the forms of self-
righting to be guided both by the prior optimal states of each motivational
system and the self (even if fleeting) and by the optimal states guided
by genetic potential that have been achieved because of the especi-
ally favorable conditions during the analysis itself. The disconfirmation
of pathogenic beliefs represents one example of the especially favor-
able conditions that occur during analysis (and other psychotherapies).

We consider self-righting to be a powerful growth process that
facilitates positive change across the spectrum of supportive, expres-
sive, exploratory psychotherapies as well as in psychoanalysis. When
we consider our ten principles of technique in this context, we believe the ones most facilitative of self-righting are (1) establishing arrangements that work to create a frame of friendliness, consistency, reliability, and an ambience of safety; (2) the systematic application of the empathic mode of perception; (3) discerning affects to appreciate the patient’s experience; (4) intervening to communicate comprehension, express affective attunement, and illuminate recognizable patterns from the patient’s point of view; and (5) following the sequence of interventions to recognize the occurrence of disruptive affect states and perceived empathic failures, and accepting responsibility for the effect regardless of the intent.

**SHARED EXPANDING AWARENESS**

“Expanding awareness” refers to the growth of knowledge about the self. Traditionally, the focus of analytic theoreticians has been centered on insight into specific complexes, conflicts, or compromise formations that were regarded as causes of the illness. The traditional focus portrays one person, the analyst, who points out to another person information about that person’s psyche. The view we hold is that two people are concurrently developing an expanding awareness of self with and apart from the other. And because of the need to discover the nature of a transference configuration (a new creation influenced by a prior experience), each is seeking to find the self as experienced by the other. The model for this conception of expanding awareness is based on the ordinary attachment experiences of caregivers and developing children. A parent tries to discover who his or her baby is and a baby tries to seek and confirm an identity through and with his or her parents. This mutuality of search impels the acquisition of information. The most significant information sought for is the unconscious and conscious sensing of the subjectivity of the other, organized as emotion-laden perceptions and memories of events and procedures. In analysis, in contrast to ordinary life, a consistent effort is made to bring into conscious awareness the impact of procedural and event interchanges and to struggle against collusions in deception and denial. To quote Pulver (1992) about psychic change in analysis, “an understanding relationship cannot be maintained without insight into the dynamics of the relationship itself” (p. 204). Although this searching is joint, what is searched for is uneven. Analyst and patient seek to find the patient through the long axis of the patient’s life (and maybe one or two generations back) as a narrative construction in the minds of both. Analyst and patient seek to
find the analyst principally through the restricted axis of their shared experience as an intersubjective construction in the minds of both. Expanding awareness must work against and learn about the motives for using the vulnerability of the patient or the privileged position of the analyst to restrict recognition and revelation. An example of the latter from Nancy’s analysis is when the analyst had to face up to his ingenuous denial of responsibility for his participation in a role enactment (83:2:24–26).

The 87:2 hour with Nancy illustrates a successful quest for shared expanding awareness. Nancy sets the tone with a playful exchange about the payment, and the analyst responds accordingly. She then introduces the theme of the hour that leads into an area of exploration of central interest to both: “It’s come up before that I’m attracted to men who are not available.” Then, puzzled and stymied, she asks the analyst to help. The analyst believes she is asking more for confirmation of his presence and responsiveness than for definitive assistance, so he asks, “Give you a lead to follow?” (87:2:6). Confirmation that they “know” each other follows when Nancy restates the problem, “I need to set limits” (87:2:7). The hour then proceeds in a manner that could only occur with two people who share both an enormous amount of information about the life experience of one—the patient—and way of being together as two—the patient and the analyst. A rapid shift begins between the people in Nancy’s life—Sean, Brian, Anthony, her father, her brother, the analyst, the dean, and her grandfather—and between time lines—distant past, recent past, and present. Her motives shift from being liked, looked after, and approved of (attachment motives), to being warmed (a sensual motive), to being aroused (a sexual motive). By the end of the hour, they arrive at an issue that we believe neither could have anticipated. A source of her conflict about liking men derived from the grossly confused guidance of her mother, who saw sexual threats coming from reliable, caring men and overlooked, denied, and disavowed the sexual abuse from Nancy’s brother, who in her mother’s eyes could do no wrong. “[with rising angry indignation] Why in the name of Hell didn’t she pay the same attention to my brother! . . . She saw it [sexual abuse] where it wasn’t and didn’t where it was” (87:2:25).

Our understanding of the nature of expanding awareness derives from studies of cognitive and memory organization and of neural networks. Lived experiences are abstracted and categorized in the form of discrete events—eating, going to the store, playing with Mommy, playing with toys, going to sleep. The salient features by
which categories are formed are extremely simple at first: the hunger-satiety cycle, Mother's face and voice during play, the actions in a sequence. Asked to talk about making cookies, a child of three responds, "Well, you bake them and eat them" (Nelson, 1986, p. 27). The current understanding of memory is that a "memory" or a "trace" does not exist in a single brain locus. Rather, maps or networks are formed based on one or another criterion for categorization. Perceptual stimuli alone are insufficient to activate categorization. An affective dimension is essential for creating and categorizing memories. These perceptual-affective action maps have a continuous relationship with external stimuli, the differing nuances of which activate other maps. As the maps interact with one another, information is constantly recategorized (Rosenfield, 1988). When a stimulus is repeated, such as the recognition of a pattern of an experience of mild empathic failure, the strengths of the connections that produce pattern awareness are increased, making recognition easier to arrive at on subsequent exposures. Because each pattern varies somewhat in context and texture, no response will be exactly the same, thus each recollection is a new creation (Poland, 1992). What is stored is not a replication of the category or event, but the capacity to generalize associatively and then to narrow consequential behavior to achieve a motivational goal. Studies of brain mapping indicate that the capacity to categorize perceptually and generalize associatively is more complex in infancy than previously thought, involving the brain stem and cerebellum (Levin, 1991). Even at this level, generalization can involve commonality of feature, response, or history, any one of which can act independently of the other—"small biases in internal states can lead to large changes in responses" (Edelman, 1987, pp. 258–259).

Still further complexity occurs with the addition of simultaneous alternative modes of processing as the frontal hemispheres become myelinated and "come on line." The influence of language and other symbol systems, mediated by a complex sense of self, multiple changing motivations, and the influence of culture, gives to exchanges during analysis a dynamic transformational quality. "At the level of concepts, categorization, is carried out neither by rigorous, nor by logical, nor by universal criteria. Indeed, there may be no single general means by which categories are formed at this level" (Edelman, 1987, p. 246).

We believe that the dynamic transformational quality of the expanding awareness that takes place during analysis is the result of the facilitation of two individuals sharing affective experiences triggered by
event descriptions and gestural and linguistic renderings of self-experience. Hadley (personal communication, 1995) states that expanding awareness requires "the arousal of affect, at least to the level of interest and the deployment of high levels of focused attention. The highest levels of interest/attention/affect are aroused from birth by the presence of another human being. These levels can be enhanced even further if the communicator and recipient share enough common experience over a period of time." The networks that mediate the relevant experience of analyst and patient expand in conjunction with the affective arousal.

At moments, analyst and analysand experience affect attunement and shared comprehension of meaning. However, moments of coincident perspective, although confirming, informative, and intimate, are responsible for only part of the momentum of analytic change. A dialectic tension exists as analyst and patient become convergent and divergent in their sense of knowing the subjectivity of each other. Boesky (1990) observes that "if the analyst does not get emotionally involved sooner or later in a manner he had not intended the analysis will not proceed to a successful conclusion" (p. 573). Benefit to the patient is not limited to receiving "correct final answers. The patient benefits from the process of the mutually attempted, partly successful, and partly failed efforts to understand. The way in which we, as analysts, misunderstand, and we always misunderstand a lot, is highly communicative to the patient, and this misunderstanding is by no means only or always regrettable" (pp. 577-578) (see also Poland, 1988). Preoccupied with concerns about the analyst's serious errors "we have failed to appreciate that the conflict of the analyst can lead to . . . useful outcomes" (p. 578). Throughout the treatment protocol, the clinical exchanges surrounding the analyst's falling into role enactments, then recognizing his or her participation and opening the sequence for joint consideration, illustrates Boesky's point.

Most attention has been focused on the analysand's developing self-awareness, insight, and narrative continuity. Less attention has been focused on the analyst's ability to form an associative generalized network about each individual patient. These two ever-changing, somewhat parallel schemas or networks are the source of the rich, deep (sometimes seemingly uncanny) perceptive sensitivities that grow in analyses (Major and Miller, 1984; Simon, 1984). Two explanations (Levin, 1991) have been offered for the impact of joint awareness of transference configurations. One is that the relevant network or map becomes enlarged through a linkage between higher cortical
levels and the affect-rich limbic system and cerebellar memory system. The enlarging of the map is achieved because the gated brain-stem nuclei "no longer block out specific limbic and/or cerebellar or other inputs" (p. 51). "A second possibility is that the patient’s style of coordinating his hemispheres . . . has been altered by his awareness of the analyst’s style" (p. 52) of being open to playful integrations of right and left brain processed information (Lichtenberg and Meares, 1996).

Levin (1991) implicated language, including nonverbal communication, as the carrier of dynamic affective information sharing. Exchanges with metaphoric potential "tap multiple levels of experience" (p. 12) in analyst and analysand. Levin speculates that "one’s natural language, once assimilated, permanently and decisively alters brain organization. Language may not only facilitate the development of the genetic plan for psychological organization, but it may also allow for adaptive reorganization as a solution to problems requiring novelty and for the manipulation of modules of knowledge . . . it is possible that our natural language also contains recurrent hierarchical elements that can be decoded as instructions to the brain’s operating system" allowing the brain to "communicate with itself" (p. 117).

We have tended to believe that understanding during analysis follows a linear path—an interpretation leads to the patient’s insight, which in turn leads to change. Brain studies confirm the view that communication is both linear and nonlinear. Communication during clinical exchanges involves nonlinear gestural, verbal, and affective features and, moreover, is governed by the richness of the context created by the two participants. The microanalysis of clinical exchanges compels us to think in nonlinear conceptualizations. We begin to see how the smallest tilt in the affective state of one participant can create a pronounced shift in his or her response and often imperceptibly alter the whole intersubjective context. Similarly, the wiggle-room for activating alternative associative paths that result from the ambiguity of language (e.g., Nancy’s father, Father, dad, Christ, analyst) requires a nonlinear (predominantly right-hemisphere) mode of thought. Levin states: "At least three systems are critical for the kind of discriminate learning that we associate with human behavior at its most complex level; the system of the right hemisphere, with its preferential attachments to the limbic system; the left hemisphere, with its motor system dominance; and the vestibulocerebellar system . . . critical brain-stem nuclei can either glue together or unglue these major subsystems" (p. 80). "When the arousal level is below a certain threshold
of excitement, the patient’s cortical activity appears to be limited to only one cortical (sensory) association area at a time . . . [I]f a threshold of interest is exceeded, the brain becomes activated as a whole, and . . . the various associative cortical (and presumably also the subcortical) parts of the brain come into communication with each other” (p. 12).

Many of our principles of technique combine to promote joint expanding awareness. In addition to promoting self-righting, the ambience created by the empathic mode of perception is critical for establishing the spirit of an inquiry carried on by two seekers, rather than by an expert knower and a supplicant learner. Each needs optimal information for the inquiry, thus we attempt to fill the narrative envelope to learn the who, what, where, when, and how of any event or exchange under examination. Further, we respect the message as delivered in its richest context as containing the needed information rather than obscuring it. Similarly, regarding manifestations of the aversive system as sources of motivations to be investigated in their own right expands awareness rather than obscures it. Discerning affects to appreciate the patient’s experience and discerning the affective experience being sought gives focus to the aim of the exploration. The joint construction of model scenes provides a method for furthering the exploration at a broader integrative level. Along with the analyst’s interventions, which communicate his or her comprehension of the patient’s point of view, the analyst’s reflecting his or her own feelings, appraisals, and intentions adds to the substantive basis for a joint expanding awareness of the clinical exchanges. The analyst’s wearing of the patient’s attributions adds to this process. Finally, joint expanding awareness gains immeasurably from the consistent effort to monitor the interpretive sequence. Through the monitoring of the patient’s responses to interventions made or not made, we are able to evaluate and explore the effect of interventions in the prior exchanges.

Like self-righting, shared expanding awareness occurs across the full spectrum of psychotherapies. In supportive and expressive or cognitive therapies, the extent and depth of awareness is likely to be more restricted. Shared expanding awareness is central to the design of both exploratory psychotherapy and psychoanalysis. In addition, a rearrangement of symbolic representational schemas occurs frequently during exploratory psychotherapy. However, as we will describe, the systematic attentional focus on transference configurations distinguishes psychoanalysis as the therapy par excellence for facilitating this particular type of positive change.
THE REARRANGEMENT OF SYMBOLIC REPRESENTATIONAL SCHEMAS

The rearrangement of symbolic representational schemas during successful psychoanalysis, results, we believe, from particular experiences that increase arousal to a level that activates the brain as a whole. By rearrangement of symbolic representational schemas, we refer to a change in the manner in which the self or a significant person (or situation) is represented (categorized). Especially when the categorization is rigidly held, the changes at first may be imperceptible, requiring many repetitions and variations of the transference configuration in order to achieve flexibility of representation and plasticity of responsiveness.

The rearrangement of representational configurations that occurs during treatment has as its precursor the changes that take place at the transition point of every stage of development. The big boy who can use the potty and wear training pants, the big girl who can sleep in a bed, the youngster who can go off to school without Mother and the mother who no longer watches over him so carefully, the adolescent who can decide when to go to bed and the parent who can leave her in the house alone at night—all of these represent transitions in the manner in which the self and significant others are experienced and represented. In this process, the sense of self and the sense of others are categorized differently, making new generalizations possible. In this way, later versions of self alone and self with others are built into representational networks while early versions remain.

During psychoanalysis, we identify two processes involving transference that lead to the reorganization of symbolic representations. The first is the analyst's assisting the analysand to recognize the manner of his or her response to the analyst's perceived benevolence or malevolence. The second is the patient's edge of awareness of unconscious appreciation of contrasting perceptions of the analyst. One perception of the analyst arises when an affect-laden transference fantasy, belief, or interaction dominates the analysis. The patient's other perception of the analyst derives from the analyst as empathic listener-observer-interpreter of the transference [Lachmann, 1990].

One perception may involve the full affective sense of being especially preferred and loved by the analyst. The other perception recognizes that the analyst interprets the meaning of being special, ends the session at a prearranged time, and charges a fee. One perception may involve the full affective sense of the analyst as hated and hating, blamed and blaming, deprived and depriver. The other perception recognizes that
the analyst listens to and interprets what he or she can identify as triggering acts involving hate, blame, or deprivation, thus making the experience open to shared consideration and reflection. The one representation involving self and analyst is largely organized in a primary process mode, the other largely in a secondary process mode, the discrepancy probably appreciated largely unconsciously in both modes for full effectiveness [Lichtenberg, Lachmann, and Fosshage, 1992, p. 146].

In hours during 1989 that were not recorded in the protocol, Nancy, citing the impending ending date, was extremely angry with the analyst for taking a longer than usual time away during the fall. During the hour after his return she stated that his being away for three weeks confirmed her in her belief that he didn’t care about her. In this way, he was felt to be similar to her mother in only wanting to be rid of her. In order to arouse guilt and hold his interest on his return, she felt she had to tell him she had been miserable the whole time and had hardly completed any of her dissertation. As she became more calm and self-righted she acknowledged that, actually, things hadn’t gone that badly but that she was slowed down. Even going slowly could be considered a gain from the analysis. As they had worked out many times, for Nancy, fast meant being reckless like her brother Matt. Slow, careful, and thorough meant choosing to be like the analyst, but she didn’t feel that closeness now.

During the next hour, she noted that even though she hadn’t finished the number of pages she had intended to, she was pleased with what she had done since yesterday’s hour. (In the analyst’s view, the patient had continued to self-right from her paralyzing depressive affect and had restored a positive schema of herself and him that had been lost in her aversive response to feeling he had abandoned her during his absence). She had received a disturbing phone call about her brother’s sons, who were doing poorly in school and getting into trouble. She had advised psychological testing and treatment, but her brother refused to follow her advice, claiming lack of funds. She was frustrated. She was also disappointed with the dean’s effort to help her get a job. No one seemed to want to help—the dean with his recommendation or the analyst in providing the time she needed. The analyst acknowledged her sense of hurt, but wondered about it in the light of her prior conviction that the dean had been actively supportive in his letter. She agreed, but concluded she couldn’t believe that his letter of recommendation was authentic and thought it was only a pat on the head. Why should anyone want to help her? The analyst stated that she seemed to discount the possibility
that, besides fondness for her, it would be in the dean’s and his (the analyst’s) self-interest to have her succeed. She answered that she knew that intellectually, but couldn’t believe it—although she didn’t know why. She had had two dreams. In one someone said “they are not our kind of people.” In the other, because of money, the analyst had had to move out of his office and was seeing her in a parking lot behind a garage. It was strange and upsetting. She was puzzled because she knew she had paid her bill.

In the next hour she began wondering about the snobbery in her dream of “not our kind of people.” She recognized in it her mother’s attitude toward her father’s family. The analyst added, and in her brother’s attitude about therapists—hers and someone for his children. She said that it wasn’t his snobbish attitude about people who are weak and dependent that stopped her brother, but his lack of money. He wasn’t really snobbish. Actually, he lived in a run-down working-class neighborhood and was friendly with the people there. (This was the first time she had mentioned this information.) Highly interested, the analyst invited further details. She stated that the people in her brother’s area had been badly affected by the recession. Because he and his wife hadn’t moved when they could have, the property values had dropped and they were stuck where the schools and all of the services were underfunded and inadequate. The analyst said that was like in her dream where he saw her in a parking lot behind a garage. He asked if he had lost his money and couldn’t provide properly for her to be able to progress. No, she stated, my brother didn’t lose his money—in fact, he is one of the few people there who has kept his job. The reason they don’t have any money for treatment is because they spent their money on pleasures as soon as it came in. The analyst then “corrected” the view of himself portrayed in her dream: he hadn’t lost his money, rather, he had been spending it for his pleasure. Angrily, she retorted, you take my money and spend it to go away! The analyst added: no wonder she couldn’t believe he would regard it as in his interest as well as hers to see her progress—he’s busy spending her money for his pleasure. The patient on leaving looked angry and sheepish.

In this example, analyst and analysand are engaged in exploring an unconsciously determined pathogenic belief (Weiss and Sampson, 1986) that the analyst, like her brother with his children, and her parents with her, was an impoverished, inadequate, unmotivated provider of care. The awareness of each is expanded as they explore the reappearance of the negative schema of the analyst and Nancy—first he is the familiar abandoner, then he is the failed sponsor of her future,
and, finally, in a new version, he is a selfish spender. We believe that the expanding awareness of the motivations, meaning, and causal linkages of these shared experiences move the treatment forward. But the key to the specific power for positive change lay in the simultaneous experiencing of two contrasting subjective realms. In one, the analysand fully experienced the analyst as implicated in her distress. In the other, he is the person she is talking to, being open with, and having her view acknowledged and affirmed by. In the words of Atwood and Stolorow (1984), “Every transference interpretation that successfully illuminates for the patient his unconscious past simultaneously crystallizes an illusive present—the novelty of the therapist as an understanding presence” (p. 60). We believe that previously fixed expectations based on pathogenic representational schemas that tilt perceptions and inferences in the direction of negative transference configurations may be derigified by the consistent alternative sense of the analyst as empathic coexplorer.

Looked at from the standpoint of the brain, we believe that the intensity to activate the whole brain does not derive from affect alone. An affect state might trigger only right hemisphere–limbic system processing and an absence of cognition. We believe whole brain activation results from the vitality of the joint exploration and assertion of analysand and analyst working in tandem. Reviewing suggestions of Galin (1974) and Basch (1983), Levin (1991) notes that mental events in either hemisphere can become disconnected functionally from those in the other. Affect states might block out left hemisphere logical categorization and when an affective self-experience is aversive, right hemisphere responses might be disconnected. But with the whole brain activated, communication can take place between hemispheres and with the vestibulocerebellar system as well, bringing in past experience (e.g., with Nancy—mother as abandoner and brother as idealized, successful favorite). The special quality of an energetic transference interpretive experience creates a tension between the more logical categorization of the analyst by the left hemisphere and the representation by the right hemisphere linked to the vestibulocerebellar input that draws on related past experience. The discrepant categorizations require reconciliation (hierarchical rearrangement) as part of the continuous problem-solving effort of the brain. Levin believes the functioning of the prefrontal cortex creates “meaningful relationships between complex input and output variables, even when these relationships are not obvious or do not appear logical” (1991, p. 90). The prefrontal cortex makes use of motivationally relevant experiences of self and others to compare
possible future states with current goals in order to test out the sufficiency of proposed solutions—what Kent (1981) calls a “forward search” strategy. In matching possible future states with goals, the prior automatic expectation of a symbolic representational configuration of self with an abandoning or selfish other, may begin to coincide with a potentially plausible expectation of self with an available or empathic other. That is, in the recategorization of experience that follows the intense transference attribution of abandoner or self-server, a hierarchical rearrangement may allow the next categorization to be one of being with someone who is available or empathic. Of course, as we know about transferences, a renewed context of a perceived empathic failure might trigger a reactivation of the aversive representational schema, but hopefully it would be less “etched in stone.”

These assumptions are based on the existence of comparator functioning capable of discriminating between discrepant experiences. Stuss (1992) described comparators that operate at three hierarchical levels. Each comparator uses values developed from previous experience, modeling, and training. The lowest level compares sensory perceptual input with set expectations. The operations of this level are virtually automatic, out of awareness, and provide facilitation for daily ongoing behavior of a repetitive nature. The second level comparator facilitates selection of responses that give conscious direction to functioning toward a selected goal. At this level, anticipation, goal selection, plan formulation, evaluation and monitoring of behavior, attentional focus, and persistence are coordinated. Comparator feedback is slow, deliberate, and effortful, especially where new or complex responses are called for. The third level comparator involves “the ability to be aware of oneself and the relation of self to the environment. This prefrontal self-awareness appears to be similar to the concept of metacognition, the ability to reflect on any process itself. This level implies a self-reflectiveness of all levels, including its own. Inputs are presumably the abstract mental representations of the executive’s [second level] alternative choices” and necessitate “involvement of all functionally lower levels [of the brain]” (p. 12).

To summarize, unlike the early psychoanalytic assumption of recovering fixed memories from repression, current brain research and recent analytic studies indicate that all perceptions are to some degree creations, all memories are part of an ongoing process of recategorization and imagination. Psychoanalysis leads not simply to knowing more but to reworking, recategorizing, and rearranging what is known. When this process is successful, symbolic representational schemas
and all other information are generalized and recast in new, freer, and more imaginative ways. Both analyst and patient will continue to color (categorize) perceptions and draw inferences based on expectations from prior lived experience, especially those experiences they have shared during clinical exchanges. The change lies in the potentiality to uncouple an expectation from its automatically (and generally unconsciously) being triggered and, once more free, to activate a neural network of a different representational schema. To paraphrase General Douglas MacArthur: old transferences never die, they just fade away. More accurately, we can state that intense transference experiences can always be re-created; the representational schema on which they are based remain as neural networks. The success of the analytic effort lies in the reduced probability that they will be re-created—especially automatically. Instead, an alternative network will be activated and a different experience will be created.

We believe that the clinical exchanges that take place during psychoanalysis are likely to create optimal possibilities for the rearrangement of representational configurations. The frequency; commonly, the use of the couch (as with Nancy) (Lichtenberg, 1995); and the structured pattern of listening and responding all contribute to experiences of the essential reliability of each partner to the other when both are struggling with the impact of affect-loaded expressions of needs, wishes, and desires derived from each motivational system. All of the ten principles of technique come to bear most fully during formal psychoanalysis, making the clinical exchanges rich in contextual texture and nuance and open to reflective reconsideration. Musing on the difference between psychoanalytic therapy and psychoanalysis proper, Friedman (personal communication, 1995) states “it’s a matter of degree: At a certain point of fineness and subtlety of reaction, at some measure of intensity of patient involvement, at some degree of consistency of therapist evasiveness, and at some level of analyst mobility and leisure it’s analysis.” We believe these points of subtlety of reaction are moments during which the duality of troubled expectations and the actualized empathic responsiveness confront the patient (and sometimes the analyst) most effectively with a dissonance calling for a small but meaningful shift in categorization of the experience. Although all the technical principles are important in bringing about these moments in the clinical exchange, two seem to us particularly powerful: the analyst’s wearing the attributions of the patient, and the potential for and appropriately timed occurrences of disciplined spontaneous engagements. Wearing the patient’s attributions holds open the moment of experiencing the representational configuration
and reflecting about it, thus providing the intensity of involvement, leisure, and mobility Friedman mentions. The analyst is present in the narrative created on the basis of the schema, thereby allowing both patient and analyst to consider the experience and its meaning. The analyst is present in his or her own mind to see how he or she may have actualized the expectation. The analyst is present also in both of their experiences as an empathic perceiver of the patient's point of view. Parenthetically, the analyst at such moments is equally confronted with the duality of the patient as demander, nag, provoker, accuser, and seducer and as participant in the clinical exchange revealing his or her motivational needs and wishes. This duality presses the analyst to create new representational configurations of the patient alone and in relation to him or her in a fashion similar to the patient's revisions in representational configuration.

Disciplined spontaneous engagements are in many ways the opposite of moments of leisure and reflection. They are part of the mix that breaks the inhuman (and unbelievable) "consistency of evasiveness" that Friedman notes. They provide contrast to the empathic perceiver as Olympian benevolent altruist. Consequently, by providing a sharp contrast, they highlight the usual empathic observer position of the analyst. In addition, they provide actualized moments of role enactments for reflective reconsideration by both patient and analyst. The clinical exchanges between Nancy and her analyst reveal frequent opportunities for the analyst to wear Nancy's attributions. As we demonstrated, they led to many fruitful discoveries and opportunities for recategorization of the views each held consciously and unconsciously about the other. Although a few disciplined spontaneous engagements were noted, they were not of the more dramatic kind that often occur when analyst and patient are individually or together inclined to activate and require immediate, affectively intense communication. Nonetheless, the spontaneous engagements we have noted had the effect of providing intense moments that opened the way for examination of the role enactments into which the analyst had fallen unconsciously. First the analyst must self-right from an unexpected moment when his feelings "had grown very near that point of unmanageable strength when thoughts are apt to take wing out of their secret nest in a startling manner" (George Eliot, *Adam Bede*, 1859, p. 469). Then the conditions become optimal for a tension between an experience of an actualized transference interaction and an experience of the analyst as listener-interpreter. Disciplined spontaneous engagements provide an optimal contrast only when the fundamental mode of communication is that of repetitive empathic
clinical exchanges. Without the background of a basically empathic ambience to provide contrasting experiences, repeated high tension interactions are apt to result in the exchanges degenerating into mutually traumatizing disruptions. Then negative pathogenic expectations are re-created and reconfirmed. Such reconfirmations are the opposite of the contrasting juxtapositions of engagements and reflectively shaped expanding awareness that we believe demands reconciliation by the brain’s upper-level comparator functioning. Only when this contrast dominates experience are rearrangements of symbolic representational configurations apt to occur.

REFERENCES


