Psychoanalysis is currently seeking an expanded theory of interaction. The “relational turn” in psychoanalysis is at the center of current efforts to articulate this expansion (see for example Aron, 1996; Mitchell, 1993, 1997, 2000; Harris, 1992, 1997; Ghent, 1989, 2002; Benjamin, 1988, 1990, 1995 among others). Within the many streams of thought contributing to this effort, we single out systems views as providing a critical dimension of this expansion. The “dyadic systems view” is our particular contribution to the relational turn in psychoanalysis.

Although systems views have been evident in both psychoanalysis and infant research, each field has come from the opposite bias (Beebe & Lachmann, 1988, 2002). Centrally concerned with interactive regulation in the dyad, infant research on face-to-face interaction has only in the past decade seriously begun addressing self-regulation (Beebe, Jaffe, Chen & Cohen, 2002; Gianinno & Tronick, 1988; Fox, 1994; Thompson, 1994; Tronick, 1989). Similarly, originally centrally occupied with the organization of inner states, psychoanalysis has only in the past decade accorded interaction in the dyad a central place. Mitchell (1993, 1997, 2000) was a key player in this shift within psychoanalysis. However we believe that currently there is a discernible theoretical shift away from inner processes toward relational processes, both in relational psychoanalysis and child development research (see Miller, 1996; Overton, 1997, 1998; Ghent, 2002), perhaps as a reaction to an historical over-emphasis on inner processes (see Beebe & Lachmann, 1998).

In contrast, in our dyadic systems view, inner and relational processes are co-constructed and equally important (Beebe & Lachmann, 1998). Self-regulation processes, and other-regulation processes, emerge together in a reciprocal, inter-penetrating way (see Overton, 1997, 1998). Inner and relational, or self- and other- regulation, are “points of view” on the same whole (Overton, 1997, 1998). A dyadic systems theory of interaction must specify how each person is affected by his own behavior – that is, self-regulation – as well as by the partner’s behavior – that is, interactive regulation (Thomas & Martin, 1976; Thomas & Malone, 1979; Tronick, 1989; Beebe, Jaffe & Lachmann, 1992; Beebe & Lachmann, 2002). In the interactive process, patterns of expectation are co-constructed. Self-regulation in the adult includes self-predictability, regulation of arousal, previously established expectancies, symbolic elaboration, fantasy and projection. It includes access to, articulation of, and regard for inner states (Sander, 1983, 1985). Each person must both coordinate with the partner, and at the same time regulate inner state. Self- and interactive regulation are concurrent and reciprocal processes, with each affecting the success of the other (Gianino & Tronick, 1988). Although this theory is now well articulated, neither infant research nor psychoanalysis has taken full advantage of its implications.
If we do not privilege inner or relational, and instead emphasize their reciprocal co-construction, psychoanalysts will be in a stronger position to examine how dyadic processes may (re-)organize both inner and relational processes, and reciprocally, how changes in self-regulation in either partner may alter the interactive process (Beebe & Lachmann, 1998). As we have argued (Beebe, Jaffe & Lachmann, 1992), too great a tilt toward an interactive view of the organization of experience neglects the development of a sense of individuality, agency, and one’s own self, as distinct from the dyad; too great a tilt toward an intrapsychic view of the organization of experience under-estimates the contributions of the partner and the environment, and the intra-uterine interactive organization (see Monk, Myers, Sloan, Ellman & Fifer, 2003) of infant “biology.”

In his book, *Influence and Autonomy*, Mitchell (1997) was also concerned with the integration of inner and relational processes. He described a dialectic between being oneself and being influenced by others. Although the terms of his discourse are different from ours, he was similarly concerned with the balance between inner and relational processes. Aron (2002) noted Mitchell’s ability to maintain the dialectic between the intrapsychic and the interpersonal, each constituted by the other.

An additional essential feature of our dyadic systems view is the integration of the "implicit" procedural/emotional mode of processing with the "explicit" mode (see Beebe & Lachmann, 2002; Lyons-Ruth, 1999). Implicit refers to things that we know or do automatically without the conscious experience of doing them or remembering them, such as ice-skating, or the feel of cat fur on one’s skin, or knowing how to joke around (Clyman, 1991; Grigsby & Hartlaub, 1994; Squire & Cohen, 1985; Lyons-Ruth, 1998, 1999; Pally, 1998, 2000; Rustin & Sekaer, 2001). In contrast, explicit processing or memory refers to things that we do or remember that can be brought to consciousness as symbolically organized recall for information and events, such as facts and concepts (“semantic”), or personal history (“episodic”) (Pally, 1997).

Although there are various forms of implicit processing, the one central to our use is “procedural,” which refers to skills or goal-directed action sequences that are encoded nonsymbolically, become automatic with repeated practice, and influence the organizational processes which guide behavior (Emde, Birengen, Clyman & Oppenheim, 1991; Grigsby & Hartlaub, 1994). Our use of the concept of infant “expectancies” illustrates one definition of implicit, procedural knowledge (see Beebe & Lachmann, 2002).

Implicit and explicit are very roughly analogous to nonverbal and verbal modes. The nonverbal dimension of communication, conveyed through face, gesture, vocal tone and rhythm, is usually implicit, out of awareness, and not consciously “intentional,” although it is goal-oriented action. However, words can be used both implicitly and explicitly. Lyons-Ruth (personal communication, 2002) suggests that we distinguish how words are used: the enactive, action-potential of words which directly engage the partner, which is an implicit use of language; vs. the symbolic, interpretive, reflection-potential of words, which is explicit (see Beebe, Knoblauch, Rustin & Sorter, 2003). In general, Lyons-Ruth refers to “implicit relational knowing:” knowing how to proceed in social, particularly intimate, interactions. As an example of implicit knowledge, Dimberg, Thunberg and Elmehed (2000) showed that adults can process a facial expression, and match it, within 30 milliseconds, entirely out of awareness. Thus emotional reactions can be evoked out of awareness, so that important aspects of face-to-face communication occur on an implicit, nonconscious level. Earlier important discussions of the
role of the nonverbal in psychoanalysis can be found in Shachtel (1959), and Tauber and Green (1959), among others.

The implicit mode is usually out of awareness, but it provides a continuous and powerful background to the verbal foreground which is intermittent (speaking and listening). The importance of the implicit mode was first noted in neurosurgery and neuropsychology (Milner, 1962; Cohen & Squire, 1980). Emde et al (1991) were pivotal in conceptualizing its role in infant research, and Grigsby and Hartlaub (1994) and Clyman (1991) in adult character formation and psychoanalysis. An understanding of its role in psychoanalysis was greatly expanded by Lyons-Ruth (1998, 1999), the Boston Study Group on Change (Stern et al, 1998; Tronick, 1998; see also Bucci, 1997; Knoblauch, 2000; Sorter, 1994; Rustin, 1997; Schore, 1994, 1996, 1997). Unless we take into account the implicit mode of communication in psychoanalysis, we can address only half of what happens in the therapeutic encounter.

HISTORICAL PERSPECTIVES

It is impossible to discuss how the relational turn in psychoanalysis has influenced our work (Beebe and Lachmann) without taking a historical perspective. Its influence comes through a unique integration of our respective backgrounds. We first describe our intellectual heritages in developmental theory, infant research, and psychoanalysis, and their influences on our dyadic systems approach to psychoanalytic treatment. In the second part of the paper we revisit a case we published in 1982 to illustrate the ways in which our systems approach has transformed our thinking.

Psychoanalysis in the 1970's through Frank Lachmann’s eyes

In 1972 I (Frank Lachmann) had been in practice for a number of years and taught ego psychology at the Postgraduate Center for Mental Health. Through the treatment of a very difficult case (Lachmann, 1975), I became aware that the psychoanalytic theory I had been taught, and was now teaching, was not up to the task of understanding and treating this patient. I recalled a clinical seminar taught by Gerald Chranowsky at a Veterans Administration Clinic. He discussed cases presented to him in terms of Sullivan’s term, “problems in living,” in contrast to the pathologizing attitude of other consultants. It enabled me to relate more personally to my patient, who, in turn, felt better understood. I searched further in the literature to broaden my psychoanalytic perspective. I participated in a study group led by Martin Bergmann, where I became acquainted with the work of Hans Loewald, Edith Jacobson, and Heinz Kohut. Looking back, I can see that my ego psychoanalytic theoretical bent was slowly bending.

I was struck by how Loewald, initially trained as a Sullivanian, integrated Freud and Sullivan by reconceptualizing Freudian concepts in interactive terms. Both Loewald and Jacobson appreciated the power of the mother-infant bond and the role of interaction. Self and object representations provided the basic framework of both. Through Jacobson and Kohut I became more sensitive to the patient-analyst bond as a powerful instrument of the treatment, particularly in serious psychopathology. Through Loewald and Kohut I questioned the frustration model of early development. I was impressed by Kohut’s formulation of the role of self object experiences in development and in treatment. It was at this point that my work with Beatrice Beebe began, in the fall of 1972. I (Beatrice Beebe) was interested in developmental
theory, infant research, and psychoanalysis. In 1972-3 I had just returned from a year of studying with Sidney Blatt, and I was working with Herbert Birch, Daniel Stern and Joseph Jaffe. Joseph Jaffe has continued to be my research colleague for 30 years. In what follows we describe the confluence of views that have forged our dyadic systems view over the past 30 years.

**Historical perspectives on the development of our “Dyadic Systems View”**

Over the course of much of the 20th century, parallel developments in developmental theory and research, and in psychoanalysis, created an intellectual climate conducive to the emergence of various “relational systems” perspectives in both fields. In what follows we do not attempt a full intellectual history of this emergence, but instead focus on those intellectual currents that were most influential in the development of our own dyadic systems view.

Our dyadic systems approach (see Jaffe et al, 2001) was influenced by Sullivan’s (1940) interpersonal theory, particularly his view that “a personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being” (p. 90). He suggested that “the only way … personality can be known is through the medium of interpersonal interactions” (Greenberg & Mitchell, 1983, p. 90). Sullivan was a contemporary of Winnicott. They shared the concept that a person can only be understood in the context of the relational field. Winnicott’s (1965) famous statement that “there is no such thing as an infant” (p. 39) is paralleled by Sullivan’s similarly famous phrase, ”the myth of personal identity.” Many other psychoanalytic writers also contributed to the view that individuals cannot be understood apart from the totality of their interpersonal relationships (Bowlby, 1969; Fairbairn, 1941/1952; Ferenczi, 1930; Lewin, 1935; Spitz, 1963). This fundamental assumption set the stage for a relational systems view.

This assumption of the centrality of the relational field contrasts sharply with an alternative, influential twentieth century view that the individual is fundamentally alone and is drawn into interactions and relationships. Stolorow and Atwood (1992) termed this view “the myth of the isolated mind.” Overton (1994) also critiqued this view, arguing that it splits the relational matrix into separate individuals, and then searches for the glue that puts them back together. Instead, a relational systems approach begins with the relational matrix as a system in which each component affects and is affected by the other. In our terms, each partner affects and is affected by the other, and within the dyadic interchange, each partner’s self-regulation affects the interactive regulation, and vice-versa.

While Sullivan and Winnicott were sowing the seeds of a relational approach in psychoanalysis, in the same era Piaget and Werner were developing this idea in the area of child development research and developmental theory. Although Piaget and Werner did not use the term “systems theory,” their emphasis on the continuous interaction of organism and environment set the stage for a relational systems approach, particularly in their interactionalist view of development. They used a “constructivist” or “organismic” model, in which there is no pure sensory event independent of the perceiver (Jaffe et al, 2001; Kohlberg, 1969; Lerner, 1998; Lewis & Brooks, 1975; Lewkowicz, 2000; Overton, 1994; Reese & Overton, 1970).
Many key figures in developmental theory, biology, psychology, and information theory contributed to the move from an individual-centered approach and linear views of causality toward systems and field approaches (Iberall & McCulloch, 1969; Kohlberg, 1969; Lewin, 1935; Sameroff, 1983; von Bertalanffy, 1968; Weiss, 1970). Von Bertalanffy was a leading figure in theoretical biology. He described the fundamental properties of a system as organization and primary activity: each component of a system brings its own active self-regulation. Having much in common with Piaget and Werner, he argued that in the course of development the system is “self organizing,” becoming more differentiated, complex, and integrated. Sameroff became a leading proponent of this view in child development research and theory.

Louis Sander was a seminal figure in infant research who grasped the power of the systems approach in the 1960’s and began to influence three decades of infant researchers. He was the central translator between systems views of theoretical biology and infant research, and he has been at the forefront of a relational systems approach to infant research. Increasingly he has come to have a profound impact on psychoanalysis as well (Sander, 1995, 2002; Seligman, 2002; Nahum, 1994; Stern et al, 1998). Sander was influenced by von Bertalanffy (1968) and Weiss (1970) on biological systems views, by Byers (1976) and Luce (1970) on biological rhythms, by Piaget (1965/1995) and by psychoanalysis, particularly the work of Winnicott (1965).

Mutual (bi-directional) regulation and self-regulation were Sander’s most fundamental concepts. He suggested that “… organism, surround, and exchanges-between can be … discussed as a system … exchanges between interacting components in a system, through mutual modification, reach a harmonious coordination … “ (Sander 1977, p. 138). Regulation in the system is based on the capacity for mutual modification of the partners, a bi-directional coordination. A key to Sander’s thinking is his emphasis on timing as central to coordination. He argued that the temporal organization of events provides the framework for conceptualizing the interface between two ongoing organizations (see Jaffe et al, 2001). Although he played out his ideas in the empirical arena of the organization of sleep-wake cycles in the first weeks of life, his work influenced the researchers working on mother-infant face-to-face interaction, described below. More recent systems views of development as a whole, from the cellular level to the societal level, have been articulated by Gottlieb, Wahlsten and Lickliter (1998), Lerner (1998), Lewkowicz (2000) and Overton (1998), among others. These theorists have elaborated on a central theme inherent in Sander’s work, that bi-directional or reciprocal coordinations between components of a system (such as two partners) provide one critical “engine” of development (see Jaffe et al, 2001).

Working in parallel to Sander, Jaffe approached rhythms of dialogue as a dyadic system (Jaffe & Norman, 1964; Jaffe & Feldstein, 1970). Neither Sander nor Jaffe was aware of the other’s work until a decade later. Jaffe & Feldstein developed their dyadic systems view in the 1960’s at the William Alanson White Institute for the study of psychoanalysis. Influenced by Sullivan, Jaffe and Feldstein (1970; see also Feldstein & Welkowitz, 1978; Feldstein, 1998) documented the interpersonal, pragmatic features of dialogic timing that were relevant to the communication of mood, the phenomenon of empathy, and the breakdown of effective dialogue. First working with adults, then with mother-infant pairs, in collaboration with his colleagues Stern, Beebe, Feldstein, Crown and Jasnow, Jaffe brought this emphasis on the temporal pattern
of the exchange into the mother-infant “proto-conversation” (Jaffe, Stern & Peery, 1973; Jaffe, Beebe, Feldstein, Crown & Jasnow, 2001; Beebe, Stern & Jaffe, 1979; Beebe, Jaffe, Feldstein, Mays & Alson, 1985). Jaffe’s conceptualization of the dyadic system has been pivotal in the work of Beebe and Lachmann (see Beebe, Jaffe & Lachmann, 1992).

Another key influence on relational systems views in infant and child development research came from ethology, both animal and human, and the careful examination of the organization of behavior in the natural habitat (see for example Chance, 1962; McGrew, 1972; Tinbergen, 1972; Hinde, 1982). This emphasis on the detailed, often micro-analytic description of behavior became the central methodology of the infant research noted below, and ultimately revealed the fascinating, complex forms of early relatedness, as well as forms of infant attachment, that now inform our understanding of early development.

Two veins of infant research emerged in the 1970's from this intellectual climate:

- Two rich and distinct veins of infant research emerged from the intellectual climate that fed into relational systems approaches: the study of mother-infant face-to-face interaction, and the study of infant attachment described below. The empirical investigation of the mother-infant face-to-face exchange emerged from several different laboratories at about the same time: Stern (1971) working with Jaffe at Columbia University; Trevarthen (1974) working with Richards at Bruner’s lab at Harvard as well as with Brazelton at Harvard; Catherine Bateson (1971) working with Bullowa, and Brazelton (Brazelton, Kozlowski, & Main 1974) working with Tronick, (Tronick, 1979; Tronick, E., Als, H., & Brazelton, T., 1975; Tronick, E., Als, H., & Adamson, L., 1977). These researchers began the now rich tradition of documenting the minute details of the mother-infant face-to-face exchange, showing both partners to be active participants in the co-creation of many patterns of relatedness. This research occurred in the context of a dramatic shift in the zeitgeist of child development research, in which the field moved from investigating the parent’s influence on the child, to a bi-directional or “systems” approach, addressing the processes of how each partner affected the other (Bell, 1968, 1971; Sameroff, 1993; Lewis & Rosenblum, 1974). This thinking was very compatible with that of Sander (1969; 1977; 1985).

- A second quite different vein of research emerging from the intellectual climate feeding relational approaches was attachment theory, although a detailed discussion is beyond the scope of this paper. Bowlby’s famous 1958 paper, The Child’s Tie to his Mother, was followed by his seminal volume Attachment (1969). Ainsworth (Ainsworth, Blehar, Waters & Wall, 1978), Sroufe (1983) and later Main (Main, Kaplan & Cassidy, 1985), together with a host of other researchers developed attachment theory into one of the most influential empirical and theoretical areas of child and adult development. In the past decade there have been several key efforts to link detailed descriptions of early mother-infant face-to-face interaction with infant attachment outcomes (see Malatesta et al, 1989 ; Jaffe et al, 2001; Beebe et al, 2002).

Many veins of psychoanalysis emerged from this intellectual climate:

Parallel to the developments in infant research and developmental theory, many broadly “relational” veins of psychoanalysis also emerged from the intellectual climate that fed relational systems approaches. The psychoanalytic influences on the relational turn can be traced back to Ferenczi (1910), Winnicott, Sullivan, Anna Freud and Balint (1930's), Margaret Mahler (1950's) Jacobson, Loewald and Racker (1960's), Kohut (1970's), Gill, Hoffman, Modell, Stolorow, Lachmann, Greenberg and Mitchell (1980's). These authors enlarged the scope of
psychoanalysis by recognizing the mutual influences of analyst and analysand, parent and child. The constraints of a largely one-person, intrapsychic emphasis gradually yielded to a greater integration of a one-person and a two-person approach, and metaphors of “field,” “matrix,” and “context” became prevalent.

Parallel developments in infant research and psychoanalysis created a synergy that is yielding one of the most fertile interdisciplinary exchanges in the history of psychoanalysis.

We have described two parallel intellectual streams, one in infant and child development research, and one in psychoanalysis, both spawned by the intellectual climate that fed relational systems approaches. Although the ideas were developed in parallel in both intellectual streams, not until these two traditions converged in psychoanalysis in the past decade or so have we sensed the full potential of this synergy. When Greenberg and Mitchell began the “relational” point of view with the publication of *Object Relations in Psychoanalytic Theory* in 1983, the time was ripe for an integration of psychoanalysis with the powerful current of relational systems thinking in infant research and child development. From that time on the two streams have been engaged on a profound intellectual dialogue. Key players in this dialogue are, among others, Sander (1977, 1983, 1985, 1995), Stern (1977, 1985, 1995), Stechler and Kaplan (1980), Emde (1981), Schwaber (1981), Demos (1983), Lichtenberg (1983), Beebe and Stern (1977), Beebe and Lachmann (1988, 1994, 2002), Tronick (1989, 1998), Lyons-Ruth (1991, 1998, 1999), Fonagy (1991), Fonagy and Target (1996), and Seligman (1994). In the 1990's they were joined by the team of Fonagy and Target, and in the late 1990's by the Boston Study Group on Change (see Lyons-Ruth, 1998; Stern, Sander, Nahum, Harrison, Bruschweiler-Stern, & Tronick, 1998; Tronick, 1998). This dialogue took a great leap forward with nonlinear dynamic systems theory (Edelman, 1992; Tononi, Sporns, & Edelman, 1994; Freeman, 1991), translated for developmental psychology, and further elaborated, by Thelen and Smith (1994). This landmark publication by Thelen and Smith further influenced a number of psychoanalytic writers, including Sander, Stolorow, Orange, Ghent, Harris, Olds, Beebe et al, Modell, and the Boston Study Group on Change, among others. The nonlinear dynamic systems view will be a major player in the next chapter of the development of relational systems approaches. The dialogue between systems views in infant and child development research and relational points of view in psychoanalysis is one of the most creative and fertile interdisciplinary exchanges in the history of psychoanalysis.

**How does the dyadic systems view change the look of psychoanalysis?**

Greenberg (2001) has proposed that the clinical dimension of the relational turn in psychoanalysis is to be found in the critique of a fixed standard technique, instead tailoring technique to each unique dyad. He argues that many of the most influential clinical vignettes in the recent relational literature emphasize the analyst's risk taking, engaging patients in a highly personal way, thus breaking the mold of traditional psychoanalysis.

Rather than viewing the relational turn within the dichotomy of frame-maintaining vs. frame-breaking, we believe that the relational turn has changed the entire context in which analysts ply their trade. This change in context has evolved through the confluences of the intellectual climate that fed into relational systems approaches, described above. This change frees the analyst to be more human, but the analyst is also called upon to be more accountable: to recognize the power of every nonverbal as well as verbal gesture, to be more aware of self-regulation patterns and the dyadic “fit.” Thus a relational systems approach, and specifically our
emphasis on self- and interactive regulation and co-construction, provides both expansion and constraint in the analyst’s role. We what follows we briefly summarize some of the ways that our dyadic systems view changes the look of psychoanalysis.

(1) Our dyadic systems approach is concerned with the moment-by moment organization of interactive process between two partners. The continuous, moment-to-moment variation in each partner is fundamental to communication: it provides each partner an essential means of sensing the other. Moment-to-moment process is nested within larger patterns that are more prolonged, such as moods. But even moods retain fluctuation and process. Therefore we argue that, in general, the concept of process captures the nature of relatedness in psychoanalysis better than the more familiar concept of “states.”

(2) Interaction and experience are co-constructed. This statement has two layers.

First, “co-construction” refers to the idea that interaction is bi-directional: each person “coordinates with” or “influences” the other moment-by-moment. Influence or coordination are defined by probabilities that each person’s behavior can be significantly predicted by that of the other. No causality, equality, symmetry, or (positive) mutuality is implied. For example, facial mirroring patterns in the positive range, and chase and dodge patterns of maternal spatial intrusion and infant withdrawal, are both co-constructed. Both patient and analyst may coordinate with the other’s timing, affect, arousal, activity level. And each can sense whether or not the partner’s behavior is related in time to his or her own, or “coordinated.” This sensing generally goes on out of awareness, and is most readily noticed when absent.

In translating the bi-directional model of interaction for psychoanalysis, it is important to note that there are four vectors of experience: both the patient’s experience (in or out of awareness) of being “influenced by” (coordinating with) the analyst, as well as influencing the analyst (sensing the analyst coordinating with the patient); and reciprocally the analyst’s experience (in or out of awareness) of being influenced by (coordinating with) the patient, as well as influencing the patient (sensing the patient’s coordination). Rarely are all four vectors given equal play in conceptualizing the interaction (see Beebe & Lachmann, 2002).

Second, “co-construction” refers to the idea that interactive regulation and self-regulation both “influence” each other, each partially organizing the other, and affecting the success of the other. In Sander’s terms, inner experience is organized in the interactive context. Reciprocally, interaction patterns are critically affected by the self-regulation range of both partners.

The concept of the co-construction of the analytic experience implicates the analyst in every aspect of the analysis. As Lachmann (2000) notes, no moment can be written off as purely the patient’s transferences or projections, or as purely the analyst’s counter-transferences or projective identifications. Furthermore, at every moment there is the potential to (re-) organize (or not reorganize) expectations of intimacy, trust, mutuality, repair of disruptions, as well as to disconfirm (or not disconfirm) rigid archaic expectations. Both analyst and patient contribute to this process.

The co-construction view also alters our usual understanding of the analyst’s subjectivity. Concerns about obfuscation, constraint, bias, distortion or facilitation have dominated our
discussions of the contribution of the analyst’s subjectivity to the analytic process. In contrast, the co-construction view proposes a more neutral, inclusive, and ongoing formulation of the system, in which each partner’s subjective experience is an emergent process of patterns of self-and interactive regulation (see Beebe & Lachmann, 2002).

(4) Context, such as who the partner is, or the familiarity of the physical environment, has a tremendous influence on self-and interactive processes. Thelen and Smith (1994) proposed a generative theory of behavior in which each occurrence of a behavior is assembled anew, to fit the changing demands of task and context. Context sensitivity allows behavior tremendous flexibility to reorganize (Thelen & Smith, 1994; see Beebe et al, 2000). Jaffe et al (2001) showed that, even with the same partner, we coordinate our behavior more tightly or more loosely as a function of the novelty/familiarity of the partner and environment context. Thus behavior, and interactions, are potentially emergent and open to transformation. Nevertheless, we do not fully understand what factors, such as trauma, may disturb a system’s capacity to transform.

(5) Our dyadic systems approach integrates the symbolic representational or “explicit” mode with the nonsymbolic, implicit (procedural/emotional) action-perception mode. At the symbolic level, representations of others in relation to the self (conscious/ unconscious) guide the regulation of social behavior. However, much of the regulation of social behavior is out of awareness, organized at in a split-second time-frame, through perception and action sequences (see Newton, 1990), although it can under certain circumstances be brought into awareness. These two modes of processing information continuously affect the other (see Beebe et al, 2000; Beebe & Lachmann, 2002; Bucci, 1985, 1997). The perception-action coordination system is a central mode through which the patient comprehends the analyst, and vice-versa. Each can further comprehend, question, and “deconstruct” (Malcome Slavin, personal communication, Feb. 12, 1998) the symbolic level through elaborations, alterations, or discrepancies at the perception-action level. Thus implicit dimensions of the interaction may powerfully enhance or disturb the structure of relatedness, impacting on more familiar psychoanalytic dynamic issues, for example safety, efficacy, self esteem, separation and reunion, boundaries, self definition, intimacy, aloneness in the presence of the partner, or mutual recognition (Beebe & Lachmann, 1998).

Our increasing understanding of the implicit mode has tremendous implications for psychoanalysis: expectancies that regulate intimate relating can be reorganized in the implicit domain without necessarily reaching conscious awareness. Therapeutic action can occur in the implicit mode without ever being translated into words (see for example Clyman, 1991; Grigsby & Hartlaub, 1994; Bucci, 1997; Pally, 1998; Knoblauch, 2000; Sorter, 1996; Lyons-Ruth, 1998, 1999; Beebe & Lachmann, 2002; Schore, 1994; Stern et al, 1998). Because relatively little of the implicit domain becomes translated into the symbolic domain; the implicit is more pervasive and potentially more organizing (Lyons-Ruth, 1998, 1999).

**REVISITING THE CASE OF BURTON: HOW HAS THE DYADIC SYSTEMS VIEW TRANSFORMED OUR PSYCHOANALYTIC WORK?**

We now turn to the case of Burton (treated by Beebe) that we published in 1983 (Lachmann & Beebe, 1983), describing Burton in the way we understood him at the time, and
then revisiting the case in the light of our dyadic systems view (for a full discussion of the case see Beebe & Lachmann, 2002). This case illustrates the ways in which the relational turn in psychoanalysis, and particularly our dyadic systems view, has affected our clinical work.

The theory we followed in the treatment of Burton focused on the consolidation of the self. His pathology was seen as a result of merger wishes with consequent difficulties with separation. We assumed that the sense of self consolidates along three dimensions: (1) self-object differentiation, (2) the capacity to tolerate positive and negative affects, and (3) the experience of continuity over time, an essential ingredient of self and object constancy. Whereas the term differentiation was used to refer to the process through which self and object were distinguished, separation was used to refer to the capacity to maintain this distinction. Separation resulted in a diminution of an imperative need for the object's actual presence.

We also held that a consolidated sense of self was a prerequisite for the emergence of psychological conflict. Difficulties in the structuralization of self experience was distinguished from a self in conflict (Stolorow & Lachmann, 1980). In Burton's treatment, especially in the later stages, we tracked the fluctuations, back and forth, as one kind of pathology was, at times, more salient than the other. Early in the treatment, we viewed his pathology as based on deficits in structuralization of the self. We used these theoretical constructs as our response to an everpresent danger of "fragmentation" in Burton's sense of self. The notion of "increments of separation" (Lachmann, Beebe & Stolorow, 1987) was used as a theoretical touchstone to afford Burton a safety zone with which to organize his continual back and forth oscillations into manageable proportions. Reciprocally, any retreat from a particular step of separation was not viewed as necessarily equivalent to a remerger with the feared and enticing mother, but rather as part of a back and forth oscillation. We believed that this line of interpretation would gradually enable him to modify his all-or-none fantasy that to separate meant isolation or death, and would establish psychic structure by minute transformations.

Burton began his treatment with Beatrice Beebe as a patient at a University clinic, and remained in treatment with her for the next ten years. In the ninth year the severe pathology that characterized him since early childhood diminished markedly. When we wrote up the ninth year of his three session per week treatment, we named him Burton, his first wife Liz, and his second wife Sybille.

Burton began treatment, his fifth attempt at therapy at the age of 20, as a college sophomore. He felt that life was not worth living; he complained of his self destructiveness; and he catalogued an extensive involvement with drugs (LSD, ritalin), periodic alcoholism, and persistent suicidal ideation. He heard a persecutory voice located "in the back of my mind" criticizing him, mocking him, and telling him to kill himself. He described difficulties in concentration, racing thoughts, lapses of memory, and out-of-body experiences. He felt he was losing his sense of being alive, and that he had a terminal disease. His sense of time was severely distorted, so that time was either speeding up or in danger of stopping. He made dare-devil forays into dangerous neighborhoods, carrying a gun, planning to fight the drug dealers who supplied heroin to Liz, his girlfriend whom he married in the third year of his treatment.
Whenever Liz would reject him, take drugs, or disappear all night, Burton would simultaneously want to murder Liz and kill himself. He would then become dangerously suicidal. When Liz left him in the 7th year of his treatment, Burton was hospitalized (his third in the course of the treatment) for a severe depression which continued for a full year after the hospitalization. However, Burton was able to use his ideal as a scholar to force himself to ignore urgent impulses to reconnect with Liz. They were divorced in the following year.

Burton's strengths were also extremely impressive. He had a rich imagination, outstanding intellectual ability, a sensitive capacity for self reflection, and intense concern for his friends. He consistently maintained a high academic standing and was able to pursue graduate work throughout the treatment. The vitality of his struggle suggested a passionate commitment to life.

By the ninth year of the treatment, much work had already been done on his relationship with his mother. Early in the treatment he had described, "We are like Siamese twins; both of us would die if we were separated." He had recalled a repetitive early nightmare of being locked in a coffin, with his mother outside -- or vice versa. Separation meant being killed and killing. Burton recounted, "My mother would freak out for days, going crazy, nothing could stop her. I know what it's like to love someone who is determined to annihilate herself. When Liz would get self destructive I'd feel I'm getting shut out, killed. She's killing me, I'll kill her." Burton's fundamental metaphor was that separation meant death.

Lengthy reconstruction of his early relationship with his mother had revealed memories of her as grossly inconsistent, alternately all good or murderous, sexually seductive and then abruptly abusive. The repetitive nightmare in which either Burton or his mother is locked in a coffin at night with the other outside captured his simultaneous suicidal and homicidal preoccupations and the fluid interchangeability between images of himself and his mother as killer and victim. Memories such as these were used in the crucial ninth year to remind Burton how much of his relationship to Liz re-evoked his early relationship with his mother, so that at times he found it nearly impossible to distinguish the two sets of experiences.

As we enter the clinical material in the ninth year to illustrate briefly the process of the treatment, Burton was involved in a conscious attempt to become less preoccupied with Liz. By this time he was already living with Sybille, whom he later married. Burton now began to miss sessions for four weeks in a row, which was highly unusual. Burton thought that he was missing sessions to stop the process of tearing himself away from Liz, by rejecting the therapist's help. He began to panic, to feel that he had lost himself, that he had lost Liz, and that both he and Liz were evil.

In a rising panic, Burton attempted to convince his therapist that he would die without Liz. The oscillation toward and away from Liz escalated. He needed to see Liz to repair the rift and to save her. Simultaneously, he announced his decision to accept a divorce from her. He still felt enraged and wished to kill her: "I miss her, I hate her. I want to get rid of her. I want to run back to her." His functioning became disorganized: "I can't handle business. I can't get my books to the library. My apartment is a mess. My life is falling apart. I am not living, without Liz. This
is not separation; this is the end." This disorganization culminated in a suicidal state reviving a merger with his mother as dying: "This is a subjective car accident. It's like my mother dying. I want to blow my brains out. I want to lose myself now."

We understood this process as an indication of the tenuousness of Burton's self structure. The distinction between self and object was temporarily lost and he re-entered a merged state with Liz, essentially similar to that which he had had with his mother. Homicide and suicide were interchangeable. Both he and his mother were dying. He was both killer and victim.

The vanishing time dimension inherent in the merger state was reintroduced by pointing out to Burton that he imagined being trapped in this feared state forever. This interpretation enabled Burton to progress from his suicidal and merged position to an acceptance of a more differentiated and dependent state. He felt unable to take care of himself and overtly acknowledged his need for me (Beatrice). He dreamed of a woman who let him suck her breasts, whom he identified with me. He used these images to comfort himself in the face of the dread of murderous separation. He re-integrated various qualities of himself, not only as aggressive but also as needy, able to be comforted and having sexual feelings. Burton's movement was articulated as an increment of separation toward a richer, more articulated self experience. In this period we (Frank and Beatrice) understood the merger to be transformed into a more object-related dependency with some self-object differentiation.

During much of the treatment Burton's positive, idealized transference was in the background. At the start of the ninth year, when Burton began to miss sessions, the transference shifted into the foreground and began to be the subject of interpretation. At this point in the treatment the work on the transference dream of the woman who let his suck her breasts allowed Burton to use his overt acknowledgment of need as a way of transforming symbiotic-like longings into object-related dependency and a crucial new capacity to be comforted.

These developments in Burton's integration of various qualities of himself enabled him to sustain intense feelings (rage, sexuality, dependence, fear of loss) which had previously been managed through re-merger with his mother and Liz. At this point in the treatment, Burton was enraged about his sexual dependence on Liz and felt panicked that the loss of this relationship would mean the loss of his sexuality. He said, "I'm losing a part of myself; I'm resisting it. I feel like an abandoned child. I feel wronged. I can't give her up; I feel chained to a dead person." These thoughts were connected to Burton's early dreams in which either he or his mother was locked in a coffin with the other outside, and his lifelong dread that moving away from his mother would result in both dying. Burton appreciated that he was condensing his experiences with Liz and his mother, and acknowledged, "I can't take all my experiences so seriously."

A core consolidation of the self (defined as distinctness of images of self and other) was established following extensive work on separating from his therapist, as we began the work of termination. Burton no longer felt merged with his "evil" mother. Burton said, "I do feel I can survive and survive well. I feel lucky and happy in many ways. I feel good about myself, honest. But I also know there will always be times when I want to destroy myself." His progress in the three dimensions we defined at the outset, differentiation of self and other, ability to tolerate intense affects, and a sense of continuity over time, were now manifest in several salient ways. He was increasingly able to imagine his relationship with his therapist between sessions.
He was able to revive memories of prior times without fears of being drawn back into experiences of himself as a killer, as identified with Jack the Ripper, as a psychotic hospitalized adolescent, as belonging in jail, or as merged with his ex-wife or mother.

It has now been two decades since the termination of Burton's ten year treatment. During these years Burton has retained intermittent contact with me and has pursued no other therapy, with the exception of medication. In some of his telephone calls he was in crisis, and in others he was "checking-in." There were long periods of no contact. In recent years a brief telephone call has been scheduled once a week. Every few months there comes a warm card from him. Despite periods of intense depression and work inhibition, Burton is flourishing as a loving husband to Sybille, a warm and dedicated father, and an outstanding and productive member of his intellectual community.

THE CASE OF BURTON SEEN THROUGH THE DYADIC SYSTEMS VIEW

In reconceptualizing this case through a dyadic systems view, we describe the shifts in our thinking that have altered our understanding of Burton and his treatment. Dimensions of the therapeutic exchange which were previously in the background are now in the foreground, as critical aspects of the therapeutic action. We have also changed our understanding of psychological organization, altering our concepts of development, representation, internalization, and the relationship between repetition and transformation.

In the discussion to follow, we focus on various interrelated critiques of our former thinking: (1) the central concern with structure formation and structural deficit reflected a one-person view of psychological organization; (2) the model of development focused on separation; (3) the emphasis on the repetition of archaic attachments neglected the transformations of these attachments; (4) the emphasis on the verbal narrative and interpretation neglected the therapeutic action of the ongoing nonverbal exchange; (5) the use of a unidirectional model emphasized the influence of the therapist on the patient, neglecting the influence of the patient on the therapist.

Our treatment of Burton had pursued the analysis of structural deficits and the promotion of structure formation. Consistent with a systems model, rather than viewing psychopathology as deficits in organization, we believe that every experience is organized in some way. Instead of the concept of psychic structure, we prefer "patterns of experience" which are in process, that is, organizations which may transform. In fact, we have changed our original term "interaction structure" to "interaction pattern" to avoid the static implications of the concept of structure (see Beebe, Lachmann & Jaffe, 1997; Kulka, 1997). Patterns of experience are initially organized in infancy as expectancies of sequences of reciprocal exchanges, in which each partner influences the other moment-by-moment, and associated self regulatory styles. This reciprocal, or "bidirectional" influence, where each partner contributes to the ongoing exchange, is termed "co-construction."

What difference does the concept of expectancies make in our understanding of the treatment of Burton? Expectancies have been included among the "nonspecific" or "noninterpretive" factors in psychoanalysis. Instead, we view the nonconfirmation of traumatic expectations to carry a specific therapeutic action. Burton expected criticism, mocking, abuse, abandonment, explosions, and sexual overstimulation as well as an immediate supply of nurturance (drugs, alcohol). The fact that his therapist did not fulfill any of these expectations
not only provided a "background of safety" (Sandler, 1960), but also "perturbed the system" (Thelen & Smith, 1994), thus making other interactions possible.

The concept of expectancies shifts the focus to the process in which patterns of interaction became organized in the patient's history and are becoming organized in the treatment relationship. Each partner comes to expect patterns of response where each affects and is affected by the other with a certain timing and emotional tone. And simultaneously each partner experiences a range of ease or discomfort in the ability to regulate arousal and inner states, one critical aspect of self-regulation. We term these patterns "expectancies of regulation" and "expectancies of misregulation." This emphasis on process facilitates an integration of the nonverbal dimensions of the exchange with the more customary verbal focus.

Although Burton's expectations of misregulation rigidly organized his childhood, and dominated his relationships as an adult, they did not dominate the transference. On the contrary, he established a tender, warm, openly affectionate relationship with his therapist. He had had a very nurturing grandmother whom he loved intensely, and presumably this relationship provided a model and a hope which he brought to the transference. Moreover, despite the violent and at times highly sexually charged relationship with his mother, she had a very generous, loving side and she believed in him. However, at times this tender and warm aspect of his relatedness to me (Beatrice) existed side by side with cold a unreachable withdrawal, or a charged suicidal preoccupation.

In retrospect, in line with our changed understanding, we now ask how the patterns of his experience were reorganized. How did his expectancies of self and interactive regulation change? And how did the "internalizations" of our original formulation actually work? Here we draw on our contention that internalization proceeds hand in hand with the organization of representations (patterns of expectancies) (see Beebe & Lachmann, 1994). In development as well as in treatment, both partners jointly construct dyadic modes of regulation, which include patterns of both self- and interactive regulation. We have built on Schafer's (1968) position that regulatory interactions are interiorized. Generating, elaborating, anticipating, and representing the self- and interactive regulations that are jointly constructed constitutes the organizing process. And so, in Burton's case, the interactions in the analytic process gradually altered the nature of Burton's self regulation processes. He become able to think, anticipate, soothe and enliven himself without drugs and alcohol. Increasingly he was able to restrain himself from engaging in dangerous activities. Reciprocally these changes in his self-regulation patterns facilitated further transformations in the ways we interacted.

Our original concept of increments of separation can now be translated from a one-person model into a dyadic systems view. We initially used the concept to address a process that we believed occurred within Burton. We now suggest that a fascinating and complex interactive pattern of disruption and repair was being established. We (Burton and Beatrice) became increasingly capable of contributing to the repair process. When a crisis would occur, we learned to slow the process down, to make room for reversals, denials, and undoings, and we came to expect that we would eventually put the process back on track. Thus, the typical ways in which disruption and repair patterns proceeded came to be expected and represented by both of us. These expectations gradually reorganized Burton's inner regulation and simultaneously I, Beatrice, grew calmer. Thus the interactive exchange shifted for both of us.
In reconceptualizing Burton, our developmental model has shifted from separation-individuation to attachment-individuation. Mahler's phase of symbiosis (Mahler, Pine & Bergman, 1975) assumed a positive relatedness without self and object boundaries in the early months of life. She viewed the infant as differentiating representations of self and other in the second year, in the context of the increased physical separation of the toddler. The toddler's ambivalence about separation and differentiation, together with an increasing cognitive awareness of separateness, led to a "rapprochement crisis," described as a normal stage of alternating avoidance and pursuit of contact comfort with the mother. In Burton's treatment, our concept of increments of separation was influenced by this view.

In contrast, Bowlby (1969) conceptualized the task of the first year and a half as establishing a secure attachment relationship. Building on Bowlby, Karlen Lyons-Ruth (1991) critiqued Mahler et al's description of ambivalence about contact as normative for the rapprochement period. Instead, she argued that such ambivalence or avoidance over contact was a mark of an insecure attachment. Lyons-Ruth suggested that we reframe the first two years of life as an attachment-individuation process rather than as an attachment-separation process. The toddler's optimal development includes affection, using the parent as a resource for help, vigorous pursuit of contact comfort with the parent when under stress, and the assertion of initiative and opposition without fear of rejection. Thus the child's developmental process should be assessed by the degree to which patterns of affect regulation remain warm and mutual. At the same time they should facilitate the child's pursuit of goals and initiative. This model of development emphasizes assertive relatedness rather than separation to achieve autonomy.

Although our theoretical model at the time emphasized separation, in retrospect we observe that we did continuously direct our attention to Burton's attachment to the analyst. Influenced by Kohut (1967, 1971), we were alert to instances where the tie was threatened or disrupted, and tried to repair it. However, attachment was certainly in the background, and separation in the foreground, in our treatment of Burton. Burton's attachment to the analyst was continually and profoundly threatened by the ever present lure of suicide. From what we understood about Burton's early life, his ability to turn to his parents in times of stress was impaired both by his parents' unavailability and aggression, and by the extent of his terror and rage. Instead, he had turned to drugs, fighting, and extreme physical feats. In the treatment, it took many years before the attachment was experienced as "secure" by both Burton and his analyst.

At the time of the treatment, we recognized Burton's attachment to his analyst, but we did not explicitly conceptualize the role of the powerful investment of the analyst in Burton. This is a key aspect of therapeutic action in the treatment of the difficult-to-treat patient (Martin Bergmann, personal communication, April 2, 1990). Similarly, we conceptualized the analyst's influence on the patient, but we did not address the patient's reciprocal influence on the analyst. We left out of our original account the intensity of Beatrice’s involvement with Burton, especially her agonized moments when Burton was suicidal or out of reach. These reactions of the analyst would now be viewed as co-constructed, based on both the analyst’s own interactive history and self-regulation style, as well as the patient’s impact on the analyst. Thus, in both arenas of attachment and interpersonal influence only half of the treatment system was addressed. That is, we did not think in a more inclusive bi-directional way about attachment and influence in the co-constructed treatment relationship.
Our description of the treatment was limited to the patient's experience and the therapist's verbal interpretations. The ongoing moment-by-moment participation of the analyst in the co-construction of the implicit as well as explicit, verbal relatedness was neglected. In contrast, we now formulate treatment as co-constructed interactive process at every moment, in which the narrative dynamic issues and the moment-by-moment negotiation of relatedness fluctuate in a foreground-background manner.

I (Beatrice) recall a poignant late afternoon session with Burton when the daylight began to fade. Neither of us made a move to switch on the light in the room. We entered a slow, near-reverie state, barely talking. We each sensed the other calming down, and we were both quite content with our silence. For a very long time neither of us wanted to disturb it. Although Burton and I never explicitly talked about this session, it marked a shift in our ability to be together in a calmer way. This was all the more striking in the context of his usual frenetic, urgent, impulsive, wildly emotional states of mind. Simultaneously, it marked a shift away from my anxious, agonized concern.

Using the original separation-individuation model, the treatment emphasized Burton's attempts to separate from Liz. Burton wanted to be able to live apart from her. His ability to establish a sense of himself as able to survive and worthy of surviving without her was a key focus. Interpretations emphasized his renunciation of his responsibility for her fate. He feared that she would die or kill herself if he left her. This struggle was connected to a similar difficulty in separating from his mother.

Although we emphasized the repetition of Burton's relationship with his mother in his relationship with Liz, in retrospect we prefer a model that conceptualizes the interplay between repetition and transformation. The relationship with Liz was a repetition in the ways in which Burton made dramatically explicit his childhood sense of his mother as dangerous and evil. However, Burton also made numerous attempts to transform his destructive tie to his mother in his relationship to Liz. There were many tender and loving moments with Liz, and he made consistent efforts to "save" her from depression and drug use. Although we were aware of these transformational efforts, the treatment did not sufficiently reflect them. Nevertheless, despite Burton's best efforts, he could not integrate and transform the passionate hatred that characterized many of their interactions into a less stormy love.

Through the work in the transference, however, Burton developed an expectation that an energetic and vital relationship could be safe rather than murderous, pleasurable rather than overwhelming, and ongoing and predictable rather than prone to rapidly fluctuating moods and disruptions. In this process the passion of his previous relationships was both preserved and transformed. When he met Sybille, he found an intense, passionately loving, intelligent woman working in a field related to that of his therapist. In his later years, despite occasional intense conflicts, Burton was able to transform his relationship with his mother into a warm and relatively harmonious one.

A systems perspective on Burton's treatment actually comprises three people: Burton, Beatrice Beebe, and Frank Lachmann. Burton had a profound impact on both of us, and we
were both intensely involved in his treatment. We admired his extraordinary intellect, his creativity and energy, his generosity of spirit, and the intensity of his struggle.

The theory that we used in 1983 illustrates a one-person view; in essence, the self-regulation aspect of the systems model, emphasizing what the patient brings to the treatment. However, the treatment actually utilized both one- and two-person models, although the interactive view was not articulated by us at the time. In retrospect, therefore, our treatment of Burton already implicitly contained aspects of our systems thinking. After all, Beatrice Beebe was already an infant researcher while she was treating Burton, and the dialogue between Beatrice and Frank was already absorbing systems constructs. Lachmann was already translating Edith Jacobson’s concept of the self and object world, and Kohut’s concept of the selfobject, into an interactive point of view. Our reconceptualization of Burton within a systems view helps us to articulate better some of the aspects of the treatment that were already in play.

In summary, the Burton case illustrates the influence of the relational turn on our clinical work, specifically the influence of the dyadic systems model from infant research, and the emerging recognition of the role of interaction from psychoanalysis. We believe that the relational turn in psychoanalysis is making a profound change in the role of the analyst, and in our understanding of therapeutic action. However, we emphasize that both self- and interactive regulation are critical to our conceptualization of the relational turn from a dyadic systems point of view.

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