INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®

ATTACHMENT, COMMUNICATION, AND AFFECT:

IMPLICATIONS FOR PSYCHOTHERAPY

by

Peter C. Costello

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy
The City University of New York

2000

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

7-31-00

Date

Professor Steven Tuber

Chair of Examining Committee

7/31/00

Date

Executive Officer

Supervisory Committee

Steven Tuber, Ph.D.

Paul Wachtel, Ph.D.

Kate Oram, Ph.D.

The City University of New York

Abstract

ATTACHMENT, COMMUNICATION, AND AFFECT:

IMPLICATIONS FOR PSYCHOTHERAPY

by

Peter C. Costello

Adviser: Professor Steven Tuber

This theoretical study examines the relevance of attachment, communication, and affect to an understanding of psychopathology and clinical process and derives an attachment-based psychotherapy from the theoretical and empirical literature on these fundamental processes.

The processes that constitute a psychodynamics of attachment are emphasized, rather than the study of attachment classifications *per se*. The goal of the attachment behavioral system is enlarged to emphasize the achievement of a coordinated interactive state with the caregiver rather than the achievement of proximity. Bowlby's theory of defensive processes is emphasized and related to the literature on affect and affective communication. The implications of these defensive processes are considered in terms of the extent to which an individual's access to a range of emotions, cognitions, percepts, and self-states may be constrained as the individual shapes himself to the responsiveness of the

caregiver, and the extent to which such constraints may distort motivation, behavior, thinking, and relationships.

A model of pathology and then psychotherapy is elaborated around the proposition that what cannot be communicated to an other cannot be fully experienced and known by the self. To the extent that such affective self-experience is necessary and adaptive for the real events of an individual's life, the individual loses cognitive, emotional, motivational, and relational coherence.

Therefore, the attachment-based psychotherapy described in this study emphasizes the central role of the communication of anxiety-inhibited emotions, percepts, and cognitions to a "trusted companion" as the basic process that is countervailing to defensive exclusion and distortion. This permits more complete and accurate affective self-experience and more adaptive behavior.

Acknowledgments

John Bowlby quotes G. K. Chesterton to say "there are no words to express the abyss between isolation and having one ally." I have been blessed with allies in the pursuit of my degree and the completion of this dissertation. I am grateful to these trusted companions who have helped to shape the recent years of my life. I wish especially to thank Steven Tuber, who taught me psychodynamics and how to think clinically, and who has been generous in his support from my first days in the City program; Arietta Slade, who introduced me to attachment theory; Paul Wachtel, who introduced me to active forms of therapy; and Kate Oram, whose critiques were a form of creative encouragement; and the faculty and supervisors of the City program, who taught me as a student and treated me as a colleague. I am very grateful for the good friends made in the program and on internship—Robin Kerner, Natalie Fisher, Jennifer Gerber, Elliot Jurist, Lauren Schmerl, and Christine Li, among others; and to two particular colleagues, Robert Mendelsohn and George Stricker, each of whom in different ways helped to make my degree an attainable goal.

Most especially, I am grateful to my wife Rosemary and to my sons Andrew and Jonathan, whose love and distinctive talents are a source of happiness and strength and who make my life possible.

Table of Contents

Chapter 1: Introduction and Method

The Underdevelopment of an Attachment Theory of Clinical Process

In 1988, at the age of 81 and near the end of his life, John Bowlby wrote:

> It is a little unexpected that, whereas attachment theory was formulated by a clinician for use in the diagnosis and treatment of emotionally disturbed patients and families, its usage hitherto has been mainly to promote research in developmental psychology. Whilst I welcome the findings of this research as enormously extending our understanding of personality development and psychopathology, and thus of the greatest clinical relevance, it is none the less disappointing that clinicians have been slow to test the theory's uses" (1988, pp. ix-x).

The disproportion between attachment theory's influence in developmental studies and its bare presence in the study of clinical process has not changed a great deal in the decade since Bowlby expressed his disappointment. In 1992, Slade and Aber wrote that "the fundamental tenets of attachment theory have had little impact on clinical psychoanalysis (or on more traditional psychoanalytic theory, for that matter)" despite the fact that "attachment theory and attachment research have dominated virtually all attempts within the empirical child development literature to explain the nature of early social and emotional

development" (Slade & Aber, 1992). Six years after Bowlby's statement, a review of attachment theory's application to clinical issues found that the theory's "application to clinical practice has barely been explored" (Birengen, 1994). And a decade after Bowlby's expression of disappointment, Slade (1999) found that "the literature on the relation between attachment theory and clinical process, spurred largely by developments in the assessment of adult attachment" was only "small" even if "steadily growing" (Slade, 1999). Most of this literature focused on the relation between attachment theory and psychoanalysis or on the specialized area of treatment of infants and their parents; only some of it focused more broadly on "the application of attachment research to the theory and practice of psychotherapy" (p. 577). The diminutive extent of the literature on attachment theory and clinical process continues to contrast markedly with the vast and still rapidly growing literature on attachment theory and child development.

Why has attachment theory been so slow to find clinical application? Certainly one principal reason is that from its inception, attachment theory's birthplace and natural home—psychoanalytic and psychodynamic psychotherapy—has been often hostile and, at least until recently, at best ambivalent about its very existence, much less its expansive clinical application. Despite the fact that Bowlby was a senior member of the British Psychoanalytic Society, serving as Deputy President during the term of Winnicott's presidency, his initial series of

attachment papers became the occasion for his virtual exile from the Society. Following the publication of Bowlby's (1960) central assertion that grief and mourning processes appear whenever attachment is sought but the attachment figure is unavailable, Spitz (1960), in one of a series of invited critical rejoinders (of which Bowlby was not informed prior to publication) wrote:

> When submitting new theories we should not violate the principle of parsimony in science by offering hypotheses which in contrast to existing theory becloud the observational facts, are oversimplified, and make no contribution to the better understanding of observed phenomena (quoted in Bretherton, 1992, p. 763).

Grosskurth (1987) reports one analyst as saying, "Bowlby? Give me Barrabas." Winnicott is reported to have said: "I can't quite make out why it is that Bowlby's papers are building up in me a kind of revulsion although in fact he has been scrupulously fair to me in his writings"; and Guntrip wrote in a letter: "I think it is very good for an eminent psychoanalyst to have gone thoroughly into the relation of ethology to psychoanalysis, but my impression is that he succeeds in using it to explain everything in human behaviour except what is of vital importance for psychoanalysis" (quoted in Holmes, 1993). According to Holmes, "Bowlby became for nearly two decades almost a nonperson in analytic circles" (1995, p. 26).

The extent to which the attachment paradigm is compatible or reconcilable with basic psychoanalytic theory remains a matter of considerable attention (Slade, 1999). But the effect of the reception of Bowlby's ideas was to isolate them from their natural intellectual, clinical, and institutional base. "Attachment theory was for two decades virtually airbrushed out of the psychoanalytic record" (Holmes, 1995, p. 20). Nor, one may speculate, were his ideas any more congenial, with their Darwinian emphasis on innate behaviors and their developmental emphasis on the role of early relationships, to the emergent behaviorist and subsequent cognitivist clinical schools. This was a problem that other ethologically disposed students of human behavior also encountered during these years in non-clinical realms (Ekman, 1998). Not psychoanalytic enough for most analysts, Bowlby was too psychoanalytic for anyone else working on clinical theory and process.

A second influence on the under-development of the clinical implications of attachment theory is Bowlby himself. Bowlby certainly contributed to the scarcity of clinical attachment theory by himself not fully addressing these issues. "It is hard to get an impression of Bowlby as a therapist because personal clinical material is so sparse in his writings" (Holmes, 1993, p. 31). His foundational papers (1958, 1959, 1960) were concerned with setting forth the basic assertions of an ethological and attachment approach to the child's relationship with his mother; they were not clinically focused. His foundational "case studies"

were not records of treatment, but a film record of a child's trip to a hospital. The first volume of his major trilogy was not published until Bowlby was sixty-two and the third appeared when he was seventy-three, followed two years later, at the age of seventy-five, by the substantially revised second edition of the first volume. One reads these in vain for any extended clinical discussion, for extensive excerpts from treatments, or for elaborated accounts of technique and important moments of change in psychotherapy. His concern remained at a more abstract and theoretical level than issues of clinical intervention and technique. He was elaborating and supporting, really defending, a theoretical paradigm. This paradigm had apparently not originated in the treatment situation, as had Freud's, Klein's, or Winnicott's, but in the real world experiences of children who had lost or been extensively separated from their mothers and in the ethological constructs that could be used to elucidate the profundity and consequences of these experiences.

Holmes (1995) suggests that Bowlby broadly avoided the inner world because of his own trends toward an avoidant relational style, relating this to a fluctuating but pronounced distance in his mother's involvement with him. He characterizes Bowlby as "prematurely self-possessed". Hamilton (1991, cited in Holmes, 1993) described Bowlby's "somewhat military manner, expressed in a certain abruptness and stiffness very far from 'small talk'". Sutherland (1991, cited in Holmes, 1993), on first meeting Bowlby, found him "somewhat formal and even

aloof"; "he developed in some measure a protective shell of not showing his feelings as readily as many people do....John's slightly formal and even detached manner struck many people on first knowing him". Bowlby's underemphasis of clinical material extended to his own psychoanalytic training and analysis; very little is known about these experiences, his views about them, or their impact on him. He was analyzed by the prominent Kleinian Joan Riviere and supervised by Klein herself, and Holmes does observe:

> It is interesting to find Klein's famous "Richard" trying to instill in her the basic principles of ethology and telling her that he is Mum's "chick" and that "chicks do run after their Mums" (1995, p. 26).

There is something in this of "Richard's" describing and perhaps even justifying his own internal world and his running after Mum in terms of abstract biological principles and similarities to other species, a kind of arguing for the right to want and to have one's mother on impersonal biological grounds. In such an admittedly speculative construction, ethological principles become simultaneously an approach to and a distancing from the inner world of direct clinical experience. But for whatever reasons, and despite his own expression, cited above, of disappointment in the scant clinical application of his work, Bowlby did not himself elaborate the clinical implications of attachment theory.

In addition to the rejection and hostility of the psychoanalytic community and Bowlby's own under-development of the clinical implications of his theory, there is a third reason for the paucity of work applying attachment theory to clinical process. The aspects of attachment theory that most directly bear on the development of clinically-relevant individual differences in attachment and, it will be argued below, on the role of a therapist in treating a patient—the role of the vicissitudes of maternal behavior and of the caregiving behavioral system in the development of attachment and in relationship to exploration and knowledge of the environment—come not primarily from Bowlby's work but from Mary Ainsworth's. And Ainsworth was not herself primarily a clinician and did not conceive of her work from a clinical perspective. Bretherton (1992) writes that Ainsworth's early data "were a rich source for the study of individual differences in the quality of mother-infant interaction, the topic that Bowlby had earlier left aside as too difficult to study" (p. 764). Bowlby specifically cited the role and behavior of the mother of a securely attached infant, as elucidated by Ainsworth, as a model for the therapist with a patient. He also titled the volume of late papers in which he most directly approached clinical issues after a concept contributed by Ainsworth, that of the secure base. But the major application of Ainsworth's work was in the field of child development. Its clinical application and relevance were neither part of its conception nor were they developed by Ainsworth and her colleagues.

For instance, the subject index of Ainsworth et al.'s (1978) major summary, *Patterns of Attachment*, contains no reference to psychotherapy, psychopathology, nor to any other clinical topic; its subject is child development.

In summary, three reasons have been offered above for the limited development of clinical attachment theory: the intellectual and organizational hostility of psychoanalysis which isolated attachment theory from its most natural and institutionally available clinical base; the very limited work by Bowlby himself on the clinical uses of his theory; and the prominence of non-clinical developmentalist perspectives in identifying and elaborating attachment processes that produce clinically relevant individual differences. It is worth observing that of these three limiting influences, two continue to characterize and delimit major segments of the attachment literature on clinical process as identified by Slade (see above): the literature on psychoanalysis and attachment theory, which for the most part seeks to compare or to reconcile the estranged perspectives; and the literature on attachment-guided interventions with infants and parents, which has been closely associated with developmental research.

The Purpose and Method of this Study.

The purpose of this study is to show the profound relevance of attachment theory to an understanding of psychopathology and clinical process and to derive an attachment psychotherapy from the extensive theoretical and empirical literature on attachment and from the literature concerning other fundamental processes on which attachment processes closely bear. This is essentially a theoretical task which requires that attachment processes be construed as sufficiently fundamental, extensive, and distinct so as to encompass broad pathological processes that distort and impair relational functioning and self-experience. These attachment processes must be shown to be fundamental in the sense that they are primary organizers of critically important experience and behavior, leading to on-going individual differences and characteristics, or "psychic structuralization," and central to the self-experience and interpersonal functioning of the individual. These attachment processes must be shown to be extensive in that they operate and apply across the range of the individual's behavior and experience in the social environment, and that the processes are not limited to particular periods of development or to a narrow range of relationships. They must be shown to be distinct in that they are not derivative of other organizers of experience and behavior, but are shaped by the vicissitudes of their own history.

This theoretical task will be undertaken in the following ways:

1. Attachment psychodynamics are described in their fullest and most complete form, especially including the relationship and interactions of the attachment behavioral system with the caregiving and exploratory behavioral systems, as Bowlby postulated them. Further, the goal of the attachment system, following Bowlby's own revisions (1973) and the work of Sroufe and Waters (1977) and Tronick (1989), is shifted and enlarged. The goal of attachment is viewed as "emotional availability" (Bowlby, 1973) and "felt security" (Sroufe & Waters; Sroufe, 1996) achieved via a "coordinated interactive state" (Tronick, 1989) with the caregiver. Tronick's work on affective communication and the concept of a "coordinated interactive state" provide a particularly important link of attachment theory to communication, affect theory and the study of defensive processes. Attachment processes are then seen to include an array of powerful and complex interactive and emotional processes.

By emphasizing the role and functioning of the relatively neglected caregiving and exploratory behavioral systems in relationship to this enlarged conception of attachment, attachment processes are given an expansive context. An emphasis on attachment processes in relationship to caregiving thereby includes the history of an individual's intimate developmental relationships; an emphasis on the exploratory behavioral system

thereby includes not only an individual's ability to explore and to learn about the external environment, but also his ability to explore and to recognize his own internal experience in an undistorted way—to coherently know where he is and what he is experiencing. Together these place the central issues of intimacy and self-experience in direct relationship to each other and to attachment.

2. The processes that constitute a *psychodynamics* of attachment are emphasized, rather than the study of infant or adult attachment classifications *per se*. Bowlby viewed attachment processes as active "from the cradle to the grave". Caregiving-attachment-exploration are construed, in keeping with current empirical and theoretical work, as fundamental underlying processes that are continuously active in the formation of relationships and in self-experience. These processes include the following elements: first, a powerful, biologically-based motivation to place oneself in relationship to others that gives specificity and scientific coherence to Fairbairn's contention that libido is object-seeking rather than pleasure-seeking; second, a crucially consequential role for the interpersonal environment—both during the developmental periods of infancy-childhood-adolescence and in the current circumstances of adult life—in responding to and shaping the behaviors that are motivated by the need for

attachment; and third, profound effects on the internal world of the individual in terms of what the individual may and may not know, explore, and fully experience, about himself and about the external world.

These processes result in but are not fully captured by attachment classifications. An emphasis on attachment processes better captures the highly textured and detailed individual variability that is necessarily the focus of clinical work. It permits a conceptually informed view of the particular psychodynamics of an individual's knowing and not knowing, feeling and not feeling, defending and not defending, in relationship to a particular current and historical interpersonal environment.

3. In keeping with an emphasis on the psychodynamics of attachment, Bowlby's theory of defensive processes is emphasized and related to the empirical and theoretical literature on emotion and self-regulation. Bowlby presents a robust account of defensive processes that draw their motivational force from the wellspring of the desire for attachment. Bowlby viewed his account as incorporating all of the defenses propounded by psychoanalytic theory, and as addressing a broad range of phenomena; they are thus of central importance for the clinical application of attachment theory.

But attachment theory's defenses operate for a different reason

and serve a different purpose than do those of psychoanalysis; they function to modulate and to shape the self in relation to the caregiver. Attachment theory's defenses shape the self in order to obtain the best available attachment, i.e. coordinated interactive state, to a particular caregiver who is not uniformly responsive to all communications from the individual seeking attachment. When the caregiver is non-responsive or less responsive to the communication of certain emotions, cognitions, percepts, or self-states, anxiety about the availability of the caregiver (fear of aloneness) results, and defensive processes are set in motion. The emotions, percepts, cognitions, and self-states that decrease responsiveness or attunement in the caregiver then also cause anxiety in the self, and are defensively excluded. "Defensive exclusion is regarded as being at the heart of psychopathology" (Bowlby, 1980, p. 65).

4. The implications of these defensive processes are considered in terms of the extent to which an individual's access to a range of emotions, cognitions, percepts, and self-states may be constrained as the individual shapes himself to the contours of responsiveness in the caregiver, and the extent to which such constraints may limit and distort motivation, behavior, thinking, and relationships. The emphasis is on the consequences for the individual of the loss to defenses of significant information about both the self and the

external environment. The significance of these losses is placed in the context of theoretical and empirical findings on the role of emotional communication and self-regulation in thinking, motivation, behavior, and in interpersonal relationships. The experience and communication of emotion motivates behavior to render it adaptive to the attachment goals of "felt security" and a "coordinated interactive state" in a particular interpersonal setting, a process with important implications for defensive processes and for psychopathology.

5. Bowlby repeatedly described the dynamics and experience of attachment and of psychotherapy in terms of a contrast between the experience of aloneness versus the experience of the company of a "trusted companion" (e.g. 1973, pp. 118-119, p. 122, p. 200, Chapter 14). Bowlby was also clear in emphasizing that as an infant matures, the attachment goal of physical proximity is increasingly replaced by communication with the caregiver. Kobak (1999) has argued that the implications of this shift have been neglected by attachment theorists. Tronick's conception of a coordinated interactive state gives specificity to these propositions and leads naturally to an emphasis on the role of affective communication in attachment, self-experience, defensive processes and relationships with others. Following Tronick (1989), Stern (1985) and Bowlby (1991), a model of pathology and then

psychotherapy is elaborated around the proposition that what cannot be communicated to an other, a trusted companion, cannot be fully experienced and known by the self. To experience what cannot be communicated, i.e. what cannot be brought into a coordinated interactive state with the other, is be left alone within one's own experience and therefore to experience the dread and anxiety that attend the fear of aloneness (which is the obverse of the desire for attachment, for a trusted companion). Therefore, such anxiety provoking self-experience is defensively excluded. To the extent that such self-experience is of central significance to the real events by which an individual is surrounded, the individual loses cognitive, emotional, motivational, and relational coherence. The individual then lives simultaneously within two realms: the sphere of the real events, actions, and relationships with others that provide the actual context for their living—the individual's real world situation and options as they might be seen by a disinterested set of others or by a therapist; and the sphere of what it is psychologically permissible for the individual to know, feel, do, and communicate to others, that is bounded and distorted by defensive exclusions enforced by anxiety and dread. This second realm is the origin of the false self phenomena described by Winnicott (1960) as originating in cauterizing impingements on the individual's self-experience.

Therefore, the paradigm of attachment-based psychotherapy described in this study emphasizes the central role of the communication of anxiety-inhibited emotions, percepts, and cognitions to a "trusted companion" as the basic process that is countervailing to defensive exclusion and distortion and that permits more complete and accurate self-experience and relational intimacy. The attachment psychotherapist is described as expert at eliciting from the patient the communication of those aspects of self-experience that had previously been defensively excluded; and as expert at understanding these excluded self-experiences and helping the patient to integrate them into current functioning. This occurs throughout the exploration with the patient of present and past experience, including the immediate experience of the patient with the therapist.

In keeping with Bowlby's view of the central influence of real experiences with caregivers, the patient is viewed as contending with the distorting consequences of actual rather than fantasized experiences. The goal of therapy is to place the patient more directly and accurately in communication with internal and external reality. The proposed model assumes a real world. This is one of several factors that distinguish the model from the closely related intersubjectivist models of psychotherapy, which are agnostic with regard to external reality. Within this model,

fantasy—one of the phenomena that Bowlby has sometimes been criticized for neglecting—is viewed as intrapersonal and interpersonal communication in incipient, developing, inchoate and sometimes defensively distorted form.

6. Finally, the direct implications of the above understanding of relational and self pathology for the stance and technical practices of the psychotherapist are elaborated. Attachment theory, as Bowlby maintained, involves a significant shift in the understanding of basic motivation, the role of real events, of the vicissitudes of defensive processes and self-experience, and of the processes by which an individual is influenced in his or her relationship with an other.

Implications for psychotherapy are described in terms of the basic stance and emotional engagement of the therapist; the conceptualization of neutrality versus advocacy in regard to excluded aspects of self-experience and events in the external world; the focus and purpose of interventions; the conceptualization of the effect of abstinence and frustration versus corrective emotional and relational experience; the understanding of supportive versus interpretive techniques, especially with regard to the depth of treatment; the elision of anxiety and defenses and the elicitation of the communication of excluded emotions, cognition, percepts, and self-states; the self-disclosure of the

therapist's experience of the patient; and the role of the communication to the patient of the therapist's understanding.

Chapter 2: Attachment, Communication, and Affect

This chapter comprises three main sections. It begins with an overview of attachment theory, emphasizing those aspects of the theory that are important to the central issues to be raised further on. The second section is a consideration of the role of communication, especially affective communication, in attachment and of certain qualities of attachment communication as they relate to evolving conceptions of the set goal of the attachment system. The third section considers affect theory and the role of affect in placing an individual in relationship to an interpersonal environment. It also integrates attachment, communication, and affect, describing an interpersonal process impelled by attachment motivation and characterized by the vicissitudes of affective communication and the consequent shaping of affective experience.

Attachment

The Attachment, Caregiving, and Exploratory Behavioral Systems.

Bowlby described attachment behavior as resulting from a biologically evolved and deeply embedded behavioral system with powerful and primary motivational characteristics for the human being. He proposed that in the "environment of evolutionary adaptedness" in which humans evolved—during which our genetic ancestors lived in small, cooperative groups of migratory hunter-gatherers—natural selection favored the development of behaviors that maintained proximity between children and their caregivers as a form of protection from predation and other dangers. At moments of danger, and at times of migratory movement, infants and children who sought or were already in greater proximity to a "stronger and wiser" caregiver would be more likely to survive; genetic predispositions that led to proximity-seeking were therefore differentially preserved and became characteristic of our evolving human ancestors.

For Bowlby, the attachment behavioral system was the primary basis for the formation of affectional bonds (1979) and, although these were most strongly influenced by early experience, the attachment system remained motivationally active and responsive to the environment throughout development and adult life, "from the cradle to the grave" (p. 129). It was thus, for Bowlby, a major motivational system that was

present and active in relational settings throughout the lifespan. As a biologically embedded, naturally selected behavioral system, attachment behavior required no further, deeper, or more fundamental source of motivation for its operation; it was designed into and characteristic of our species in the same way and for the same Darwinian reasons as the adaptations of other animals. Bowlby considered the motivational primacy of attachment behavior to be a crucial aspect of his theoretical position. In considering the differences between his own approach and that of Freud, he wrote, "Of these [differences] by far the main one concerns the theory of motivation" (Bowlby 1969/1982, p.13). *The impelling, motivational primacy of the need and desire for attachment to a particular individual—with all of the specific vicissitudes of affective communication and relating which characterize the particular other—is a foundational principle in the view elaborated here.*

Bowlby (1982, p. 377) postulated that the attachment behavioral system of humans and other animals has a reciprocal behavioral system which with it is interwoven and interacts, which responds to and fosters attachment with the purpose of promoting safety and establishing a secure base. He called this reciprocal system the caregiving behavioral system and urged that caregiving behavior be conceptualized as distinct from though reciprocal to attachment behavior:

> Like many other sorts of social relationship, the parent-child relationship is a complementary one. Thus, the behavior of a

> mother is usually quite different to that of her child. Nevertheless, in the ordinary course of events the behavior of the one is the complement to that of the other. This brings us back to attachment.
>
> In this volume we have been examining one half only of what is normally a shared dyadic programme, the other half being maternal caregiving. Since a bond is a property of two parties, the bond with which we are concerned should be designated as one of attachment-caregiving.
>
> There is a strong case, based on the usage of the past twenty years, for restricting the term attachment to the behaviour typical of child to parent and the behavioural system responsible for it, and to avoid using it to describe the complementary behaviour and behavioural system of the parent. (377)

Consistent with his general approach, Bowlby described caregiving behavior in a specifically field-ethological manner, citing the existence of caregiving behaviors and the reciprocity of the caregiving and attachment systems in other species (e.g. 1982, pp. 182, 185-196). He sought to describe powerful, biologically coded systems that in humans provide the basis for the formation of affectional bonds and the internal representation of self and other.

In optimal development, these bonds provide a secure base from which the exploration of experience may occur. But in less than optimal

development, these bonds require defensive processes that, while they may maintain the maximum attachment possible in the circumstances in which they developed, also obscure, distort, and inhibit the exploration of the environment, including and especially the interpersonal environment (1980, pp. 44-74). These defensive processes, in relationship to affect and communication, are the principal topic and are extensively considered in Chapter 3 below. A principal point for present purposes is the idea that the caregiving behaviors which elicit and modify attachment behaviors constitute a distinct behavioral system in Bowlby's theory. A closely related point is that different qualities of caregiving promote different qualities of attachment and of exploration. Bowlby observed that:

> By the time the first birthday is reached, each mother-child couple has already developed a highly characteristic pattern of interacting. The magnitude of the differences between one couple and another can, moreover, hardly be exaggerated....There can be no doubt that, in the extent to which one partner responded to the other's initiatives, the mothers varied far more than did the infants....Whatever the causes of a mother's behaving in one way or another towards her infant, there is much evidence suggesting that whatever that way is plays a leading part in developing the pattern of attachment he ultimately develops. (1982, pp. 344-345)

Qualities of Attachment-Enhancing Caregiving Behavior

Why should the qualities of sensitivity and responsiveness to infant signals, availability, and helpfulness play such a crucial role in the development of security of attachment and of intimate emotional bonds? And how do these qualities pertain to the psychotherapeutic process? The attachment behavioral system, in Bowlby's conceptualization, forms part of a pattern of three closely related behavioral systems—the attachment, the caregiving, and the exploratory behavioral systems--that together control the individual's engagement in intimate emotional relationships, in establishing safety, and in learning and exploration. The caregiving behavioral system forms part of a crucial environment—what Winnicott (1965) described as a facilitating environment—for the operation of the attachment and the exploratory system. The attachment system responds to the presence of signals of danger in the environment by seeking to increase proximity to the caregiver (or attachment figure); the exploratory system becomes more active in the absence of signals of danger and in the presence of the caregiver. Fear activates attachment and curtails exploration. As Ainsworth et al. (1978) write:

> It seems of obvious survival advantage in evolutionary terms for a species with as long and as vulnerable a period of infancy as is characteristic of humans to have developed an interlocking between the attachment system, whose function is protection, and exploratory (and also affiliative) behavior, which promotes learning

> to know and to deal with features of the environment (including persons other than attachment figures. (22)

The caregiving behavioral system, as part of the environment for the other systems, responds to solicitations of proximity and attachment produced by the activation of the attachment behavioral system. As an environment for attachment behaviors, caregiving may be more or less facilitating of proximity seeking; in the absence of danger, it may be more or less facilitating of exploration and learning. When optimally facilitating, the interaction of the environmental caregiving system with the attachment system produces what Ainsworth (1967) termed the "secure base" phenomenon—the use of the attachment figure as a secure base from which to explore. Ainsworth et al. (1978) write:

> The interlocking between systems of this sort has led some to propose that the biological function of attachment behavior is (or should include) providing an opportunity for learning. Bowlby (1969) obviously gives first place to the protective function and indeed might well have said explicitly that the biological function of exploratory behavior is learning about the environment, whereas the protective function of attachment behavior and reciprocal maternal behavior makes this possible (22).

The security of this base depends on its availability, sensitivity, responsiveness, and helpfulness under the conditions of alarm that activate attachment behaviors: in short, the attachment figure can

notice, respond, and help when alarm stimulates proximity seeking, or not. When the caregiving attachment figure is not available, sensitive, responsive, and helpful, a second, compounding, and especially distressing type of fear is stimulated in the attachment/proximity seeking individual. Bowlby suggested that the term "alarm" be used for the fear of the initial stimulus, and that "anxiety" be used to refer to the feared inaccessibility or non-responsiveness of the caregiver. Ainsworth (1978) writes:

> Bowlby emphasizes how crucial it is in a potentially fear-arousing situation to be with a trusted companion, for with such a companion fear of all kinds of situation diminishes, whereas when alone fear is magnified. Attachment figures are one's most trusted companions. We all fear separation from attachment figures, but "separation" cannot be defined simply as a matter of absence of such a figure. What is crucial is the availability of the figure. It is when a figure is perceived as having become inaccessible and unresponsive, that separation distress (grief) occurs, and the anticipation of the possible occurrence of such a situation arouses anxiety. (20-21)

Within the terms of attachment theory, the non-availability or non-responsiveness of the caregiving attachment figure, or the particular pattern and characteristics of inadequate responsiveness and

availability, are understood as principal sources of the psychopathology to be remediated by psychotherapy.

Communication

Attachment theory primarily concerns the reciprocal operation of two distinct behavioral systems that are very closely interwoven but nonetheless located in different individuals: the attachment behavioral system, which, at moments of alarm, motivates the child to seek proximity (in Bowlby's original formulation) to a particular caregiver to whom the child has become "attached"; and the caregiving behavioral system, complementary to the attachment behavioral system, which responds to the attachment behavior of the child and thereby fosters an attachment-caregiving bond.

The location of these interpenetrating behavioral systems in different individuals is a hallmark of attachment theory. It gives to attachment theory its characteristic focus on both interpersonal and intrapsychic phenomena, rendering as critical the detailed, textured experience that a developing individual has with others, and especially with a particular other. As Bretherton has observed, Bowlby's view that the self emerges from interpersonal transactions with others is consonant with classical statements by James (1890), Baldwin (1911), Cooley (1902), and Mead (1934) on the social origins of the self. Cooley

described the self as arising from a process of "reflected self-appraisal" leading to a "looking-glass self"; James distinguished the subjectively experienced "I" from the externally viewed "me", who varied in its construction as the external appraisals of others changed from one social grouping to another; and Mead emphasized the necessity of continually taking the viewpoint of others toward one's self as part of the process of understanding and remaining related to others. Like these earlier theorists, Bowlby views the patterned reactions of particular others as constitutive of an individual's equivalently patterned conception of himself; that an individual's knowledge of himself and his sense of self-worth arise from processes shaped by how he is treated by others. Bowlby's model is deeply a social model of individual development, and (as was also the emphasis of the classical theorists of a social self) his location of interpenetrating behavioral systems in separate individuals inevitably gives a central role to the qualities and characteristics of the communication that occurs between the individuals whose behavioral systems are interdependent. In its emphasis on the reciprocal interpersonal operation of these behavioral systems, attachment theory is a theory of mother-infant (and eventually of adult-adult and adult-infant) communication. In its emphasis on the consequences of these reciprocal operations for the developing individual, attachment theory is a theory of the developmental encoding of communicational experience in the self and of its subsequent intergenerational transmission.

The significance of the interactive processes of communication between mother and infant in the functioning of the attachment behavioral system has steadily emerged as more prominent and central in evolving conceptions of the set-goal of attachment behavior. The concepts of a behavioral system and a set-goal were first introduced to Bowlby when a neighbor of his on the island of Skye, the leading evolutionary biologist Julian Huxley, gave him a copy of Konrad Lorenz's King Solomon's Ring (Holmes, 1993). Bowlby, who had already for some years been focused on the effects on children of maternal separation, was taken with Lorenz's account of imprinting and following behavior in baby geese: these infants would bond with the first creature they saw upon hatching and opening their eyes (normatively their mother) and would then strive mightily, seeking to overcome all obstacles, in order to follow this figure wherever she went. Bowlby saw in this an analog of the human infant's driven connection to and need for his mother. "He suddenly saw the possibility of bringing together object relations theory and these neo-Darwinian ideas. Attachment theory was born" (Holmes, 1993, p. 431).

In keeping with Lorenz's account (about the misplaced emphasis of which in regard to human attachment more will be said below), Bowlby originally described proximity to the attachment figure, with the adaptive function of protection from predation, as the set-goal of the human attachment behavioral system. Like the baby geese, human infants and

children sought to be close to their mothers, especially at moments of alarm, in order to protect them from malign forces in their environment. He saw similar behavior and motivations in the clinging and following behavior of primates who were evolutionarily much closer to humans and, influenced by Harlow's studies of rhesus monkeys, argued that proximity seeking to the attachment figure was itself a primary, biologically-driven motivation for humans, not influenced by the satisfaction of other needs such as that for food. Here he drew a sharp line between his own conception of object-seeking and that of Freudian theorists for whom the satisfaction of the need for food was the source of the tie to the object. He thereby accomplished a major theoretical shift, in conceptual company with Fairbairn, by making relational motivations primary and autonomous and by grounding them fully, as Freud had once sought to do with his energic model, within biological systems.

But proximity-seeking came to seem a narrow shelf upon which to place all the complex poetry of human relatedness, and the conception of the set-goal of human attachment began to shift. As Kobak (1999) has written:

> It soon became evident that the simple presence or absence of an attachment figure was inherently limited as a means of understanding attachment in older children and adults. The most casual observer of children could see that by 3 or 4 years of age, physical separations no longer present as serious a threat to a

> child, and consequently do not produce the same kinds of emotional reactions. (p. 21)

In part, the limitations of proximity as the key set-goal was addressed by shifting from a concept of physical proximity to one of communicational proximity: physical nearness was seen to give way to visual access, physical contact to the exchange of signals. As infants became children and children became adults, proximity was progressively replaced by communication. But this changed in an important way the conception of the underlying purpose of the attachment behavioral system, and in fact enlarged this purpose considerably. The quality and characteristics of the communication between mother and infant now became crucial, and in the second volume of his attachment trilogy (1973), Bowlby augmented his understanding of attachment processes in two critical ways: he emphasized the role of the internalization and psychic structuralization of actual attachment experiences via the "internal working models" that played a critical role in making appraisals of self and other and in making forecasts of situations; and he shifted from the description of proximity as the set-goal of attachment behavior to an emphasis on the experience of emotional availability and responsiveness from attachment figures. Bowlby (1973) wrote:

> In reference to an attachment figure, presence is to be understood as implying ready accessibility rather than actual and immediate presence, and absence implies inaccessibility. Still further

> amplification is required, however, since accessibility in itself is not enough. Not only must an attachment figure be accessible but he, or she, must be willing to respond in an appropriate way....Only when an attachment figure is both accessible and potentially responsive can he, or she, be said to be truly available. (pp. 201-202)

This is a very different set-goal than mere proximity, and it requires a very different set of behaviors and processes in order to accomplish it. It is not so much a change in emphasis as a change in meaning. Proximity requires primarily motor behaviors, either for following or for clinging, and perceptual modalities primarily for locating and tracking the attachment figure to whom proximity is sought. It does not involve communication except for the purpose of tracking and maintaining proximity. Availability and responsiveness in the extended sense defined by Bowlby in 1973 calls for a set of processes that do primarily concern communication and empathy in relationship to the motivations, goals, and self-state of the individual who is seeking attachment. It requires of the caregiver an understanding of the interiority of the attachment-seeking child, primarily in terms of the child's affective communication about his or her goals in their interpersonal interaction and in the environment.

This latter and shifted conception of attachment processes clearly represents in part the influence on Bowlby's conceptualizations of

attachment of the seminal research and findings of Ainsworth and her colleagues. Bowlby's understanding of the particular caregiving qualities that foster secure attachment was based upon and was elaborated principally in Ainsworth's research. Ainsworth's work was a key influence in a fundamental shift of Bowlby's conception of the set-goal of attachment from proximity and presence or absence to a communicative relationship between mother and infant (Bretherton, 1992; Kobak, 1999).

Ainsworth et al. (1978) began their study of the Strange Situation, working within Bowlby's original model of proximity as the set-goal of the attachment behavioral system, as a proximity-based study of the effect of physical separation of the child from the mother; but they concluded by placing the development of secure and insecure patterns of attachment firmly in the context of the quality and characteristics of mother-infant communication. This transition in their fundamental conceptual approach to their on-going research project marks a critical transition in attachment theory. Working backward from observations of reunion behavior of children in the Strange Situation, Ainsworth, Blehar, Waters, and Wall (1978) reported detailed observations of maternal behavior toward infants in a variety of interactional situations at home and identified correspondences between the global qualities of maternal-infant interaction at home and the behavior of infants in the Strange Situation. In shifting from the Strange Situation to home observations, Ainsworth and her colleagues emphasized the *global qualities* of maternal

behavior and communications, studying variables such as the mother's availability to the baby, the promptness and effectiveness of her response to the baby's distress, and the amount of interaction offered to the baby. Their focus was the qualities of maternal behavior and communication across a variety of situations. They now emphasized moment-to-moment interactions across a broad range of situations, involving a wide variety of affective communications between mother and infant, rather than the much narrower and more particular mother-infant interaction of the Strange Situation with its associated discrete categories. Ainsworth et al. summarized:

> The major implications of the findings...is that maternal behavior...is significantly associated with the security-anxiety dimension of an infant's attachment relationship with his mother....The most important aspect of maternal behavior commonly associated with the security-anxiety dimension of infant attachment is manifested in different specific ways in different situations, but *in each it emerges as sensitive responsiveness to infant signals and communications.* The highly significant differentiation between B [secure] and non-B [anxious] mothers...that is provided by a global measure of this variable occurs, we believe, because of the pervasive effect of this quality of maternal behavior throughout many specific kinds of interaction. *This and correlated measures of maternal behavior thus do not*

> *reflect maternal behavior in absolute terms, but they do tap the extent to which a particular mother is able to gear her interaction with a particular baby in accordance with the behavioral signals he gives of his states, needs, and, eventually, of his wishes and plans....The sensitive responsiveness of mothers to infant signals and communications seems to be the key variable in accounting for environmental influences on the development of a secure versus an anxious attachment relationship.* (p. 152, emphasis added)

Of particular note in Ainsworth's formulation and italicized above is her emphasis on a global quality of sensitive responsiveness to the infant's signals and communications, based on moment-to-moment interaction; she is concerned with a communicative pattern and style rather than with particular caregiving behaviors or "maternal behavior in absolute terms." Bowlby adopted Ainsworth's understanding of the patterns of maternal behavior that elicit secure attachment and a secure base for exploration, emphasizing—also in terms of global qualities--the responsiveness and sensitivity to infant signals, availability, and helpfulness of the maternal figure (1982, pp. 345-347; 1973, pp. 357-359; 1988, pp. 123-126) and drawing on a range of additional studies that support Ainsworth's findings. The findings concerning the influence of maternal sensitivity to infant signals that were available to Bowlby in 1982 and to Ainsworth in 1978 have now been extensively augmented by

other researchers (see De Wolff & van IJendoorn, 1997, for a meta-analytic review).

Kobak (1999) has suggested that the significance of this conceptual shift from proximity to sensitive responsiveness for the importance and role of emotional communication between mother and infant has been neglected by attachment researchers, that "although attachment researchers have made exciting advances in understanding the cognitive processes involved in child and adult attachment, they have done so by neglecting an important aspect of Bowlby's theory" (p. 22). Kobak describes this neglected aspect as follows:

> Much of Bowlby's (1973) *Separation* volume directs attention to the continuing importance of current attachment relationships and the role of emotional communication in maintaining the child's confidence in the availability and responsiveness of attachment figures. Similarly, Mary Ainsworth's seminal study of infant attachment highlights the ongoing quality of mother-infant communication as the context within which working models and attachment processes initially develop....I highlight this neglected aspect of Bowlby's and Ainsworth's work. (p. 22)

Bowlby's selection of proximity as the original set-goal of the attachment behavioral system derived, as noted above, from the early ethological theory and observations of Lorenz. The later shift in Bowlby's conceptualizations toward an understanding of presence and emotional

availability that, with Ainsworth, emphasizes the communicative aspects of the mother-infant relationship parallels later developments in ethological theories of human evolution and behavior that alter some of Lorenz's original formulations. In other words, the difficulties with proximity as the set-goal of the attachment behavioral system and the source of its gradual and not fully acknowledged evolution into conceptions with a much greater emphasis on communication may speak to a fundamental misdirection and misemphasis that Bowlby was led into by his reliance on some aspects of Lorenz's work.

Lorenz (1957, 1966) argued that the social relationships of humans evolved principally from a basis of aggression and fear, in the very specific sense that they evolved as a form of protection and mutual defense against predation by other animals. As an instance of the co-evolution of defensive aggression and social bonding, Lorenz cites, for instance, the mating rituals of greylag geese, which include as part of the courting of a mate exactly the same aggressive displays that are used in confronting an enemy. This general conception is clearly present in Bowlby's early attachment theory accounts, where the proximity to the attachment figure functions as a form of protection for the infant and emerges as most needed in the context of fear. But Lorenz's account of human sociability is viewed as misplaced and reductive by some later ethologists, who redress it in a manner that supports and clarifies the

significance of Bowlby's 1973 revision of the set-goal of attachment behavior and of Ainsworth's foundational work.

Eibl-Eibesfeldt (1970, 1989) distinguishes the practice of social proximity as protection from predation—as he says it is found, for example, in the schooling of fish—from the provision of parental care for the fostering of the young, as found in humans and other species. Fish in schools maintain proximity in order to reduce each individual's exposure to a predator. Proximity is then specifically the key to enhanced survivability, and these species develop signals designed for maintaining the physical cohesiveness of the group and for communicating danger. However, in species (including but not limited to humans) that have developed maternal care of infant young, proximity is only one incidental component of the bond between mother and infant, an aspect of on-going care that is accomplished not by proximity but primarily *through the coordination of communication between mothers and infants.* The development of elaborated signals and communication between mother and infant provides the coordinated interaction that allows effective maternal care to take place:

> A highly significant event for the development of vertebrate sociability was the evolution of maternal care by which friendliness came into existence. *For only with the appearance of parent-offspring signals, infantile appeals, and the corresponding affectionate responses [did] behavior became available that*

> *permitted adults to create friendly and affectionate relationships.* The "invention" of parental care constitutes a turning point in the behavioral evolution of the higher vertebrates and insects. Parental care occurred independently in insects, birds, and mammals, providing the impetus for analogous rituals of bonding. (Eibl-Eibesfeldt, 1989, p.167; emphasis added)

Species with maternal care of infants develop and rely on a much more extensive repertoire of signals and a more elaborated process of communication that is the basis of a principal strategy of survival and is thereby compellingly motivated. In these species, the elaborated process of communication not only coordinates mother-infant interaction, making detailed, responsive care possible, but also provides the basis for adult bonding and relationships. The achievement of a coordinated interaction and a coordinated state—through sensitive responsiveness to maternal and infant signals regarding needs, goals, and motivations—achieves a biologically based primacy.

However, there is a further decisive evolutionary step in some species, including humans. This is the development of *individualized* bonding through which members of a species recognize and relate to each other in an individualized and historically-contexted way:

> The evolution of individual bonding marks a second "propitious event" in vertebrate evolution, and it likewise begins with parental care. Individual bonding is the springboard for *love*. Mother-child

> relationships developed independently and repeatedly in birds and mammals, wherein parents and young actively seek each other's presence. They are personally acquainted and will defend their bond against all intervention. (Eibl-Eibesfeldt, 1989, pp. 167-168; emphasis in original)

As with parental caregiving in general, individualized maternal-infant caregiving is also accomplished through reciprocal sensitivity to each other's signals, through communication. The individualized nature of the bond heightens the degree to which signals and communications must be sensitively and precisely differentiated, because a particular other is now the object of interaction and communication:

> Those species with personalized mother-offspring bonding also maintain the primary mother-young contact with a repertoire of infantile signals to which the mother reacts innately. The young, in turn, is tuned to respond to corresponding maternal stimuli. Special learning predispositions ensure bonding with the appropriate object (Eibl-Eibesfeldt, 1989, p. 168).

The development of individualized bonding through communication is especially important for an understanding of attachment processes and their consequences in an individual's lifespan because, as Ainsworth's work established and as will be further argued below, the processes that accompany individualized bonding through communication are a principal source of the developmentally- and interpersonally-based

differences (as well as culturally based differences) that appear in individuals.

Eibl-Eibesfeldt summarizes the above issues in the co-evolution of maternal-infant care, communication, and adult social relationships as follows:

> Sociability can be seen as having developed in several evolutionary steps. Appetence for partner proximity and compatibility occurs in fishes, which seek protection from predators in schools. But the development of parental care was prerequisite for more elaborately differentiated forms of social life. With its development, mother-child signals came into existence. Behavioral patterns of affection and infantile appeals were the preadaptations from which adult bonding behaviors were derived. Friendliness evolved with parental care. In a further decisive evolutionary step, came the capability of forming individualized (personal) bonds. Initially it was used to secure longer lasting mother-offspring bonds in species with an extended parental caring period. But it also gave origin to love, defined as personal bonding. The behavioral patterns associated with infant care also permitted the bonding of individuals not closely related by blood, so as to form closed cooperative groups that act as units. (1989, pp. 169-170)

Human infants clearly come into the world prepared to do what Eibl-Eibesfeldt describes—to search for and create communicative

coordination with their primary caregiver, to create a personal bond organized around signaling and recognition of a particular individual. Simpson (1999) has summarized some of the abilities that make this possible from the first hours of life:

> Newborns who are 16 hours old preferentially respond to the specific rhythms and sounds of the particular speech they hear with coordinated, rhythmic body movements (Condon & Sander, 1974). Newborns just 2 days old can discriminate their mothers' faces and odors from those of strangers (Field, Cohen, Garcia, & Greenber, 1984). At 3 days, they show a clear preference for human voices, especially the voices of their mothers (DeCasper & Fifer, 1980; Mills & Melhuish, 1974). Six-day-old newborns prefer the smell of their mothers' clothes over that of strangers' clothes (MacFarlane, 1975, 1977; Russell, 1976). At 3-5 weeks, infants spend considerable time looking at the contours of human faces, focusing mainly on the eyes (Eibl-Eibesfeldt, 1989). Between 9 and 11 weeks, the eyes of others—especially those of a caregiver—draw most of their visual attention. (pp.122-123)

Not only are infants clearly prepared biologically to seek attachment and communicative coordination with a particular other, but mothers normatively behave in ways to foster this coordination. Simpson summarizes the following findings regarding mothers' communicative behavior: Mothers at 6 hours postpartum are able to distinguish their

own newborns from other infants (Russell et al., 1983); they habitually interact with the infant at the fixed focal distance that is available to the newborn during the first weeks of life (Eibl-Eibesfeldt, 1989); they actively seek to establish eye contact with their infants (Klaus & Kennell, 1976); mothers respond to the establishment of eye contact with more active vocal and facial communication (Grossman, 1978) and they feel rewarded by the infant's eye contact and smiling (Eibl-Eibesfeldt, 1989); the mothers of young infants are better at distinguishing cries of pain, hunger, and frustration than are other women (Sagi, 1981); mothers slow and exaggerate their facial and vocal communications to their infants in a way that fits the infant's developing receptive abilities (Eibl-Eibesfeldt, 1989; Anderson & Jaffe, 1972; Grieser & Kuhl, 1988).

The rapid post-natal appearance of very sophisticated communicative abilities in human infants, well ahead of their straightforward physical development, and the presence of reciprocal and matched communicative behaviors in mothers, argues—with Eibl-Eibesfeldt—that the process of achieving communicative coordination is an evolved, critical, and primary activity of the human species.

A Coordinated State as the Set-Goal of the Attachment Behavioral System.

What has been described so far, then, is an evolutionary development whereby processes of parental caregiving and individualized maternal-infant bonding developed in some species as a principal strategy of differential survival. Where both have occurred, there is individualized maternal-infant caregiving involving a particular relationship between two specific individuals. Both generalized, non-individualized parental caregiving and individualized maternal-infant caregiving are accomplished through an elaborated process of communication that permits the achievement of coordinated interactive states with regard to needs, goals, and motivations. These processes of coordinated communication are the basis, in these species, of adult bonding and social relationships. Eibl-Eibesfeldt sharply distinguishes the strategy of coordinated communication and caregiving from the strategy of proximity-seeking as very different species-specific means of enhancing the probability of survival.

In regard to human attachment, this analysis suggests, in general keeping with Bowlby's 1973 revision and with Ainsworth's findings, that the goal of attachment behavior is the attainment of individualized maternal caregiving through the achievement of a coordinated interactive state via maternal and infant sensitivity to each other's signals. This is the interactive state that Bowlby describes as "availability" or "presence"

and the variations of which Ainsworth and her colleagues have described. *The achievement of a coordinated interactive state through communication might then be taken as the immediate objective, the set-goal, of the attachment behavioral system.* The concept of a coordinated state, when joined to the extensive literature on mother-infant communication, gives specificity and operational clarity to Bowlby's and Ainsworth's extension of the meaning of "proximity" to denote "ready accessibility," being "willing to respond in an appropriate way" (Bowlby, 1973, p.201), and "sensitive responsiveness of mothers to infant signals and communications" (Ainsworth et al., 1978, p.152). In fact, the availability and sensitive, helpful responsiveness described by Bowlby and Ainsworth can only be based on a highly developed and textured coordinated state. This state must precede the responsiveness because it makes the responsiveness possible; it is how whatever degree of responsiveness that exists is created. Moreover, the goal of a coordinated state precedes and is more fundamental than the adaptation by the child to the vicissitudes of the responsiveness that is provided by a particular primary caregiver. *The attachment-motivated need for the coordinated state is in this view the underlying goal that motivates the child to make the necessary adaptations to the characteristics of the caregiver. It drives the process of adaptation.*

The conception of a mother-infant coordinated state is an idea that arises most specifically in the literature on mother-infant communication

(Tronick, 1989). Conceiving of this coordinated state as the set-goal of the attachment behavioral system theoretically joins two very powerful literatures that have sat close to each other but which have not been directly integrated: the literature on attachment and the literature on mother-infant communication and interaction. In the present conception, they become the study of the same process; the vicissitudes of mother-infant communication are the vicissitudes of the attachment process, as they clearly have been implied to be since Ainsworth's work.

But in Ainsworth's work, the *qualities* of communication, the *qualities* of the development of a coordinated state, are applied to variations in attachment processes and attachment classifications without the infant's search for a coordinated state and the infant's search for attachment being conceptualized as the same thing. The *qualities* of communication are applied to the *outcome* of attachment classification without attachment having been conceptually linked in a fundamental way to communication. There is a conflation of outcome and fundamental underlying process, where the fundamental process is treated as merely a quality of the outcome. This conflation underlies a question asked by Hinde & Stevenson-Hinde (1991) about *why* sensitive responsiveness should produce a good result in terms of attachment and the debate about the normative status of the major attachment classifications. It has tended to reify the most-studied attachment classifications in a way that has been frustrating to clinicians, who do

not find within the classifications enough textured individual differences to capture actual clinical phenomena (Klaus Grossman, 1995; Magai, 1999; Rutter, 1997). It underlies the criticism of Levine and Tuber (1992) that:

> Attachment researchers have historically focused on the assessment of parent-child interactional *behavior* to understand parenting *relationships*. Although this research has generated some significant findings about objective aspects of these relationships, it has paid less attention to the subjective meaning of the relationship for each individual and to the internal construction of relationships. (p. 75, emphasis in original)

If coordinated communication is seen as the set-goal of attachment behavior, then individual variations in coordinated communicative states become the object of attention and the basis of an understanding of attachment pathology. The attachment classifications become broad classifications of types of coordinated states. But the coordinated states are themselves the fundamental phenomena, and these retain much more individual variation and texture that is of great clinical significance and utility. In support of this understanding, it is well to remember, as Magai (1999) points out, that Ainsworth originally identified nine attachment classifications and that others have since been added; but most have fallen prey to the practical constraints of empirical research, to the detriment of attachment theory's clinical utility. Focusing on

coordinated states as the goal of attachment restores clinically vital individual variation to attachment theory.

Moreover, the processes of attachment now emerge with a much greater specificity and breadth. The detailed processes of affective communication, and their very extensive role in adult relationships, which Kobak (1999) argues have been neglected terms in Bowlby's and Ainsworth's work, are placed at the center of infant and adult attachment processes. They bring with them an enormously rich literature on mother-infant interaction that extends well beyond the somewhat reductive question of whether the mother is sensitively responsive or not. *The newer and deeper questions become to what and under what circumstances is the mother sensitively responsive and how does the child change himself in coordinating with these variations of sensitive responsiveness.* These are the terms in which Bowlby sought to describe an array of vicissitudes of the child's search for attachment—rather than in terms of a few attachment classifications—and they are terms which research on maternal-infant communication is well-prepared to address.

The conceptualization of a coordinated state as the strongly motivated set-goal of the attachment behavioral system offers a new perspective on two fundamental questions that have been of interest to attachment theorists. The first is *why* does sensitively responsive maternal-infant communication produce an adaptive result; the second

is whether and, if so, in what way the avoidant and resistant attachment styles are maladaptive or normative. Hinde & Stevenson-Hinde (1991) pose the first issue as follows:

> Attachment theorists suggest that sensitively responsive mothering will produce a securely attached child, who will in turn be socially competent....However, attachment theorists seldom ask *why* this should be so—that is, why human beings are built in such a way that receiving that sort of mothering should favour the subsequent appearance of those particular adult characteristics. After all, it could be the other way round, with sensitive mothering 'spoiling' the child, and/or making the child overly dependent on one person and unlikely to form new relationships. It is usually implied that the relation between secure attachment and later social competence is part of human nature. The answer to *why* humans are like that must be given in functional/evolutionary terms. (pp.56-57; emphasis in original)

In the present account, sensitively responsive mothering leads to an adaptive result in the child because sensitive responsiveness to communications is the basis on which the child is able to coordinate states, both with his mother and later in his peer and adult relationships, and with his or her own children; it is a degree of coordinative capacity, where a coordinated interactive state is the underlying goal. The function of the coordinated state is to make possible

the coordinated interaction that provides care to the infant and social support to the adult, both of which are evolved and crucial survival strategies of the human species (Eibl-Eibesfeldt, 1989). The more sensitively responsive one is to another's signals, the greater the degree of coordination that is possible. On the present account, to ask why sensitively responsive caregiving is better for attachment is like asking why it is better not to be language-impaired. But this is so only if communicative coordination is understood as the fundamental process that underlies attachment.

Crucially and for reasons that will be elaborated later in this chapter, *sensitively responsive mothering also leads to a style of communicative coordination that permits a child to have access to a wider range of affective and motivational information about both the self and others.* This occurs because more or broader sensitive responsiveness means that there are relatively fewer defensive interferences with the communication and experience of affect (Haft & Slade, 1989); this enhances the accuracy and coherence of the individual's behavior. To briefly anticipate the argument to be made below when affect theory is brought into the picture: sensitive responsiveness makes it possible to reach a coordinated state without cutting off one's affective communication and information; this makes one more motivationally coherent and socially competent.

Related to Hinde & Stevenson-Hinde's question about why sensitively responsive mothering produces an adaptive result is the question of whether avoidant and anxious attachment styles are maladaptive or normative. Main (1981, 1990, 1991) and Cassidy & Berlin (1994) have argued that avoidant and resistant attachment styles represent a "conditional strategy" adopted by the child to maximize proximity when the mother is insensitive or inconsistently sensitive to the child's behavior; sensitively responsive caregiving is better and is in some sense primary or preferred (though, if mere proximity is the goal, Hinde & Stevenson-Hinde's question then remains unanswered) but is given up when not available from the caregiver. The conditional strategies then represent secondary adaptations to undesirable pathological circumstances. Belsky (1999) takes attachment theorists to task for romanticizing the desirability of sensitive, responsive mothering, arguing that some stressful but normative environments of evolutionary adaptedness might make avoidant and resistant attachment preferable to secure attachment, especially when the interests of the parents and the child conflict. Locating the set-goal of the attachment system in the creation of a coordinated state places both of these arguments in a different context by moving the essential process of attachment one level deeper than the achievement of any particular attachment classification. What is normative and biologically compelled is the creation of a coordinated state with whatever maternal figure is actually there and

interacting with the child; the process of achieving a coordinated state is always necessarily conditioned on the characteristics of the caregiver. This is the evolved and biologically invariant process which yields a range of shades of coordination. Different attachment classifications are the end result of an invariant process of seeking a coordinated state within varying interpersonal environments.

If the set-goal of the attachment behavioral system is the creation of a coordinated state, then what would be invariably non-normative and non-adaptive would be the *inability* to reach a coordinated state with a caregiver, such as appears to be the case with children classified with an attachment status of disorganized. In this account, children with disorganized attachment are understood as having been unable to reach a necessary minimum degree of communicative coordination with their attachment figure; or, in the variant of disorganized attachment that appears as compulsive and controlling caretaking, to have been able to reach a degree of coordination only through a very narrow and rigidly prescribed set of signals and interactions (Teti, 1999). Notably, both Main and Belsky leave disorganized attachment out of their discussions of whether and in what ways these other attachment classifications may be adaptive or not.

Coordinated States as Effectance-Motivated Behavior

The infant's search for coordination via communication may also be a prime and foundational instance of what White (1959) has described as *effectance* or *competence motivated* behavior (White used the terms interchangeably). White argued that the drive-based motivational theories of Freud and Hull, even as developed in the adaptational ego psychology of Anna Freud and Hartmann, could not account for vast regions of behavior zestfully engaged in by humans and other animals. Prominent among the cases he considered were the playful, manipulative, and exploratory activities of children and the young of other species, which, while apparently engaged in for "fun," in fact served a serious biological purpose—that of "the attaining of competence in dealing with the environment". This attainment of mastery and competence was accompanied by a "feeling of efficacy" which was itself deeply pleasurable and motivating. White argued (citing Angyal, 1941), that the "serious biological purpose" thereby attained derived from the nature of organisms as "self-governing entities which are to some extent autonomous" (p. 324) in that they shape and influence their environments. White writes:

> The living system expands, assimilates more of the environment, transforms its surroundings so as to bring them under greater control....Of all living creatures, it is man who takes the longest strides toward autonomy....Man as a species has developed a

> tremendous power of bringing the environment into his service, and each individual member of the species must attain what is really quite an impressive level of competence if he is to take part in the life around him. We are so used to these accomplishments that it is hard to realize how long an apprenticeship they require. (p. 324)

White described the processes by which environmental effectance and competence are achieved in a way that closely matches the process of creating a coordinated state as observed by Tronick and his colleagues. White emphasized that effectance motivation is aroused under conditions in which the organism (let us say the child) can have a varying effect on the environment that "produces difference-in-sameness in the stimulus field" (p. 315). White (1959) writes:

> Our conception must therefore be that effectance motivation is aroused by stimulus conditions which offer...difference-in-sameness. This leads to variability and novelty of response, and interest is best sustained when the resulting action affects the stimulus so as to produce further difference-in-sameness. Interest wanes when action begins to have less effect. (p. 322)

And:

> The child appears to be occupied with the agreeable task of developing an effective familiarity with his environment. This

> involves discovering the effects he can have on the environment and the effects the environment will have on him. (p. 321)

As Rowland and McGuire (1968) have explained White's conceptualization:

> In effectance motivation, dealing with the environment means carrying on a continuing transaction which gradually changes the relationship to the environment.... [The most important aspect of this transaction is] the essential *continuity of action and change* between the organism and the environment" (p. 232, emphasis in original).

This is exactly the process that occurs for the infant as he experiences a coordinated state with his mother; his interpersonal environment varies in response to his own internal state and expressive behavior. His state and actions affect the environment in a meaningful way. As White suggests, and as is concordant with the argument to be developed in the next section and further on, the infant's interest in states and behaviors that produce no effect on the environment is likely to wane. Tronick (1989) explicitly notes the influence of coordinated states on the infant's "representation of himself or herself as effective" (p. 116). Both White and Tronick are describing, in different language, a process that Winnicott described as an infant's spontaneous gestures affecting the external world, an emergent transitional experience that Winnicott located, in

terms related to the notion of efficacy, as the origin of the creative true self.

Maternal-Infant Communication: The Winnowing and Shaping of Communicative Potentials

In humans, the process of achieving individualized maternal bonding and caregiving through coordinated communication is more complex than in other species. For one thing, the processes of human communication through which bonding and care are accomplished are much more complex than in other species, including, for example, the acquisition of language. For another, they are more variable. The human communication process is less innately fixed biologically and much more extensively shaped by individual and cultural variations. It therefore requires a much more extensive process of learning and of adaptation than is the case in other species. It calls for a process of adaptation both to a particular and idiosyncratically variable individual and to a particular and widely variable socio-cultural group. A clear example is the acquisition of language, which requires, among other developments, that a child learn how to produce and recognize the particular sounds that are made in the language he or she is acquiring, and to understand the context of meaning in which the sounds are used. Both sounds and contexts of meaning of course vary from one culture to another, and more idiosyncratically within a culture, so the acquisition of language

requires a shaping of the self to fit those with whom the baby communicates. This process begins early enough so that by their fourth day of life babies seem able to distinguish between adult utterances in their maternal language and those in another language (Mehler et al., 1988); even before they begin to form words, babies learn to babble in a way that is recognizably characteristic of the sounds and intonations made in the language they are acquiring (Boysson-Bardies, B. de, Sagart, L., & Durand, C., 1984; Boysson-Bardies, Halle, Sagart, & Durand, 1989). In other words, a baby learns the particular phonemes and intonational contours that are used in the language that it is acquiring as these are distinguished from all the speech sounds it can initially make and hear. The mother and others who speak to the baby make some sounds and not others; they respond meaningfully to some of the baby's sounds more than others. From this winnowing process, the infant is left with the sounds that are used in his or her language. This shaping process is powerful enough so that by the time the infant is a year old, and later as an adult, he or she will no longer be able to hear the differences between close vocal sounds when these differences are not significant in his or her own language; these same vocal differences may be immediately discerned by the speaker of a language in which they are significant (Werker et al., 1981; Werker & Tees, 1984; Werker & Pegg, 1992). In other words, the child will have acquired a linguistic decoding bias. From the universe of sounds that the infant is able to

hear and make, a particular subset is selected that fits the child to those with whom he communicates and coordinates his interactions. Vygotsky (1962, 1978) argues that the same process of shaping occurs with regard to the semantic component of language acquisition. The child is shaped through the details of his communication with others.

The winnowing and shaping process that occurs in the acquisition of language occurs broadly in other communicative processes involved in creating a coordinated interactive state. For example, Sander and his colleagues have documented the creation of what Sander (1977) has termed an "interactive regulative system" between infant and caregiver. Mother and infant progressively create a pattern of coordinated alert attentiveness by adjusting to each other in terms of diurnal patterns of sleep and alertness during the first weeks of life (Sander, Chappell, & Snyder, 1982). During the first eight days of life, infants increasingly match their own periods of alertness to periods of the day when their mother is actively interacting with them (Chappell & Sander, 1979). This matching of periods of interactive attentiveness is personalized and idiosyncratic to the particular dyad. Adamson (1996) summarizes a particularly striking study by Sander, Stechler, Burns, & Julia (1970) of this creation of a personalized coordination between infant and caregiver:

> During their first 10 days each of nine newborns was cared for by one of two experienced foster caretakers. Then the caretakers were switched so that, for the 11th through 29th days, each infant

> experienced a new (but equally skilled) foster caretaker. Nine additional infants in the control group were each cared for by a single foster caregiver throughout the entire month-long study period. In both the cross-fostering and the control groups, a temporal fitting together or coordination of caregiver-infant sleep/awake patterns began to occur during the first 10 days of life. However, this pattern appeared disrupted during the next 2 weeks for the cross-fostered infants. Their pattern of crying and feeding changed...and they spent less time awake during the day than the control group infants. (p.79)

Thus, from an array of possible patterns of sleep and alertness, babies develop a pattern that is shaped to fit a particular caregiver; if the caregiver is changed, the pattern is disrupted in the relationship with the new caregiver. At the level of these biological rhythms, no less than in the acquisition of language, there is a personalized fitting of the self to the other. When the personalized pattern is disrupted, a substantial degree of coordinated communication is lost as the disrupted infants spend less time alertly awake.

The concept of a communicative coordinated state as a mutual creation of mother and infant has been most specifically described in the work of Tronick (1989, 1998; Tronick, Als, & Adamson, 1979; Tronick, Als, & Brazelton, 1980; Cohn & Tronick, 1987), from whom the term "coordinated state" comes, Beebe (1986; Beebe & Lachmann, 1988a,

1988b, 1992; Beebe, Jaffe, & Lachmann, 1992), and Stern (1977,1985) and their colleagues. The same essential conception, more broadly described, is found in Winnicott (e.g. 1965, 1971). Each has extensively described models of the processes by which a detailed, textured, and personalized coordinated state is created between mother and infant. A major feature of their descriptions is the shaping of the infant to fit the mother through a winnowing of the communications that are responded to and coordinated with. This conception is central to the understanding of psychopathology and of psychotherapeutic processes that is presented in later chapters, and it closely fits Bowlby's account of the child's search for responsive attachment as entailing exclusions of those aspects of the self that lead to non-responsiveness or unavailability of the caregiver (see Chapter 3). If a coordinated communicative state for the purposes of caregiving and the achievement of interactive and environmental goals is taken as the set goal of attachment behavior, then Tronick's, Beebe's, and Stern's work are descriptions of core processes of attachment.

Tronick's conception of a coordinated state closely matches Eibl-Eibesfeldt's description of coordinated communication as the basis of parental care of infants in humans and related species. What Tronick describes is a mutual, bi-directional, affective and goal-related process between infant and mother that regularly and frequently moves from coordination to miscoordination and back again in a cycle of "interactive error" and "interactive repair". In well-functioning dyads, actual

coordination, in the sense of matching or synchronously following affective communications, occurs for only 30% of the time spent in face-to-face interaction. Thus, the dyad is frequently in a miscoordinated state, but one that is in continuous motion, with transitions from coordinated to miscoordinated states and back to coordinated states occurring about once every three to five seconds (Tronick & Cohn, 1989). *But the search for coordination is maintained throughout the interaction* as the dyad searches for matching and synchronous affective states. Thus, *there is a more or less continuous process of each fitting the self to the other and also seeking to fit the other to the self.* Beebe & Lachmann (1988b, 1992) and Stern (1985) have also described the close mutual adjustment that takes place in maternal-infant communication, with each partner changing the self to fit the other and seeking to influence the other to fit the self. Beebe (1986; Beebe & Lachmann, 1988a, 1988b; Beebe & Stern, 1977) has proposed that the processes of *mutual influence* between mother and infant are central to the infant's development of psychic structure and representations of self and other. Beebe terms these processes of mutual influence as "interaction structures" and describes them as "characteristic patterns of mutual regulation which the infant comes to remember and expect" (Beebe & Lachmann, 1988b, p.305). Stern emphasizes the mother's attunement with the baby as a process that crystallizes the infant's self in terms of the communications that are attuned with. Selective attunement makes

those affective states that are attuned with available to the infant and renders states that are not attuned with as outside the realm of inter-subjective experience.

These coordinated affective communications take place in relation to interactive goals, to affective self-regulation, and to goals with regard to the environment (e.g. the infant's trying to reach an object and communicating anger and frustration when he cannot reach it). The infant affectively communicates with the mother in furtherance of these goals and is affected by the mother's response to his communications. As Tronick (1989) writes:

> The infant is part of an affective communication system in which the infant's goal-directed strivings are aided and supplemented by the capacities of the caretaker. An infant's affective displays function as messages that specify the infant's evaluation of whether he or she is succeeding in achieving a goal. The caretaker "reads" this message and uses it to guide his or her actions for facilitating the infant's strivings. (p.113)

When an infant affectively communicates with an other in furtherance of a goal, Gianino & Tronick (1988) label the communication an *other-directed regulatory behavior*, to emphasize the infant's use of an other in pursuit of a goal. But, as noted, the infant also regulates him- or herself, particularly when he or she experiences negative affect as a result of non-coordination by the caregiver, as when the caregiver is non-

responsive, intrusive, or miscoordinated or does not facilitate an environmental goal (e.g. won't give the infant the crystal vase or does not facilitate the infant's escaping the pediatrician's cold cotton swab). Gianino & Tronick label the infant's self-regulation through actions that are undertaken without the facilitation of an other—such as looking away, self-touching, yawning, mouthing, and self-stimulation—as *self-directed regulatory behaviors.*

Moreover, in normal interactions the cycle of interactive error and interactive repair, with frequent errors and successful repairs, elicits in the infant the experience of affective *transformation*: while interactive errors occasion an experience of negative affect, interactive repairs transform the negative into positive affect. The infant's experience of himself and his mother is positively transformed. In abnormal interactions, which are characterized by fewer successful interactive repairs, the infant experiences much less positive affective transformation and spends relatively extended periods in a negative affective state; he is left to cope with this negative affective state on his own. This experience is aversive. Infants who are more coordinated with spend more time in an experience of positive affect, and they find others as more useful as facilitators for their own self-regulation (Tronick, 1980, 1989; Gianino & Tronick, 1988; Cohn & Elmore, 1988; Cohn & Tronick, 1989).

The affective communication system is bi-directional and requires that the infant sometimes follow the mother. Beebe & Lachmann found that mothers and infants tend to "match the direction of affective change, but to avoid an exact match of level....Thus, mother and infant both tend to increase engagement together or to decrease engagement together but are rarely at the same level of engagement" (p.94). Tronick (1989), citing Bowlby, suggests that the infant has no choice but to seek coordination with the mother; if the mother won't adjust, then the infant must adjust himself into mutual coordination with her as best he can, using a balance of other-directed and self-directed regulatory behaviors, shaping himself to her communicative contours. Communicative affective coordination takes place in relationship to goals, but of course not all of the infant's communications and goals are coordinated with or facilitated. This is, for example, the case with the formerly recommended practice of permitting an infant at bedtime to cry herself to sleep and similarly with regard to the inevitable frustrations of some of the infant's goals, such as obtaining the vase or escaping the pediatrician. A sensitive caregiver may often ease this process by providing non-coordinated but engaging and inviting alternative messages: the child's frustration at not obtaining the crystal vase may be assuaged by the provision of a favored toy (a type of behavior specifically identified by Ainsworth in her rating scales as characteristic of sensitively responsive mothering); the child's pain on receiving a vaccination by injection may be assuaged by close

tactile contact or by an invitation to play peek-a-boo. But even when these tactics are successful, the child is nonetheless as part of this process required to coordinate with the mother; the interactive error is corrected by the child's adjustment to the mother.

Our concern with this process in terms of psychopathology does not look primarily to such "purposeful misattunements" (Stern, 1985) but rather to those misattunements that are not consciously purposive but nonetheless systematic. Stern's process of "selective attunement," centering on which of the infant's affective communications are attuned to by the mother and thus rendered interactionally valid and salient, includes the interpersonal context and goals of which the affective communications are a part. As well be discussed more extensively in the next chapter, affects in relationship to goals and interpersonal contexts that are not attuned to are thereby placed outside the realm of what is shareable and doable. They become less salient.

From the infant's point of view, this is a conception that closely approximates, on the basis of careful empirical observation, Winnicott's (1960) description of the origin of the true and false self, wherein "moments of omnipotence," when the facilitating environment actualizes the infant's spontaneous gestures, communication and goals, alternate with moments of "impingement" when the environment does not and the infant must match himself to an external demand; the balance of moments of facilitation and moments of impingement determine the

balance of the true and false self. That which is not met and facilitated by the "environment" is dissociated, separated from the sense of the self and the sense of reality. In our present language, the false self develops through an imbalance of coordination by the child with a relatively non-coordinating caregiver. At worst, when crucial aspects of the self have not been facilitated, this leads to a process of "progressive self-deception, alienation from reality and splitting of the mind" (Alper, 1996).

The coordinated affective communication system described by Tronick, Beebe, Stern and their colleagues, as well as by Winnicott, is the basis of the coordinated caregiving that is described by Eibl-Eibesfeldt as the generative core of human relatedness and that, in optimal operation, constitutes the essence of the "sensitive responsiveness" described by Ainsworth. This description of the vicissitudes of the maternal-infant coordinated and miscoordinated states offers a specification and construction of "sensitive responsiveness" and "availability" that is more detailed and closer to the phenomena of mother-infant interaction than the mechanics of the Strange Situation. The Strange Situation bears the same relationship to Tronick's descriptions of coordinated states as do attachment classifications: the Strange Situation and attachment classifications reflect *outcomes*; coordinated states constitute underlying *process*.

Patterns of coordinated states lead to outcomes. Bowlby (1973, 1982), as noted above, described a child's experience with his

attachment figure as resulting in the construction of an internal working model of the self and of the other that is used as the basis for predicting and interpreting the signals and behavior of the attachment figure and for constructing the child's own communications and behavior. Bowlby emphasized that the child's working model is constructed on the basis of actual experience with the caregiver and in that sense constitutes a record of the actual transactions between the two.

A critical component of this record as reflected in the internal working model is the child's experience of the conditions under which his attachment figure will be available and responsive to him and his implicit understanding of what aspects of himself are acceptable or unacceptable to the caregiver (Bowlby, 1973, p.203). The internal working model includes the interpersonal and environmental conditions and goals that are part of the pattern of the availability and responsiveness or non-availability and non-responsiveness of the caregiver. Bowlby proposed that those aspects of the child that lead to the non-responsiveness or non-availability of the attachment figure are "defensively excluded" from the child's awareness and interaction with the caregiver. Tronick's, Beebe's, and Stern's descriptions of maternal-infant communication may be understood as a more specific and detailed description of the process of constructing an internal working model that leaves in and leaves out different parts of self- and other-experience in the interests of maintaining a coordinated state with the caregiver, with the

consequential effect of the shaping of potentials and capabilities for affective communication on the part of the child. Stern describes these structuralizations in terms of the infant's sense of self and her Representations of Interactions that have been Generalized (RIGS); Beebe & Lachmann (1988a, 1988b, 1992) describe them as pre-symbolic representations of self and other that entail social expectancies and that are fully embedded in pre-symbolic representations of dyadic interaction structures; Tronick (1989) describes them as coordinative practices and affective regulatory styles—that is, which goals and self-experiences are communicated to and coordinated with the other and which are withheld within the self—that are based on representations of actual past experience.

A major feature of each of these constructions is the shaping of affective communication. As a child develops an internal template for interactions and for understanding himself and others, his access to affective experience is also shaped and delimited. This delimitation on affective experience plays a crucial role in shaping and controlling interactions, cognitions, and behaviors. Understanding the consequences of this shaping for psychopathology and psychotherapy requires a consideration of the role of affect in human behavior and experience.

Affect

Bowlby emphasized that attachment experiences in general are both mediated by and have consequences for emotional experience:

> Many of the most intense emotions arise during the formation, the maintenance, the disruption and the renewal of attachment relationships. The formation of a bond is described as falling in love, maintaining a bond as loving someone, and losing a partner as grieving over someone. Similarly, threat of loss arouses anxiety and actual loss gives rise to sorrow; while each of these situations is likely to arouse anger. The unchallenged maintenance of a bond is experienced as a source of security and the renewal of a bond as a source of joy. Because such emotions are usually a reflection of the state of a person's affectional bonds, the psychology and psychopathology of emotion is found to be in large part the psychology and psychopathology of affectional bonds. (1980, p.40)

Moreover, Bowlby's 1973 shift in his description of proximity to emphasize the mother's responsiveness as the key element of presence or absence (p.23), places, as Kobak has noted, emotional communication between the child and the attachment figure at the center of attachment processes. In addition, Bowlby (1982) assigned a special role to affect in terms of the appraisal of the environment and of the self and the communication of information about the self to others:

> Affects, feelings, and emotions are phases of an individual's intuitive appraisals either of his own organismic states and urges to act or of the succession of environmental situations in which he finds himself. These appraising processes have often, but not always, the very special property of being experienced as feelings, or, to use better terminology, as felt. Because an individual is often aware of these processes, they commonly provide him with a monitoring service regarding his own states, urges, and situations. At the same time, because they are usually accompanied by distinctive facial expressions, bodily postures, and incipient movements, they usually provide valuable information to his companions. (pp. 105-106)

The view of affect taken in this chapter draws largely from the functionalist and discrete emotions perspective on affect (Tomkins, 1962, 1963; Ekman, 1971, 1972, 1993, 1994; Izard,1971, 1977, 1991; Izard & Malatesta, 1987; Frijda, 1986, 1987, 1988; Plutchik, 1962, 1980; Malatesta, 1982, 1990; Malatesta & Wilson, 1988; Lazarus, 1991, 1994; Magai & McFadden, 1995) and is highly consistent with Bowlby's general view of the emotions. This psychoevolutionary view originated with Darwin (1872), who argued that in humans and closely related animals there are discrete primary emotions. Each of these serves an evolved and distinct function in terms of adaptation to the environment because each is associated with a particular kind of action. Each is linked to a

characteristic pattern of facial expression and thereby to communication with others. Although modern discrete emotions theorists differ on which emotions are primary and which may be secondary combinations or blends of the others, this distinction is not important for present purposes. Plutchik (1962, 1980) identifies eight primary emotions: anger, sadness, joy, acceptance, anticipation, surprise, fear, and disgust. Izard's (1977, 1991) list of primary emotions includes most of those that are included by others: interest, joy, surprise, sadness, anger, disgust, contempt, fear, shame, shyness, and guilt. The differences between these and other lists of primaries are in general minor. The differences may arise from seeking to assign precise and comprehensive verbal labels to what are essentially nonverbal, physiologically-based processes that shift rapidly and may be parsed in various ways.

Modern functionalist theories of affect also emphasize the role of emotions in adaptation to the environment, and this is a crucial issue from the point of view of the shaping of the child's capacity for affective experiencing. Emotions place the individual in relationship to what is happening, preparing and motivating him to take action that is relevant to his goals, relationships, and circumstances. Lazarus (1991) suggests that emotions cannot be understood except in the context of adaptational encounters and that the boundaries of "encounters" are in major part determined by continuities and changes in emotional experience. In this, functionalist theorists view emotions as core motivational and organizing

experiences that recruit cognition, perception, memory, physiological states, and behavior and that prepare the individual to take particular kinds of action. Scherer (1993), for example, defines emotion as:

> An episode of temporary synchronization of all major systems of organismic functioning represented by five components (cognition, physiological regulation, motivation, motor expression, and monitoring/feeling) in response to the evaluation of an external or internal stimulus event as relevant to the central concerns of the organism. (in Kaiser & Scherer, 1998, p.82)

Emotions may be better described as processes that are interwoven with other processes than as static entities, a view that Bowlby emphasizes (1982, pp. 105-114). They begin with an internal or external stimulus event that is registered, more or less consciously, by the individual. The apprehension of the stimulus event may involve greater or lesser degrees of cognition. Humans appear to be neurologically hard-wired to respond to some stimulus events, such as certain characteristics of human faces, sudden noises, sexual stimuli, and looming movements, without the requirement of intervening cognitions; in the case of other stimulus events, though we may be neurologically well-prepared to respond (as for example in the ease with which learned associations between foods and disgust are acquired), the stimulus event produces a conscious or unconscious cognition, i.e. a recognition and interpretation of the event. The cognition then becomes an intervening factor, and is itself a stimulus

event. It is often the case that non-cognitive and cognitive responses take place sequentially (LeDoux, 1994; Scherer 1984a, 1984b), as for example when we respond with a moment of fright to a sudden noise on a quiet evening and then recognize the sound as a raccoon turning over a garbage can. This process is iterative: as additional information is apprehended, and as actions are taken, additional non-cognitive and cognitive responses occur, with each modifying the other; and different emotions succeed each other in relation to both changing cognitions and to actual changes in the stimulus event, some of which may occur in response to our actions. In the case of the raccoon and the garbage can, for example, our initial fright might be succeeded by anger as we recognize the source of the noise.

In any case, the response of the individual to the stimulus event entails two processes that are virtually simultaneous: the appraisal of the event and a set of physiological changes. Cognitive processes are interwoven with these responses, standing as neither only cause nor only effect but as both and either, sometimes one and sometimes the other. Bowlby's internal working models function as templates for these appraisal processes; they are also modified by them, and in their developmental stage, are constructed from them. Stern's (1985) Representations of Interactions that have been Generalized (RIGS) and Generalized Event Representations (GERS) may be seen to function and to be constructed similarly. The appraisal process, which is emphasized

by Bowlby, focuses on the relevance of what is apprehended to the individual and his goals. Lazarus suggests (1991) that this appraisal takes place both in terms of whether what is apprehended is *congruent* or *incongruent* with an individual's goals and also in terms of the nature of the congruence or incongruence, i.e. the relationship of the stimulus event to the appraiser and his goals. Lazarus describes the nature of the congruence or incongruence as a *core relational theme* that defines the nature of the relational harm or benefit that accrues from the adaptational encounter. "Each individual emotion or emotion family is defined by a specific core relational theme" (p. 121). Thus, emotions tell us rapidly what something means for us.

The appraisal of the stimulus event also produces a bodily response. Each emotion, or at least each major family of emotions, is associated with a particular set of physiological changes in the autonomic nervous system and other bodily sub-systems (Izard, 1990; Lazarus, 1991, pp. 77-78). Anger, for example, increases heart rate and blood pressure and provides increased blood flow to the muscles. Lazarus has pointed out how methodologically difficult these changes are to identify because of the flow and shift of emotional responses that take place in the unfolding of any particular encounter with the environment. It is in part for this reason that he has argued for defining the boundaries of encounters on the basis of which emotion is predominant. The internal experience of emotion is in this sense symphonic, with

shifting rhythms and melodic lines occurring as appraisals and physiological responses succeed each other. The emotional dimension of interactions are therefore highly nuanced and contoured as our appraisals of our relationship to the environment change and are informed by templates such as internal working models or Stern's Representations of Interactions that have been Generalized (RIGS).

The physiological changes that constitute a major component of the experience of emotion are important for at least three reasons: First, they prepare and predispose the individual toward certain actions, i.e. emotions include *action tendencies* which prepare us to act in response to the stimulus (Frijda, 1987; Plutchik, 1980; Izard, 1977; Lazarus, 1991; Scherer, 1984a, 1993). This is a key element of what makes emotions adaptive; they are rapid mechanisms of physiological change that link appraisal, motivation, action, and response to the stimulus. They relate us to our environment, including the social environment, in a goal-related purposive way. In this, they are central to our being in the world and the manner in which our being in the world occurs. On the basis of a similar analysis, Damasio (1994) suggests that emotions are necessary to well-organized rational thought and behavior because they recruit cognitive and physiological processes to whatever is of highest priority at the moment; they are fundamental to purposiveness. Normatively, anger prepares and disposes us to assertively remove or alter obstacles to obtaining our goals; sadness leads us to withdraw

ourselves from interaction with an environment in which our goals cannot be achieved or to leave off actions that cannot obtain our goals; interest leads us to explore our environment; joy leads us to approach and increase our involvement with what suddenly appears as congruent with important goals; disgust leads us to immediately reject what is toxic to us and near to us at the same time; anxiety and fear lead us to reduce imminent danger; shame interrupts positive emotions and thus makes us stop doing what had been associated with the positive emotion, a sequence that pertains principally to how we believe others are reacting to our positive emotions; guilt disposes us to reconsider, repair, and reconstruct what has been damaged (Tomkins, 1962, 1963; Plutchik, 1983; Izard, 1977, 1990; Nathanson, 1992). Thus, emotional experience adapts our physiological states, our cognitions, and our behaviors to the task at hand. *Which emotions we experience, how fluently we have access to them, and how clearly we recognize them, influence and delimit the responses we make to situations.*

A second reason for the importance of the bodily processes that are a part of emotions is Damasio's (1999) proposal that our ability to feel our body changing in response to the appraisal of some object is the basic component of consciousness. He writes, "Consciousness consists of constructing knowledge about two facts: that the organism is involved in relating to some object, and that the object in the relation causes a change in the organism" (1999, p. 20). Moreover, Damasio proposes that

the foundations of the sense of self—its qualities, sense of stability, capacity for change, sense of agency, and sense of singularity—also derive from our feeling and knowing our body's changing in relationship to objects. These processes are driven by emotions, and therefore, Damasio writes, "consciousness and emotion are *not* separable" (p.16). Our consciousness of ourselves and our sense of what our self is at any given moment depend on what emotions we are experiencing and what object we are experiencing them in relationship to. Damasio (1994, 1999) describes six primary emotions (happiness, sadness, fear, anger, surprise, and disgust), an unspecified number of secondary emotions such as guilt and embarrassment, and a third category that he terms background emotions, which are longer-lasting but less pronounced bodily states such as tension or calm, well-being or malaise. Our consciousness and sense of self depend on what we are able to know about what our bodies are doing as we have these emotions. Damasio usefully makes a distinction that is familiar to every clinician because it often has substantial clinical significance—the difference between an emotion as a bodily state and our awareness of that bodily state as a *conscious feeling.* He writes:

> An organism may represent in neural and mental patterns the state that we conscious creatures call a feeling, without ever knowing that the feeling is taking place....There is...no evidence that we are conscious of *all* our feelings, and much to suggest that

> we are not. For example, we often realize quite suddenly, in a given situation, that we feel anxious or uncomfortable, pleased or relaxed, and it is apparent that the particular state of feeling we know then has not begun on the moment of knowing but rather sometime before. Neither the feeling state nor the emotion that led to it have been "in consciousness," and yet they have been unfolding as biological processes. (1999, p. 36)

Thus, our bodies in concert with our appraisal processes have emotions of which we may or may not be aware. Our conscious understanding of ourselves and of our environment will be colored by what emotions we are or are not aware of. As our conscious understanding of what is happening, including what we are feeling, itself becomes a stimulus to further appraisal and emotion (LeDoux, 1994), we may leave out major aspects of what is happening in our bodies and what that means about our relationship to elements of the environment. As will be discussed in the next chapter on psychopathology, the process that Bowlby described as defensive exclusion bears directly on our state of awareness and understanding of what our bodies are doing and of our selves in relation to the environment. And, it will be argued, what is defensively excluded depends in significant part on our histories of coordinative communication with our caretakers. In brief, *those affective experiences that have been communicatively coordinated with become accessible and*

useable to us in a way that affective experiences that have not been coordinated with do not. This is a fateful difference.

The third reason for the importance of the physiological processes that are the core of emotions is the very association of these processes and the action tendencies they entail to the communication of our emotions to others and to the processes of communicative coordination.

The relationship between particular communicative expressions and internal emotional experiences appears to be cross-culturally identical for fear, joy, anger, sadness, disgust, contempt, interest, and shyness (Magai & McFadden, 1995; Ekman, Sorenson & Friesen, 1969; Ekman & Friesen, 1971; Ekman, 1972, 1998; Eibl-Eibesfeldt, 1989), suggesting that the patterns of these emotions and their communicative expressions emerge relatively directly from an evolved biological substrate that is the same in different cultures. In the functionalist view of emotion, they are "hardwired" patterns of appraisal, physiological response, motivation, action tendencies, and communication that have been evolved because they are adaptive responses to a wide range of important situations encountered by the organism (Plutchik, 1980; Izard, 1977; Eibl-Eibesfeldt, 1989). This issue goes directly to the profundity of these emotions as adaptive responses.

The physical communication of an emotion has an automatic, reflex-like association with the internal state that it expresses. In their close association with the internal states and physiological processes

that are parts of emotion, the communication of emotion is also directly linked to the actions tendencies to which emotions dispose us. For Darwin (1872), this link occurs because the physical signs by which emotions are communicated are themselves direct manifestations of the physical actions that emotionally-driven physiological processes dispose our bodies to take—for example, the clenched fists of anger express anger but are also linked to anger's disposing us to the action tendency of aggressive confrontation, which may include the use of the fists. In other words, some of the changes that take place in our bodies to predispose and ready us for action are visible to others and communicate our emotional state to them. But we need not know whether Darwin's view of the origin of emotional expressions is correct to see that, in fact, the expression of our emotional state may itself be considered as an action, a physical behavior to which we are prompted by the experience of the emotion.

LeDoux (1994) and Scherer (1993, 1984a, 1984b) have both emphasized that the experience of emotion in relation to the environment takes place in a sequence of repeated or iterative cycles. LeDoux writes:

> Emotional experience is initially an output of emotion processing systems, not an integral part of the system that activates and processes emotional information. However, once emotional experiences occur, they come to exert important influences on subsequent emotional processing. It is important to keep this dual

> role of emotional experience in mind. On the one hand, it is a consequence of emotional processing and, on the other, it becomes a cause of additional emotional phenomena. (p. 395)

When we apprehend a stimulus, the processes of physiological response begin, and these then entail experiences of appraisal, disposition to action, motivation, and communication that have been described above. As one cycle of this process is completed, the situation is changed. At a minimum, we are changed, for our bodies have changed, our appraisal has proceeded, our motivation has shifted, a new action tendency has emerged, and our communication has changed. Thus, we are in a different state; we have a different relation to the stimulus and to the environment. In most circumstances, especially in interpersonal circumstances, our changed relation to the environment also affects the original stimulus and alters it: the aggressor senses our fear or our anger; the companion senses our sadness or interest; the mother senses our distress or joy. As this occurs, one cycle of the emotional experience is completed and the next begins.

Normatively, the communication of our emotions is a key link in the transition from one interactive cycle to the next. Communication holds but also represents and externalizes our internal state. It makes our internal state public and renders it as a new element which must now be regarded and responded to in an evolving situation. It does this both for others and for our self. This is so because, as Bowlby

emphasized, the communication of emotion is a critical cue to others and to the self; it is the key and most salient marker both to others and to ourselves of the changes that have taken place within us. The expression of emotion is the element by which our internal processes of appraisal, motivation, and disposition to action are externalized and made salient in the interpersonal situation; it makes what is happening inside of us a part of the external reality that we and others will continue to respond to.

This iterative cycle and the changes in external and internal reality that occur as it proceeds are key to the adaptive functions of emotions. For affect theorists and researchers who focus on the adaptive function of emotions—Tomkins, Izard, Malatesta (Malatesta-Magai, Magai), Lazarus, Plutchik—this process is what emotions are for. In this way, the communication of emotion, far from being epiphenomenal, incidental or inconsequential, is an essential action that completes one cycle of emotion and begins the next. But, factors which influence or delimit affective communication—such as socio-cultural display rules or coordination or non-coordination by others with our affective communication—shape the direction in which these iterative cycles evolve. They guide us toward some and away from other responses. Factors that limit and shape affective communications are in fact control mechanisms that influence cognitions, behaviors, and subsequent emotional experience. To anticipate the discussion of psychopathology that is to come, *factors that interfere with the communication of adaptive*

emotions also interfere with our consciousness and cognitions about what we are feeling and what kind of situation we are in; they thereby interfere with the adaptive function of emotions and with adaptive processes.

The role of affective communication as a control mechanism for cognitions, behaviors, and subsequent emotional experience is closely tied to the self-cueing effects of affective communication. Because emotional experience plays a key role in the processes of appraisal, motivation, and disposition to particular action tendencies, that which excludes, diminishes, or shapes our access to emotional experience also excludes, diminishes, and shapes our processes of appraisal, motivation, and action. The lynchpin that connects one individual's emotional experience to that of another—and that provides a basis for the shaping that occurs as part of reaching a coordinated state—is the communication of affect. The communication of affect changes emotional experience, providing access to discrete, categorical emotions and amplifying or diminishing that which is felt. It does so, as we will see, both for the individual who expresses (or does not express) the affect, through processes of facial and vocal feedback; and it does so for the person who receives the affective communication through exchange properties of nonverbal communication that produce "emotional contagion."

The communication of emotion cues the self in at least two ways—through the responses of others to our communication and through the

internal reverberations and internal resonance of the emotional communication itself. First, by rendering our internal experience in a form that is accessible to others, emotional communication has an effect on others that we may then ourselves regard. We see and feel the effect of our internal state in the external environment. Others may respond to our emotional communication in a way that actualizes our presence in the situation; our appraisal, motivation, and disposition to particular actions become present to others. By then perceiving and assessing the reactions of others in dyadic interaction with ourselves, we gain what Stern has called an intersubjective reality that incorporates our own experience and our own impact on the present situation. In Winnicott's terms, our affective communications become transitional phenomena. Through being intersubjectively shared, our appraisal, motivation, and action tendencies become more real to us; they acquire an external social reality and validation, at least in the sense that they are recognized. It is not necessary that they be accepted, only that they be responded to in some way that registers their existence. Watzlawick, Beavin, and Jackson (1969) distinguish between confirming, rejecting, and disconfirming responses to interpersonal messages. Confirming and rejecting responses recognize the existence of a message and its relational import, though they may either accept or reject what is communicated. Disconfirming responses are those that invalidate the existence of the message through in some way not recognizing it as having occurred. In the latter case, the

internal experience that is rendered by the emotional communication seems not to become a part of the external situation.

In terms of communicatively coordinated states between mothers and infants, affective communications that are not coordinated with lead to experiences of non-coordination; Tronick describes these experiences of non-coordination as in themselves aversive, leading to negative self-experience for the infant and requiring the infant to manage his or her internal state in isolation from social interaction (Tronick 1980; Tronick and Field, 1986; Tronick and Cohn, 1989; Tronick, 1989). Stern (1985) describes the regular exclusion of attunement to particular emotional states as an aspect—the negative or exclusionary aspect—of selective attunement, a process which renders some affect states more available and others much less available to the child; he distinguishes between the purposeful misattunement that a mother may perform to deliberately shape her infant's response in a particular situation (such as the pediatrician's office) and the systematic, unconscious exclusion of specific affect attunement in particular interpersonal configurations. But both types of misattunement make the same point for present purposes: that which is excluded from communicative coordination becomes less available to the infant as an internal emotional experience and thus as a shaper of cognitions, behavior, and subsequent emotional experience. The excluded emotions are lost both to internal experience and to a role in directly influencing the immediate situation.

The second way in which emotional communication cues the self is through internal feedback—reverberations and resonance—from the process of emotional expression itself. Tomkins (1964, 1990, see also Demos, 1995) hypothesized that the face primarily and the voice secondarily play a central, generative role in the experience and production of affect, that the face in essence is an "organ of affect." In Tomkins's theory, the muscular, vascular, and cutaneous activity of the face and its associated receptors are the primary source of subjective affective experience; they not only cue the self about internal emotional experience but also shape, intensify, or diminish the emotions that an individual is experiencing. They both reflect emotional experience to the self and cause emotional experience, in this respect playing a central role in both what we feel and what we know about what we feel. Because what we do with our faces is especially influenced by whom we are with and how they are responding to us—and what we have learned to expect on the basis of past experience—the role of the face in self-cueing affective experience is closely related to the role of communicatively coordinated communication in emotional experience. What we have learned to facially express or to suppress in key social interactions with others directly influences what internal emotional experiences are heightened or diminished and therefore the extent to which these emotional experiences become part of our cognitions and behaviors in

situations. This changes how we think about and behave in our interactions with others and with the environment.

Although Tomkins's view of emotion differs in some important respects from Darwin's, Darwin (1872 rev. 1898/1998) also viewed the communication of emotion as itself a source and shaper of emotion, and therefore as an influence on thought and behavior:

> The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as this is possible, of all outward signs softens our emotions. He who gives way to violent gestures will increase his rage; he who does not control the signs of fear will experience fear in a greater degree; and he who remains passive when overwhelmed with grief loses his best chance of recovering elasticity of mind. These results follow partly from the intimate relation which exists between almost all the emotions and their outward manifestations; and partly from the direct influence of exertion on the heart, and consequently on the brain. Even the simulation of an emotion tends to arouse it in our minds. (pp. 359-360)

In addition to the proposal by Tomkins that feedback from the facial and/or vocal expression of emotion influences and shapes subsequent emotion, Ekman and his colleagues (Ekman, Levenson, & Friesen, 1983) have proposed a stronger form of the same hypothesis, which asserts that facial expressions, even in the absence of emotion-prompting

external stimuli, are themselves sufficient to *create* emotional experience. In addition to these strong and weak forms of the facial feedback hypothesis, it is also possible to distinguish between *dimensional* versions of the hypothesis, which assert that changes in the face produce changes in the dimensional qualities (e.g. pleasantness or unpleasantness) of experiences, and *categorical* forms of the hypothesis, which assert that specific changes in the face produce specific categorical emotions, such as anger, sadness, or fear. Camras, Holland, and Patterson (1993) have reviewed a broad range of empirical studies of the facial feedback hypothesis, including those by Lanzetta et al. (1976), Kleck et al. (1976), Vaughan and Lanzetta (1981), Bush, Barr, McHugo, and Lanzetta (1989), Cupchik and Leventhal (1974), Kraut (1982), Ricelleli, Antila, Dale, and Klions (1989), Zuckerman et al. (1981), Kleinke and Walton (1982), Deckers et al. (1987), Strack, Martin, and Stepper (1988), Larsen, Kasimatis, and Frey (1992), Duclos et al. (1989), Rhodewalt and Comer (1979), Duncan and Laird (1977), Laird and Cosby (1974), Laird, Wagener, Halal, and Szegda (1982), Kellerman and Laird (1982), Rutledge and Hupka (1985), Edelman (1984), McArthur, Soloman, and Jaffe (1980), Laird (1984), Tourangeau and Ellsworth (1979), Ekman et al. (1983), and Levenson, Ekman, and Friesen (1990).

These studies, taken collectively, consider the facial feedback hypothesis in both its strong and weak and categorical and dimensional forms. Camras and her colleagues found broad support for all versions of

the hypothesis. Most of the studies reported considered the dimensional form of the hypothesis in its weak form (i.e. changes in facial expression were manipulated in relation to emotion-eliciting stimuli rather than in the absence of external stimuli and subjects were assessed for changes in the dimensional qualities of emotional experience rather than for the production of a particular categorical emotion). Many of these asked subjects to voluntarily amplify or inhibit spontaneous emotional expressions that were elicited by external stimuli (such as pictures, films, or electrical shocks) and then assessed dimensional variations in response to the amplifications or inhibitions of expression. Camras et al. write that, "With few reported exceptions, support for the hypothesis has been found in these studies" (p. 204). Studies of the hypothesis in its strong form manipulated subjects' facial expressions in the absence of other emotion-prompting stimuli; studies of the categorical form of the hypothesis manipulated subjects facial expressions in the absence of other stimuli and also assessed subjects' subsequent experience of particular categorical emotions and/or differential patterns of autonomic nervous system activity that are correlated with categorical emotions. Camras et al. found that among studies testing the strong and categorical versions of the hypothesis, a preponderance of published studies also supported the hypothesis.

Thus, in an interpersonal context, the freedom to communicate particular emotional states provides a clearer experience of those states,

with greater access to the appraisals, motivations, cognitions, and actions that the emotional state provides. Similarly, interpersonal pressure to communicate a particular emotional state amplifies the emotions—and the appraisals, motivations, cognitions, and actions—that correspond to the expressed emotion and diminish access to the correlated appraisals, motivations, cognitions, and actions of other emotions that might have been expressed. This is a dynamic that may be applied not only to issues of social control and coordination, but also to the operation of defensive processes.

We have been discussing ways in which the communication of emotion cues the self and, as noted above, one of the ways the self is cued is through the effect of our communications on others. It is important to recognize that the emotional effects of affective communication work in both directions, on both the self and on the other. Our emotional communication alters others as their emotional communications alter us. The very process of others' understanding us stimulates in them a partial experience of what we are feeling, an idea that appears in the psychoanalytic literature as part of the process of identification, including, for example, the "trial identifications" that a therapist makes in the interest of understanding her patient and the broader processes of projective identification that, in addition to proposed pathological forms, have been described by some theorists as fundamental to all interpersonal communication and empathy (Tansey &

Burke, 1989). The classical theorists of the social self emphasized our capacity to experience within ourselves the views of others about us—Cooley's (1902) "looking glass self" and George Herbert Mead's (1934) conception of "role taking"—a process that Mead argued was crucial to the formation of the self—whereby we mentally put ourselves in the position of another and view ourselves as does the other.

In the empirical literature on emotion, one of the effects of our emotional communications on others is characterized as "emotional contagion," a process whereby others begin to feel what we are feeling and affectively expressing (Hatfield, Cacioppo, and Rapson, 1994). This process is evidenced, for example, in the distressed crying of a single infant eliciting similar distressed crying among others. Emotional contagion alters others' own appraisals and emotional responses to situations (for example, making a funny movie funnier if it seen with a lively audience), cues others about the kind of situation they are in (for example, when a toddler checks its mother's reaction to a visual cliff before proceeding over it), and makes a demand on others to relate to us in a particular way, in accord with or response to the core relational theme (Lazarus, 1991) that our emotional communications evidences toward them and toward the environment.

In the empirical literature on emotion, the process of emotional contagion is specifically linked to communication and to the emotional effects of facial and other nonverbal feedback via "exchange"

characteristics of nonverbal affective communication (Lanzetta, 1970, 1976; Wallbott, 1995; Levenson, 1996). These exchange characteristics of facial and other nonverbal communications, in their relationship to the shaping and control of emotional experience, bear directly on how communicative coordination or non-coordination shape and delimit emotional experience.

A key way in which others actually begin to experience the emotions that we are experiencing and expressing is through "the tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person, and consequently, to converge emotionally" (Hatfield, Cacioppo, and Rapson, 1994). When others experience our affective communications, there is a tendency for them to physically mimic and thereby to reproduce in themselves, via facial feedback, a version of what we are expressing. In a study examining responses to displays of sadness, anger, fear, surprise, disgust, happiness, and neutrality, different displayed emotions elicited different facial reactions in subjects; subjects "both mimicked and experienced the same emotion expressed by the stimuli persons" (Lundqvist and Dimberg, 1995). This responsive mimicry is reliably measurable as electromyograpic (EMG) activity; the electrical activity takes place in facial muscle groups that are specifically linked both to specific emotions and to the specific expressions that are being viewed by the responding other (Lundqvist and Dimberg, 1995;

Dimberg, Hanson, and Thunberg, 1998). The process of responsive mimicry takes place very rapidly, with distinctive electromyograpic reactions detected in responders after only 300-400 milliseconds of exposure to an emotionally expressive facial stimulus (Dimberg and Thunberg, 1998). Moreover, the process of expressive mimicry is cross-modal, with *facial* electromyograpic responses occurring in reaction to the sole presentation of *vocal* affect expressions (Hietanen, Surakka, and Linnankoski, 1998), suggesting that the process of expressive contagion is specifically guided by the emotional significance of what is expressed and mimicked. In the same study, the researchers also found that the emotional expressions that are reproduced by responders have the effect of producing in them emotional action tendencies that are related to the emotional expressions that are being reproduced. The action tendencies produced could be either symmetrical or complementary to the emotions that were perceived and mimicked: in their study, which measured only a disposition to approach or withdraw, the perception and mimicry of anger produced a complementary action tendency of withdrawal; the perception of contentment produced a symmetrical action tendency of approach. Doherty (1998) found that the processes of expressive emotional contagion influence social judgement, memory, and cognition and "that exposure to even mild emotional expressions can influence cognition and behavior" (p. 207). Dimberg and Thunberg (1998) propose the existence of fast-acting expressive affect programs that influence

internal affective experience, cognition, and behavior through both one's own affective expressions and the responsively mimicked affective expressions of others.

In other words, via the communication process, affect flows like a current through social interactions and "emotional knowledge and rapport depend, in large measure, on the degree of synchrony in the physiological responses of the perceiver and the target" (Levenson and Ruef, 1997, p. 44). Emotional contagion constitutes a communicated form of facial feedback. These affective communication processes provide a basis for empathy because they elicit in us an experience of what others are feeling and elicit in others an experience of what we are feeling. They also provide a basis for the ways in which the affective experience of one person can provoke anxiety, distress, and defensive processes in another.

Others, for a variety of reasons, may not wish to feel what we are feeling; they may not wish to synchronize and coordinate with it, thus diminishing our own capacity to feel it as the others also diminish their own experience of what we are feeling. At a broad social level, all cultures have display rules (Ekman, 1993) that shape and delimit what emotions can be displayed and the situations in which they may and may not be expressed. These display rules function as controllers and organizers of social interaction and social settings, shaping how people feel, think, and act in a range of situations. They may be said to constitute a culture's

systematic form of emotional organization and of emotional bias. The same process operates more idiomatically in particular interpersonal dyads and familial contexts, when someone does not want to feel what we are feeling or does not want to accept the interactional demands and implications of what we are feeling. When our emotional communications elicit matching experiences that are intrapsychically uncomfortable to others, they may seek to avoid us, misunderstand us, divert the interaction in another direction, or otherwise seek to block an internal experience of the state we are communicating (Fraiberg, Adelson, & Shapiro, 1975; Main & Weston, 1981; Main & Goldwyn, 1984; Main, Kaplan, & Cassidy,1985; Main, 1991). In such cases, the other does not coordinate with us, i.e. they do not match and synchronize with our affective expressions. An important reason why an other may not wish to coordinate with a particular affective communication is because the experience of that affect—in the particular relational configuration that is operative—causes them anxiety. Clinically, this is a defensive process. This is the process that Fraiberg et al. (1975) identified as operating in mothers who could not effectively respond to certain emotional communications of their children. Fraiberg suggests that the children's emotional states evoked matching emotional states in the mothers that were painful, anxiety provoking, and defended against because they had never been satisfactorily responded to or otherwise resolved in the mother's own development. This is the same process that underlies the

intergenerational transmission of attachment pathology (Main, Kaplan, & Cassidy, 1985; Main, 1991).

The linkage between the communication of emotion and the production and experience of emotion is important because it places the regulation of emotion and the regulation of emotion's adaptive functions within a social context and subject to the fine-grained, detailed interactions between self and other. Our own experience of emotion, and our ability to know and to use our emotional experience adaptively in relation to our goals, needs, and environmental contingencies thereby falls under the sway of our social partners and what may be communicated to them; rules and expectancies for emotional communication are part and parcel of our internal working models of interactions with others. Just as we may exercise a degree of control over the actions to which emotions dispose us, we also may exercise a degree of control over the expression of our emotions. We sometimes seek to hide our anger or fear, our shame or our sadness, and we may do so more or less successfully. The control that we exercise may have either a voluntary or an involuntary quality, i.e. it may be something that we can choose whether or not to do, or it may be a control of expression that we ourselves no longer have much control over, i.e. it has become automatic and does not involve our making a choice. The control of emotional expression is in significant part determined by our developmental experiences of attachment and mutual coordination with our caregivers.

Affective communication—facial and vocal expressions—become, as Kaiser and Scherer (1998) suggest, the interface between "the *intraindividual regulation* of thoughts and behavior and the *interindividual regulation* in social interactions" (p. 82). Within the terms of the facial feedback hypothesis of emotion, that which we cannot communicate we cannot fully feel and know; that which we do communicate will be affectively and experientially heightened. The processes of emotional contagion mean that it will be difficult for us to know and to feel that which makes our caregivers anxious or uncomfortable. Tronick's work on affective communicational coordination between mothers and infants emerges with forceful relevance in this regard, because what Tronick has documented are the ways in which *an infant's affective communications depend on what his mother will and will not coordinate with* (Cohn & Tronick, 1987; Lester, Hoffman, & Brazelton, 1985; Tronick, 1989). The patterns in the affective communications that are and are not coordinated with become structuralizations of affective communications that regulate or control thoughts and behavior.

The communication of emotion, including its voluntary or involuntary control, is a central issue for the general argument of this study, reaching backward to our earlier discussion of attachment and coordinated states and extending forward to the next chapter's discussion of psychopathology. The communication of emotion is central because of the importance of emotion itself as an organizing, appraising,

and motivating experience for the individual that orients us in our environment, because of the effects that the communication of emotion have on others and on the self, and because of the malleability of individual patterns and characteristics of emotional communication in response to developmental experiences with others. Communication, action tendencies, appraisal, motivation, and physiological states are woven together. The processes of emotional communication link all of these to the responses of others, especially those others with whom we must coordinate at all costs, such as our primary attachment figures.

Chapter 3: Attachment Psychopathology

John Bowlby viewed attachment relationships as sources of the most fundamental and enduring experiences that we have of ourselves and of others. The essential terms of his understanding are given by the titles of the volumes in his trilogy: on the one hand, there is the experience of attachment, the formation of which Bowlby likened to the experience of falling in love and related to feelings of joy and of security; and on the other there are the experiences of separation and of loss, which occasion fear and mourning, grief and despair (1980, p. 40). He understood separation and loss not only as absolute, descriptive terms about the physical absence or death of others but also as a description of a psychological state that could occur while in the presence of another. Anxiety about being alone, especially about being alone in the face of a stress-inducing stimulus, is a central theme in Bowlby's thinking. In Bowlby's conception of living, the fundamental dynamic is a tension between the experience of being alone—in the sense of an isolation in life that brings with it terrible fear and anxiety—and the experience of being with another who understands and is responsive to what one is experiencing and who is willing to share it. Bowlby often described this latter state as the experience of having a "trusted companion"—someone who goes with us, who knows and shares what we encounter, and who is our ally. He used the phrase "trusted companion" to describe both the

optimal behavior of a mother with her infant and child and the proper role of a therapist with her patient (1973, 1988).

Bowlby begins a key chapter in *Separation* (1973) with an epigraph taken from the writing of Chesterton: "Throughout all this ordeal his root horror had been isolation, and there are no words to express the abyss between isolation and having one ally" (p. 201). Bowlby himself then writes:

> Enough has been said about the conditions that arouse fear to make plain how crucial a variable it is to be with or without a trusted companion. In the presence of a trusted companion fear of situations of every kind diminishes; when, by contrast, one is alone, fear of situations of every kind is magnified. Since in the lives of all of us our most trusted companions are our attachment figures, it follows that the degree to which each of us is susceptible to fear turns in great part on whether our attachment figures are present or absent.
>
> But man does not live entirely in the present. As a child's cognitive capacities increase he becomes capable of foreseeing the possible occurrence of many sorts of situation, including those that he knows would arouse fear. And, of the many fear-arousing situations that a child, or older person, can foresee, none is likely to be more frightening than the possibility that an attachment

> figure will be absent or, in more general terms, unavailable when wanted. (p.210)

This epigraph and these opening paragraphs are notable for several reasons. Bowlby is speaking, and using Chesterton to speak, in plain, experience-near language, directly and almost informally, about deeply felt experiences. Bowlby is also speaking broadly about issues that pertain with force across the life-span, joining the concerns of infancy and childhood to those of an "older person." He is uniting these concerns in a central focus on the difference between being-with and being-alone and naming a fear of being-alone as one of the most frightening experiences an individual can have. He is describing being-alone or being-with a trusted companion as the key modifier, even determinant, of experiences of anxiety. He is joining these experiences to the expectancies and cognitive forecasts about the availability of the other that in his thinking arose from early attachment relationships and were structuralized as internal working models of relationships. He is naming the fear that an attachment figure will be unavailable when wanted as the most frightening experience, in and of itself, that anyone can encounter. And, in his emphasis on the vicissitudes and the conditions under which we experience fear, including especially fear of aloneness, he is giving an account of the origins of psychopathology in terms of a dynamic between involuntary aloneness and having a trusted companion.

Attachment Classifications, Attachment Dynamics, and Psychopathology.

Concerning psychopathology and its relationship to attachment, John Bowlby's enduring concern was not with attachment classifications but with the underlying processes and dynamics of attachment relationships. His aim was not narrow; he did not seek to describe and understand a highly circumscribed set of relationships but rather to account for qualities of relating to others and of experiencing the self and others that pervaded one's life. Nowhere in his work does the reader find Bowlby seeking to separate pathological processes related to attachment from pathology arising from other sources. His conception of attachment psychopathology was broad. A central issue in constructing an attachment based account of psychopathology is extending the processes that are part of establishing an attachment relationship beyond operations that occur solely within attachment relationships. This is done here in the following ways:

(a) By focusing on the processes that occur because of the motivational primacy of attachment but that become more permanently and broadly part of the individual's functioning. In brief, attachment operations become part of a person in terms of implicit, procedural knowledge (implicit relational knowing) and then representations concerning means of

establishing a coordinated state through communication, especially through affective communication.

(b) The implicit knowledge of how to and not to establish a coordinated state through affective communication affects and is brought to effect by the individual's emotional regulation at the intersection of the intra- and interindividual regulation of emotion. This renders some core affective experiences within some relational configurations, and thus certain self-experiences and self-states, more or less off-limits to the individual. These affective experiences and self-states are avoided by defensive processes, which misshape and distort the experience of the self and the perception of the environment.

(c) In keeping with the principles of affect theory, the relative inaccessibility and defensive distortion of some core affective experiences restricts and constrains the adaptive capacity of the individual. As the experience of the self is constrained and defensively distorted, so also is interaction with the environment impoverished and made maladaptive; so also is the capacity for intimacy with others diminished.

The breadth of Bowlby's conception rests on his view of the *motivational primacy* of attachment processes and the focus that this places on the dynamics and particular vicissitudes by which attachment is first

accomplished and thereafter maintained. Bowlbly (1982) described the motivational primacy of attachment as "by far" (p. 13) the single greatest point of divergence between traditional psychoanalytic theory and his own thinking; and he distinguished attachment theory from existing object relations theories on the basis of his use of "a new type of instinct theory" (pp.16-18). His focus was on a new way of understanding what motivates behavior; like Freud, his conception of psychopathology rests on understanding what happens to the individual as he seeks to do what he is irresistibly motivated to accomplish. But for Bowlby, what the individual was irresistibly motivated to do was to establish an attachment relationship. The issue for Bowlby is less what types of attachment relationships may be established than what is formed and structuralized and what is lost in the individual as part of the process of establishing an attachment. Thus, in this chapter, the focus is less on attachment categories as forms of pathology than on the processes by which an individual establishes an attachment.

From a psychodynamic point of view, classifications of types of attachment relationships have only limited clinical utility because they represent an outcome that is the tip of an iceberg that does not reveal the underlying processes that keep the tip afloat. They are broadly diagnostic rather than individually interpretive, epidemiological rather than clinical, and they thereby undo one of the great contributions of Freud's psychoanalytic theory—the necessity for the complex and

intricate understanding of the individual. This is a contribution and an understanding that is now assumed as basic by virtually all forms of psychotherapy. Studies of attachment classifications have been enormously useful in identifying general processes of attachment and defense. These general processes operate broadly. In terms of attachment theory, the clinical question is less into what attachment classification an individual falls than by what processes they arrived and keep themselves there and, even more, how these processes are part of their general functioning. It is the re-working of these underlying processes that constitutes clinical work within an attachment paradigm.

Attachment theory lends itself to a psychodynamic understanding of individual experience no less than does Freud's instinct theory. But it does so on the basis of a different understanding of what is motivated or impelled, how the motivation is satisfied or frustrated, and of how the individual is affected and formed by trying to accomplish what he or she is urgently motivated to do. An attachment-based account of psychopathology includes conscious and unconscious processes, a central role for anxiety, affect, and relationships, a full understanding of defenses and conflict, a basis in individual development and childhood experience, and a broad application to how an individual manages adaptation—self-regulation and interaction with the environment. It encompasses these elements in a manner that accords with current

biological principles, developmental research, and detailed observations of infants, children, and their mothers.

As noted in Chapter 1, the developmental research that has helped to validate attachment theory has also turned attachment theory away from the development of an individual psychology with greater clinical utility—the occasion for the disappointment that Bowlby expressed in 1988. Perhaps ironically, it was Mary Ainsworth's seminal research—which so emphasized the significance of the process variable of sensitive responsiveness of a mother to her child—that fostered the preeminence of developmental research on attachment classifications. In part this was the result of the utility and robustness of the Strange Situation methodology as a research measure and the extent to which this methodology has become a hallmark of attachment research. The Strange Situation has from its origins been specifically tied to conceptualizing attachment from the perspective of classifications, and the utility and pervasiveness of the measure has rendered attachment classifications as the conceptual building block of research derived from Bowlby's theories.

But while attachment classifications have found some significant and useful clinical application (e.g. Dozier & Tyrrell, 1998; Roberts & Noller, 1998), they have not resulted in an extensive clinical literature (Slade, 1999); nor have they led to a focus on the psychology of the individual. In part, this is the result of the small number of attachment

classifications that have been the focus of most research—usually only four, including the non-pathological secure category, significantly fewer than the nine categories originally envisaged by Ainsworth. As Magai (1999) has suggested:

> The very sweep of the broad attachment style classifications that produce reliable generalizations concerning affect regulation and other behaviors may inadvertently mask more idiosyncratic but developmentally important patterns. (p. 799)

Rutter (1997) makes a similar point:

> [The Strange Situation] procedure is based on just 20 minutes of behavior, with the categories mainly reliant on the brief period following reunion. It can scarcely be expected to tap all the relevant qualities of a child's attachment relationships....The Strange Situation coding procedure results in discrete categories rather than in continuously distributed dimensions....It is not at all obvious that discrete categories best represent the concepts that are inherent in attachment security. (p. 21)

When one has described an individual in terms of placing him or her in one of four categories, not enough has been said. While the clinician may be usefully alerted by the classifications to look for particular kinds of defensive operations, he or she is not led by the nosology of four-part classification to a detailed analysis of individual processes of experiencing. It is natural then for the clinician to look elsewhere, to

other conceptual frameworks, for guidance. The schema of attachment classifications applies at too high a level of generalization, as though Freud's clinical theory had stopped at the level of oral, anal, or phallic fixation. What is needed instead for clinical purposes is a focus on the processes and adaptations by which attaching is accomplished, with an account of the consequences of these processes and adaptations for the individual's general relational functioning. It is possible to do this in a way that emphasizes the individual variability of experience while remaining within a coherent and generalizable conceptual framework by detailing the pathological processes identified by Bowlby, with an emphasis on the role of communication and affect.

Bowlby's Account of Psychopathology and Defenses in Terms of Coordinated States and Affective Communication

Bowlby's account of psychopathology may be elaborated in terms of the conceptual framework of coordinated communicative states and affective communication that were described in the preceding chapter.

It was argued in the preceding chapter that the set goal of attachment behavior might be better described as a coordinated communicative state rather than as proximity and that although the concept of a coordinated state comes from Tronick's work (and is closely related to the conceptions of Stern, Beebe and Lachmann), it is highly consistent with both ethological theory and Bowlby's own 1973 alteration

in the meaning of "proximity." As part of their attachment behavioral systems, babies experience a primary motivation to achieve a coordinated state with their principal caregiver. As previously discussed, there is not any necessary extrinsic motivation; babies are well-prepared and strongly disposed from their first days of life to seek a synchronized exchange of affectively rich signals with their caregiver. They look for attunement. The discovery of the interactional "rules" and idiosyncratic contours of achieving a coordinated state with a particular individual constitutes an infant's developing attachment relationship and the first building blocks of his internal working model of himself and an other in relationship. Coordination is constitutive of sensitive responsiveness and availability; miscoordination constitutes insensitivity, non-responsiveness to the signals of the other, and unavailability. *A coordinated state is how an individual "knows" or experiences that attachment has occurred; it is the experience that is sought by the attachment-seeking individual.*

The achievement of a coordinated state is experienced as innately rewarding and failure to achieve the state is innately aversive. According to Tronick (1989; 1998; Weinberg & Tronick, 1998; Tronick et al., 1978), this is because the experience of coordination is directly tied to the infant's affective state and internal affective regulation and consequently to his or her ability to maintain a state of self-organization. In a coordinated state, the mother helps the infant to regulate his or her

internal affective experience through coordinating with his or her affective communication. Their interaction occurs cooperatively at the interface of intraindividual and interindividual affect regulation. In non-coordination, the infant is left to manage his or her affective self-regulation on his or her own; this is disruptive and inherently aversive.

What is coordinated with by the mother is the social and affective state of the child. Because coordination is innately rewarding and miscoordination innately aversive, the baby, and thereafter the child and the adult, is impelled to achieve a coordinated state. This, it is argued, is the internal process at the core of the attachment of a particular child to a particular mother.

It is important to note here that coordination includes the mother's responsive cooperation and coordination in permitting the withdrawal or autonomy of the infant, in allowing the experience that Winnicott described as being alone in the presence of the other. This may take place in at least two forms. One of these involves the infant's or child's seeking to disengage from emotional involvement with the mother in the interest of affective self-regulation, as for example when a game of peek-a-boo has become *too* exciting. One of Tronick's (1989) modal examples of *miscoordination* between a mother and infant is the mother's intrusively engaging the infant when the infant has communicated a wish for diminished engagement in order to calm himself from overexcitement. The infant's communication of a wish for diminished

engagement is understood by Tronick as an effort at affective self-regulation that is frustrated by the miscoordinating mother, with aversive consequences for the infant. The second form of coordinated non-engagement between mother and infant or child involves the latter's exploration of the environment. Tronick counts as coordination the matching of social state that occurs when both mother and infant look at objects rather than at each other, with the mother's looking occurring in support of the baby's interest. This is an early instance of what Bowlby termed the operation of the exploratory behavioral system, which will later express itself in more autonomous behavior, and which occurs fluently in the context of secure attachment. Appropriate autonomous and exploratory behavior is facilitated by security-engendering mothers (Ainsworth, c. 1976; Ainsworth et al., 1978; De Wolff & van IJendoorn. 1997). Blatt and his colleagues (e.g. Guisinger & Blatt, 1994) have suggested that interpersonal relatedness and self-definition occur as two distinct, although dialectically related, developmental lines (p. 104). From the perspective of coordinated states (which include coordination with autonomy) and attachment theory (which includes a relationship between security and exploration), the relationship between relatedness and self-definition appears more intrinsic: self-definition best occurs and perhaps can only occur in the context of a relatedness that embraces it. As Levine and Tuber (1992) write, quoting Bretherton:

> Attachment theorists have tended to focus equally on individuation and relatedness as they "have seen attachment not as an initially symbiotic relationship from which the child must eventually emerge as differentiated and separate, but rather as a relationship that, from the beginning, permits optimal autonomy in the context of emotional support" (Bretherton, 1987, p. 1075). (p. 84)

In terms of the winnowing of communicative potentials and the exclusion or inclusion of affective self-states, autonomy occurs most fluently where relatedness permits it. Sroufe (1996) captures this sense of the relationship of coordination and autonomy when he writes, "The child achieves a degree of autonomy without at first even recognizing the separateness involved" (p. 205). In support of his observation, Sroufe quotes a beautiful description by Soren Kierkegaard of a mother's helping her child to walk that is immediately recognizable as coordination with autonomy and as the support of a trusted companion:

> The loving mother teaches her child to walk alone. She is far enough from him so that she cannot actually support him, but she holds out her arms to him. She imitates his movements, and if he totters she swiftly bends as if to seize him, so that the child might believe that he is not walking alone...And yet, she does more.
>
> Her face beckons like a reward, an encouragement. Thus, the child walks alone with his eyes fixed on his mother's face, not on the difficulties in his way. ***He supports himself by the arms that***

> *do not hold him* and constantly strives toward the refuge in his mother's embrace, little suspecting that in the very same moment that he is emphasizing his need of her, he is proving that he can do without her, because he is walking alone. (in Sroufe, 1996, p. 205, emphasis added here)

Separateness and autonomy at more advanced stages may also occur in the context of coordination, for example through coordination about plans for separation. In a study of three- and four-year-old children in a variation of the Strange Situation (Marvin & Greenberg, 1982), the mother explained her departure to her child before her second absence, was permitted to expand on the purpose of her departure, to attempt to obtain the child's agreement, and to suggest activities for the child during her absence:

> [Some children] attempted to construct a joint plan with their mothers concerning her departure. If the attempt was successful, the children were relaxed and sociable upon reunion. If the attempt was unsuccessful, the children were distressed and controlling upon reunion. (p. 58)

Thus, the ability to bring separation within the orbit of coordination appears to influence the behavior of children in the Strange Situation. In a related study of profoundly deaf children (Greenberg & Marvin, 1979, cited in Marvin & Greenberg, 1982), the authors found that the ability to make such joint plans "was related to the mother-child dyad's level of

communicative competence, rather than merely to age" (p. 50). As Williams (1992, quoted in Mitchell, 1997) has put it, "The road to interiority passes through the other."

For Bowlby, psychopathology in the pursuit of attachment arises primarily through two processes: the operations of internal working models and the defensive processes that are required by these models.

Internal Working Models.

Pathology arises through the construction of internal working models of the attachment figure and the self that incorporate beliefs, explanations, and expectations regarding unavailability and non-responsiveness, including the attributes of the self that occasion non-responsiveness and the possible conditions under which such responsiveness as is available might be obtained. Internal working models incorporate pathology because they guide the behavior and expectations of the individual in regard to how the environmental caregiving system will respond to the operation of the attachment system. They therefore guide the individual with regard to the regulation of his or her own internal experience (through the defensive processes discussed below), the regulation of his or her demands on and relationship to the caregiver, and the regulation of his or her exploratory behavior (which is conditioned on expectancies regarding availability of the attachment figure). *These self-regulatory processes require that the*

individual fit his experience and behavior to the conditions under which the attachment figure is most likely to provide caregiving. They denote how the self must be experienced in order to obtain a relationship with the other; they denote which states in the other must be elicited and which avoided in order to obtain a caregiving response. The experiential or psychological goal is to avoid the dreaded and intensely anxious state of involuntary aloneness; the biological or evolutionary function is to fit the individual to the conditions under which survival-enhancing proximity, responsiveness, and caregiving may be obtained.

There is nothing of a malfunction about this process; it is not pathological in and of itself, but represents a naturally-selected adaptive fitting of the self to the environment. These internal working models were accurate as well as adaptive in the childhood situation in which they arose, where, according to Bowlby, they probably provided the best that could be gotten; but in their persistence beyond those original conditions, they now distort, mislead, and constrain the individual in new and different circumstances (Bowlby 1973, 201-209; Hinde and Stevenson-Hinde 1991), leading him to recreate the interpersonal and intrapsychic experience of his childhood in ways that distort and delimit present experience. The first biological mandate for the developing infant and child is to survive, and survival for the human infant rests on attachment to the caregiver. The difficulties attendant on particular strategies for remaining close to the caregiver come later, in

environments external to the original relationship with the particular caregiver.

In his emphasis in *Separation* (1973) and subsequently on the importance of *emotional availability* and *responsiveness*, Bowlby makes it clear that he is conceiving of presence and absence of the attachment figure as a psychological experience of being-with or being-alone and not as a mere matter of physical presence or absence. *The psychological experience of being-with rests on the extent to which what one is feeling and thinking is registered by one's companion and is then reflected in the companion's communication and behavior. It is an experience of being understood, of attunement, of a coordinated state.*

This is an idea with a profound basis in psychodynamic understandings of the relationship between mothers and infants and, as noted earlier, is an extensively described process that one finds in Winnicott's description of the mirror-role of the mother's face, in Stern's conception of selective attunement, in Beebe's and Lachmann's description of mother-infant dyadic interaction, in Tronick's studies of affective communication and coordinated states between mothers and infants, and in Fonagy's concept of the reflective self function (Fonagy & Target, 1997). It is the process to which Bowlby assigns motivational primacy as the sought after goal in the search for attachment, and which he thereby directly links to the vicissitudes of attachment experiences and their consequences for the individual. With the reader's indulgence, I

would like to quote serially what each of these other authors says about this basic process of finding a particular version of the self through the sought after connection to the mother. In chronological order, we begin with Winnicott (1971), who writes:

> What does the baby see when he or she looks at the mother's face? I am suggesting that, ordinarily, what the baby sees is himself or herself. In other words the mother is looking at the baby and *what she looks like is related to what she sees there.* All this is too easily taken for granted. I am asking that this which is done well by mothers who are caring for their babies shall not be taken for granted. I can make my point by going straight over to the case of the baby whose mother reflects her own mood or, worse still, the rigidity of her own defences....Many babies...have a long experience of not getting back what they are giving. They look and they do not see themselves....The mother's face is not then a mirror....The baby quickly learns to make a forecast: 'Just now it is safe to forget the mother's mood and to be spontaneous, but any minute the mother's face will become fixed or her mood will dominate, and my own personal needs must be withdrawn, otherwise my central self may suffer insult.' (pp. 112-113)

Describing a very similar process in different conceptual language, Stern (1985) writes:

> Selective attunement is one of the most potent ways that a parent can shape the development of a child's subjective and interpersonal life. It helps us account for "the infant becoming the child of his particular mother" (Lichtenstein 1961)....In essence, attunement permits the parents to convey to the infant what is shareable, that is, which subjective experiences are within and which are beyond the pale of mutual consideration and acceptance. Through the selective use of attunement, the parents' intersubjective responsivity acts as a template to shape and create corresponding intrapsychic experiences in the child. It is in this way that the parents' desires, fears, prohibitions, and fantasies contour the psychic experiences of the child. The communicative power of selective attunement reaches to almost all forms of experience. (pp. 207-208)

Similarly, Beebe and Lachmann (1988b) write:

> The characteristic patterns of mutual influence in purely social exchanges between mother and infant in the first 6 months of life provide one important basis for emerging self- and object representations. The dynamic, reciprocal interplay, as each partner influences the other, creates expected patterns of exchange that are represented in a presymbolic form during the first year. These early representations are abstracted toward the end of the first year and form the basis for emerging symbolic self- and object

> representations. Empirical studies have shown mutual influences in infant-caretaker matching of affect and timing. These matching experiences provide each partner with a behavioral basis for knowing and entering the other's perception, temporal world, and feeling state, and may contribute to later experiences of being attuned, known, tracked, or "on the same wavelength."...These mutual influence patterns illustrate qualitative variations in the nature of relatedness that will organize emerging self- and object representations. (p. 331)

And, discussing a child's experience of successfully coordinated or failed and miscoordinated affective communication with his or her mother, Tronick (1989) writes:

> How is it that some children become happy and curious, whereas others become sad and withdrawn, and still others become angry and unfocused? My answer is that these different outcomes are related to the working of the affective communication system in which the infant participates, especially to the balance of the child's experience of success or failure during his or her social-emotional interactions....The achievement of a coordinated state successfully fulfills the infant's interactive goal and engenders positive affect, whereas an interactive error fails to fulfill that goal and engenders negative affect. (p. 116)

Tronick continues:

> I (Tronick, 1980) have found that those infants who chronically experienced miscoordinated interactions disengaged from their mothers and the inanimate environment and distorted their interactions with other people. Similar effects are seen in the infants of depressed mothers: They have more negative interactions with unfamiliar adults, and those infants who are more negative during face-to-face interactions are also more negative in other situations (Tronick & Field, 1986). Of course, an infant could completely give up the goal of engaging his or her mother. However, the young infant may not be able to give up this goal, and even if he or she could, the consequences might be even more severe (Bowlby, 1982). (p. 117)

Finally, Fonagy et al. (1991) write:

> Attachment security in infancy is based on parental sensitivity to, and understanding of, the infant's mental world....The notion of security takes on a somewhat new meaning. Placing our emphasis upon the parent's confident anticipation of the child's mental state as one of the essential processes underlying secure attachment may force us to reconsider the nature of security in the child's mind. In our view, a child may be said to be secure in relation to a caregiver to the extent that, on the basis of his or her experience, he or she can make an assumption that his or her mental state will

> be appropriately reflected on and responded to accurately. (pp. 214-215)

The infant-experiences that are described by these authors are the basis for a psychodynamics of attachment. These infant-experiences of coordinative communication are dense, intricate, and affectively charged, and they each entail a variegated experience of what will and will not be coordinated with; they each require a detailed process of self-regulation and shaping of self in the presence of an other in order to remain related to that other. As Tronick suggests, the infant, by the first principle of attachment theory, has no choice but to seek coordination with the other. As Fonagy et al. (1995) write, in concordance with Bowlby, "The biological need to feel understood...takes precedence over almost all other goals" (pp. 268-269).

But the infant invariably meets an imperfectly coordinating other and being understood is not a uniform or homogenous experience. In any of our interactions, some aspects of what we are experiencing are understood better than others. Bowlby's concern was with those aspects of our perceptual, cognitive, and affective experiencing that were systematically excluded from our coordination and communication with our caregiver and that were thereby excluded from our internal working models of what was allowable in the self and in interaction with the other. He refers to aspects of self-experience that could not be communicated to the caregiver as defensively excluded.

The Process of Defensive Exclusion.

Defensive exclusion is the second process through which pathology arises for Bowlby—through the operations and effects of the defensive processes that are required to shape ourselves in order to reach coordination with and obtain reliable responsiveness from our attachment figure. These defensive processes become encoded in our internal working models, and they distort our perception of the environment, the self, and other persons by excluding information about them. They are required to fit the individual to his caregiver and thus to maintain as much coordination as is possible under the conditions imposed by this figure. They contain and limit the anxiety that results from the anticipated non-coordination and non-availability of the attachment figure. These goals are accomplished by excluding from awareness attributes of the other, events in the external world, and experiences of the self, including affective self-experiences and their related self-states, that would threaten the coordinative responsiveness of the caregiver if they were recognized, communicated, or acted upon (Bowlby, 1980, pp. 44-74; 1985;1988, pp. 99-118).

These defensive exclusionary processes are motivated by the very specific antecedents and conditions of non-responsiveness and responsiveness in the caregiver, by patterns in what is and is not coordinated with. If the communication of anger to the caregiver

predictably decreases coordination, the experience of anger is excluded from awareness, for example by being redirected onto another person. If awareness of the caregiver's selfishness predictably elicits non-responsiveness, the selfishness may not be recognized or perhaps may be misattributed to the self. If the caregiver does not coordinate with the child's assertion of independence or separateness, then the child will exclude knowledge of and become anxious in the presence of his own independence and competence. If the caregiver presents very few opportunities for the child to receive caregiving, the child becomes less aware of his own needs for comfort. The affective contours and reflective capacities of the self are shaped and constrained by these processes.

Bowlby's conception of defensive exclusion is based on an information-processing model, incorporating the work of Erdelyi (1974, but also see 1985), Norman (1976), and Dixon (1971), and emphasizes the exclusion of information at the levels of perception, cognition, memory, and communication. Such defensively excluded information is excluded from further processing with the result that behavioral processes may become deactivated, constraining the individual's options in the real world. Bowlby believed that defensive exclusion was the central component in the full array of defenses identified by psychoanalytic theorists and clinicians. Bowlby (1980) writes:

> The basic concept in the theory of defense proposed is that of the exclusion from further processing of information of certain specific

> types for relatively long periods or even permanently. Some of this information is already stored in long-term memory, in which case defensive exclusion results in some type of amnesia. Other information is arriving via sense organs, in which case defensive exclusion results in some degree of perceptual blocking....The many other phenomena described by clinicians as defensive, notably certain types of belief and certain patterns either of activity or inactivity together with their associated feeling, can be understood within this framework as being the profound consequences of certain significant information having been excluded. Correspondingly, analytic therapies can be understood as procedures aimed at enabling a person to accept for processing information that hitherto he has been excluding, in the hope that the consequences of his doing so will be equally profound. (pp. 45-46)

The concept of defensive exclusion requires that a person block information that at some level he or she already possesses or has some limited type of access to and Bowlby was concerned to explain how this could be so. His solution was to invoke a multi-stage model of information processing, based on the work of Erdelyi, Dixon, Norman, and others. In this model, the organism is constantly bombarded with vastly more information, from both internal and external sources, than can be fully processed or responded to; information processing therefore

proceeds through a series of stages as it is evaluated in regard to personal relevance and past experience. In optimal, unimpeded operation, information is progressively assessed for relevance to the organism's goals, passing through a series of stages and evaluations prior to consciousness. This involves "the processing of sensory inflow for meaning outside awareness" and "can influence also the further inflow of that very information itself" (p. 50). As this process proceeds, much incoming information—whether from intraorganismic sources or from the senses—is excluded. Other information is passed through for further processing and integration, leading at the highest levels of processing to full consciousness.

Using Erdelyi's, Norman's, and Dixon's work and ideas, Bowlby summarizes the processing and possible fates of information about the organism's internal and external environment as follows:

> On the basis of findings such as those described cognitive psychologists propose that an analytical mechanism exists that performs a series of tests outside awareness on all incoming messages. As a result of these tests information can undergo one of several fates amongst which the following are easily specified:
>
> —it can be excluded without a trace
>
> —it can be retained long enough outside consciousness in a temporary buffer for it to influence judgement, autonomic responses and, I believe, mood

> —it can reach the stage of advanced processing associated with consciousness, and in so doing influence the highest levels of decision making and also become eligible for long-term storage. (p. 49)

Thus, in this conception, information can either be fully excluded and not influence the organism; partially processed and partially excluded but able to influence the organism outside of awareness; or, fully processed, becoming conscious and influencing decision-making. Fraley, Davis, & Shaver (1998) have described how processes other than those describe by Erdelyi, Dixon, and Norman could lead to similar patterns of defensive exclusion.

Exclusion, Hypervigilance, and Communication in Strategies for Coordination.

Bowlby describes a two-part process involving both perceptual defense and perceptual vigilance. Perceptual vigilance refers to heightened attention to—enhanced processing of—some types of information that is assessed by the organism as especially relevant. Thus, his description of the information processing system includes the idea of valences or weightings that produce both the selective exclusion and selective inclusion of information from internal and external sources. Bowlby does not fully develop the clinical implications of perceptual vigilance, focusing his attention on processes of exclusion.

But perceptual vigilance may also be an aspect of defensive exclusion in that by overattending to some kinds of interactional information in order to reduce one's suffering, other information is ignored. Such a process might in part underlie psychoanalytic defenses such as reaction formation, projection, and displacement. In terms of attachment and the inhibition or enhancement of affects and affective communication, hypervigilance is a factor in the processes that underlie insecure attachment. Avoidant infants in the strange situation often hyperattend to play with toys, perhaps to distract themselves and help exclude information about their distress and desire for comfort, at the moment of their mother's return (Main & Weston, 1982); and, indeed, their mothers are more likely to responsively coordinate with them around issues of skill and object mastery (Haft & Slade, 1989). Fraley, Davis, and Shaver (1998) have argued that dismissing-avoidant adults "keep the attachment system relatively inactive by focusing on thoughts that are not associatively linked to attachment-related concerns" (p. 262) and that this process is supported by a defensive memory organization that facilitates focus on matters unrelated to attachment. Ambivalent infants are hypervigilant to fear-inducing stimuli in the strange situation (Ainsworth, 1992) and in other situations (Miyake, Chen, & Campos, 1985) and preoccupied-ambivalent adults over-report symptomology and distress compared to secure or dismissing-avoidant individuals (Dozier & Lee, 1995; Dozier & Tyrrell, 1998).

Cassidy (1994) has discussed avoidant and ambivalent attachment in terms of the minimizing and suppression of emotions or the heightening of emotions via processes of emotion regulation. She views the process of emotion regulation as interwoven with the suppression or heightening of affective communications. In terms of excluded states, the distortion of experience, and the coherence of behavior, Cassidy's analysis supports the conclusion that both avoidants and ambivalents exclude information that would be available to the individual if the emotional distortions were not necessary in order to maintain coordination with the mother. In the case of the avoidants, the infant and child would have more information about their own distress and desire for comfort. In the case of the ambivalents, the individual would have more information related to his or her own interest in and exploration of the environment.

Avoidants exclude information about attachment longings and distress because fully processing it would lead to a painful experience of rejection by a dismissing mother. Ambivalents exclude information about the environment because to process it risks losing the involvement of an inconsistently attentive and preoccupied mother. "This *accurate* perception of the mother is thought to necessitate a *distorted* perception of the environment" (Cassidy, 1994, p. 242). In both cases, the pain derives from the loss of coordination with a particular type of mother and is avoided by exclusionary forms of processing. In both cases, the

process is effected by the child's pattern of affective communications and by internal emotion regulation in relation to these communications and to the communicative responses of the mother.

The notion of defensive exclusion and of hypervigilance in the service of exclusion entails a concept of the existence of the possibility of relatively free and open access to information and communication about self-experience and the environment. This is the situation of secure attachment, which is characterized by the most open communication patterns. Cassidy (1994), citing Bretherton (1990), writes:

> Bretherton makes a convincing case that the flow of communication between partners has important consequences for the security/insecurity of the relationship. She described "open, fluent, and coherent" dyadic communication, in which neither partner is selective about either sending or receiving signals, as characteristic of secure dyads. Her focus is on the importance of communication signals, and these are in large part emotion signals. (p. 234)

The key to the problematics of defensive exclusion and defensive communication is that information from the environment or from within the organism that *is* personally relevant and that would normally be incorporated in further processing leading toward consciousness, aware feeling, and behavior, is nonetheless excluded. "Where defensive exclusion differs from the usual forms of [perceptual] exclusion the

difference lies not in the mechanisms responsible for it but in the nature of the information that is excluded" (Bowlby, 1980, p. 69). In the case of defensive exclusion, Bowlby argues, information is excluded because it "is of a kind that, when accepted for processing in the past, has led the person to suffer more or less severely" (p. 69).

There is a subtle but critical distinction expressed in this last quoted sentence: The difference is between information that when processed allows us to avoid a danger, thereby reducing suffering, and information that when processed produces a danger; between information that when further processed allows us to avoid suffering, and information that in itself, when further processed, leads to suffering. Under his definition, one would not usually exclude information about an external threat when, in the past, processing information about the threat leads to escape or amelioration of the danger. His concern in defining the process of defensive exclusion is with *information that is itself a threat if it is further processed.*

To illustrate this distinction, first with a non-clinical and then with a clinical example: One would not normally exclude information about the temperature of a too hot cup of coffee, because processing information about the hotness of the coffee has in the past enabled one to avoid being burned; but under the same definition and in the same situation, one might temporarily exclude or slow down the processing of information about one's own appetence for the coffee because the full

unimpeded and rapid processing of one's desire might lead to an incautious gulp of the very hot liquid and consequent suffering. A structurally similar but clinical example: One would not exclude information about an attachment figure's anger if processing information about the caregiver's anger has in the past enabled one to reduce one's suffering; but one would exclude information about one's own anger at the caregiver if in the past the full processing of one's anger has led one to get "burned" because of the way in which one's anger is responded to by the attachment figure—for example, by retaliation or withdrawal. In the latter case, important information about one's own internal state has been defensively excluded from further processing.

In the case of defensive exclusion, then, information about the self and the environment is selectively excluded precisely because it *is* personally relevant, but part of its relevance is that it is dangerous to process—to know and to feel. Defensive exclusion is concerned with what we cannot let ourselves know, feel, and do.

In the above construction, the principal reason that information might have led to suffering in the past, and therefore be dangerous to know and feel, is because it has led to the involuntary loss of a coordinated state in the past. Our concern, of course, is not with purposeful or occasional non-coordination: as noted previously, Tronick (1989) has found that mother-infant pairs spend only about 30% of their interactive time in a coordinated state; Winnicott (1971), regarding

mirroring, writes that "nothing can be said about the single occasions on which a mother could not respond" (p. 112). Indeed, there is room in the frequency with which miscoordination normatively occurs in well-functioning dyads for a conception of optimal miscoordination that provides the infant with frequent experience of and practice in the reparation of interactive errors (Tronick, 1998), as well as for the miscoordination that is part of a conscious and purposeful effort by the mother to shift the infant's state (Stern, 1985).

Our concern here is rather with non-purposeful but systematic non-coordinations that occur because they are uncomfortable or defended against for the mother and that systematically exclude particular affective communications and affective states for the child. Stern, after describing an example in which a little girl's enthusiasm was attuned (or coordinated) with by her mother *only* when "her bubble of enthusiasm had just broken" (p. 209), writes:

> [Misattunements] are covert attempts to change the infant's behavior and experience.... "Successful" misattunements must feel as though the mother has somehow slipped inside of the infant subjectively and set up the illusion of sharing, but not the actual sense of sharing. She has appeared to get into the infant's experience but has ended up somewhere else, a little way off. The infant sometimes moves to where she "is," to close the gap and establish (or re-establish) a good match. The misattunement then

> has been successful in altering the infant's behavior and experience in the direction the mother wanted.
>
> This is a very common and necessary technique, but if it is used excessively or selectively for certain types of experiences it may throw open to question the infant's sense of and evaluation of his or her own internal states or those of the other....Misattunements can be used not only to alter an infant's experience but to steal it, resulting in "emotional theft." (p. 213)

Coordinated States and the Dyadic Expansion of Consciousness.

The systematic nature of what is and is not coordinated with is key to the conception of psychopathology that is being described. Tronick (1998) argues that the very creation of an individual's consciousness rests on the process of coordination and the vicissitudes of achieving a coordinated state. "It is my hypothesis that the social emotional exchanges of mothers and infants (and of all humans) has the potential for expanding each individual's state of consciousness with powerful experiential and development consequences" (p. 295). This, he argues, is because the mother's coordination with the infant permits the infant "to incorporate and integrate increasing amounts of meaningful information into more coherent states" (p. 295). Without the mother's coordination, the infant is not capable of integrating the information in a self-

regulating manner. The infant requires the mother's dyadic attunement and coordination to incorporate new experiences. Tronick writes:

> The caregiver provides the infant with regulatory input, *scaffolding* in Bruner's (1975) terminology, but unlike Bruner, the scaffolding in this case is emotional not cognitive, which can expand the complexity and coherence of the infant's state of brain organization. Thus the expansion of the infant's state of consciousness emerges from the process of the mutual regulation of emotion. During an interaction, information about the infant's state of consciousness (e.g., intentions, affects, and arousal level) is conveyed through affective configurations that are apprehended—come to be known—by the mother. In response, the mother provides the infant with regulatory support that permits the infant to achieve a more complex level of brain organization. (p. 295)

In this conception, affective communications that are not coordinated with result in disregulation and negative affective experience, in Bowlby's phrase to "more or less suffering". The information and the self-state (or potential self-state) that are part of these affective communications are then lost to integration and to consciousness, with important consequences for the individual. This is a model of defensive exclusion at an early developmental stage and at a microanalytic level not attempted by Bowlby.

Tronick's model of the effect of coordinated states on brain organization and consciousness may explain findings that link several of the issues with which our argument is concerned, especially emotional communication between mothers and infants, to measurable and persistent differences in patterns of brain activation among individuals. For example, a series of studies reviewed by Dawson (1994) linked asymmetries in right or left frontal lobe activation (in both infants and young adults) to all of the following: the expression of different emotions; differences among individuals in innate action tendencies, specifically the tendency to explore and approach or to withdraw and flee; variations among individuals in thresholds for the experience of distress and irritability; and the emotional socialization experiences of infants in communication with their mothers. On the basis of her review of these studies and on the basis of her own research (Dawson et al., 1992a; Dawson et al., 1992b; Dawson et al., 1992c), Dawson (1994) concluded, consistent with Tronick's model, that "socialization, particularly parents' responses to the infant's emotional behavior (Malatesta & Haviland, 1982), can influence tonic frontal activation asymmetries" (p. 137), with enduring consequences for the individual's emotional processing and experience.

Although it arose from detailed studies of maternal-infant communication, Tronick's model of coordinated states and the dyadic expansion of an individual's consciousness is explicitly not meant to

apply to only infants and mothers. Rather, he views his model as a more general statement of the role of communication in the organization of consciousness "of all humans" and as directly applicable to the therapeutic process. Tronick describes the therapeutic process as essentially an expansion of the patient's capacity for consciousness that occurs through coordinated social exchange and emotional communication between the therapist and the patient. Tronick does not provide a basis for determining where the patient and therapist should work to create coordination and dyadic expansion. Bowlby's concern, as we have seen, is on what was systematically excluded in securing attachment to the caregiver. Tronick's account strongly supports a therapeutic focus on important but excluded coordinated states from an individual's past, with a consequent expansion of the states of consciousness that are available to an individual. Tronick (1998) writes:

> The hypothesis is that the patient and the therapist create dyadic states of consciousness. These states of consciousness emerge from the mutual regulation of affect between the patient and the therapist. When these dyadic states are achieved, the state of consciousness of the patient expands and changes....From a subjective perspective, the patient experiences "something new, something expanded and something singular" with the therapist and this experience is incorporated into the patient's future exchanges with the therapist. (p. 298)

So, in Tronick's conception as in Stern's and Bowlby's, patterns of communication between mothers and infants determine what is to be excluded from and included within the infant's self-experience based on what the mother is willing to sensitively respond to or coordinate with. Bowlby (1980) writes, "Defensive exclusion is regarded as lying at the very heart of psychopathology" (p. 65). Tronick views psychotherapy as a process of expanding coordinated states through communication between therapist and patient. Describing his own view of psychotherapy, Bowlby (1985) writes:

> Our role is in sanctioning the patient to think thoughts that his parents have discouraged or forbidden him to think, to experience feelings his parents have discouraged or forbidden him to experience, and to consider actions his parents have forbidden him to contemplate. (p. 198)

The Relationship between Coordinated States and Internal Working Models.

How are coordinated states and internal working models related to each other? Consistent with attachment theory, internal working models may be viewed as strategies and rules for achieving a coordinated state with a particular caregiver that evolve from interactions with the attachment figure as an infant's and child's developmental level advances. They both leave out and leave in particular affective

communications, relational configurations, and self-states on the basis of what in the self has been successfully coordinated with by the principal caregiver in the past. Coordinated states, as previously discussed, are taken to be the set-goal of the attachment behavioral system. Patterns of affective communication in the coordinated states that have been successfully achieved in the past are available for coordination in the future. Patterns of affective communication that have not been coordinated with in the past are subject to defensive exclusion and left out of interactions in the future, with delimiting and distorting consequences for the individual.

Bretherton (1990) has suggested that internal working models should be understood as constituted by and arising out of communication patterns (patterns of coordinated states in our present terminology) between an infant and his attachment figure, that this is the principal implication of Ainsworth's work, and that what is most specifically at issue in this emergence is the relative openness of these communication patterns in terms of what is and is not sensitively responded to. "A caregiver's disavowal or discounting of an infant's communicative signals leads to the elimination of specific topics from reciprocal, mutually validating, communication" (p. 63) with the result that such excluded material is dissociated from conscious processing and becomes relatively inaccessible within an individual's internal working models (p. 64) with problematic consequences.

Bretherton suggests that this process is developmentally elaborated in a manner consistent with the infant's, toddler's, and child's developing cognitive and communicative capacities, and that the processes remain operative—and constricting—for adults. The critical juncture for our purposes is the developmental movement from communication patterns in infancy to templates for relationships, a shift toward the end of the first year when "instead of moment-to-moment reciprocal responsiveness, transactions...are increasingly based on the infant's developing representations or, as Bowlby termed them, internal working models of self and caregiver in the attachment relationship" (p. 62). New interactions are assimilated to these representations of past interaction patterns which are themselves based on patterns of moment-to-moment communicative responsiveness and non-responsiveness, communicative inclusions and exclusions. The developing individual has reached the territory of relational configurations—what forms and patterns of relationships are possible with others. Patterns of communicative inclusions and exclusions are not only woven into the fabric of relational configurations; they are their foundations. Fatefully, for children and adults, self-experience that was communicatively excluded remains excluded and therefore communication *about* interactions and relationships becomes delimited and constrained. It becomes difficult to know and to talk about one's relationships; it

becomes especially difficult to talk about precisely those aspects of one's relationships that are problematic because they incorporate exclusions.

As communicative exclusions are incorporated in internal working models, they delimit the possible relational configurations that the once-infant, now-adult can have with others. This, of course, includes the communicative patterns that a former-child-and-now-a-mother can have with her own infant and child, thus providing a basis for the intergenerational transmission of communicative exclusions from parent to child; what was not coordinated with *in* the mother cannot be coordinated with *by* the mother. Haft and Slade (1989) found that "securely attached mothers are more attuned to their babies than are those mothers who are insecurely attached. Secure mothers attune to a range of infant affect, whereas insecure mothers attune to particular affects and not to others" (p. 157).

As Bretherton notes, Stern (1985) also describes a developmental process by which early moment-to-moment communicative attunements evolve in a an age-appropriate way toward the complex patterns of relatedness that are relational configurations:

> The clinical processes I have just described [selective attunement] have usually been discussed in terms of mirroring. I maintain that mirroring is really three different interpersonal processes, each having an age-specific use: appropriate responsivity and regulation (during core-relatedness); attunement (during intersubjective

> relatedness); and reinforcement shaping and consensual validation (during verbal relatedness)....We can now begin to see separate continuous lines of development for separate internal states. *The same phenomena...are seen to be under similar developmental pressures from the self-regulating other and from the subjective state-sharing other, that is, from the mother, in different domains of relatedness.* The self-regulating other acts with her physical presence, the state-sharing other acts with her mental presence—but both act in concert over time to create characteristic patterns that may last a lifetime. (pp. 210-211, italics added)

Procedural and Representational Knowledge within Internal Working Models.

Although defensive exclusions are incorporated within and have important effects at the representational level of internal working models, they are themselves primarily a form of or based on procedural knowledge. This is both because of the preverbal developmental stage at which they first arise, even if they continue to be elaborated in more representational forms, and because of the nature of what they are in themselves. It would be more accurate to call them encoded experiences rather than to describe them as something that is known. The patterns of communication that are *not* defensively excluded, that are communicatively coordinated with, are also procedural rather than

representational in nature. They are what we know how to do in interacting with others. Creating coordinated states through affective communication and within particular relational configurations is something that we know how to do in certain ways and cannot do in other ways. They are a result of experiential learning, like learning to ride a bicycle. The ways in which we have learned *not* to create a coordinated state are forms of experience that we do not know how to have; rather, we know how to *not* have them, to avoid and to defensively exclude them. This is the sense in which patients are the prisoners of their own pathology, not wanting to repeat their patterns by helpless to do otherwise.

In discussing the dyadic, shared consciousness that is a result of a coordinated state, and of which defensive exclusions are taken here to be both a constituent and an outcome, Tronick (1998) is explicit about their procedural nature. He writes, "Dyadic states of consciousness...are purely emotional and procedural (implicit)" (p. 298). He is equally clear that this is the case for adults in a patient-therapist relationship, as it is for mothers and infants. Coordinated states and the defensive exclusions that delimit them are part of what Lyons-Ruth (1998) calls "implicit relational knowing." She writes:

> The interactional processes from birth onward give rise to a form of procedural knowledge regarding how to do things with intimate others, knowledge we call implicit relational knowing. This

> knowing is distinct from conscious verbalizable knowledge and from the dynamic unconscious. (p. 282)

She continues:

> Procedural representations are rule-based representations of how to proceed, of how to do things. Such procedures may never become symbolically coded, as for example, knowledge of how to ride a bicycle. More important to us than bicycle riding, however, is the domain of knowing how to do things with others. Much of this knowledge is also procedural, such as knowing how to joke around, express affection, or get attention in childhood. (p. 284)

This knowledge develops earliest and most compellingly in interactions with the individuals we are most motivated to reach coordination with, our attachment figures. Our knowledge of what to do and what to not do, to exclude, remains with us both as procedural, implicit knowledge and as representational templates. Both types of knowledge are part of internal working models.

The procedural, implicit knowledge about what can and can not be coordinated with and thereby brought into self-experience and interactions with others has important implications for the process of psychotherapy. There is a long tradition in psychoanalytic thought of questioning whether change at the cognitive, fully representational level is sufficient to produce change. This bears directly on how procedural knowing may be altered—on whether it is altered by change at the

representational level, of which it is in part constitutive. In one sense this questioning goes back to Freud's abandonment of the catharsis hypothesis that it was sufficient for hysterics to remember repressed experiences in order to effect a cure of their hysterical symptoms. But the issue has usually been cast in terms of whether interpretation itself is sufficient to effect deep and lasting psychological change. Classical psychoanalytic theorists such as Arlow and Brenner, who may in fact be stricter than Freud about this matter, argue that it is. Strachey (1934) forcefully argued for "mutative interpretations," interpretations made at exactly the right analytic moment and in the right way. But many, many others—including Alexander, Ferenczi, Winnicott, Kohut, Lomas, Mitchell, and even Freud himself in some modes, as when discussing the non-interpretive use of the positive transference in all treatments or the necessity for exposure in the treatment of phobias—have argued that interpretation is not sufficient and that some form of *experience* is necessary to effect deep change. This issue is an important one for conceptualizations of psychotherapeutic technique, and it will be raised again in the next two chapters, when psychotherapy is itself discussed.

Lyons-Ruth and her colleagues in the Process of Change Study Group—Bruschweiler-Stern, Harrison, Morgan, Nahum, Sander, Stern, and Tronick—join this tradition by arguing that implicit relational knowing—procedural knowledge about how to interact with others—is changed in psychotherapy through the dyadic expansion of

consciousness that occurs as a result of a new and singular (in the patient's experience) coordinative communicative state that occurs between therapist and patient in the psychotherapy setting. This new coordinated state occurs during and as a result of what the Study Group calls a "moment of meeting" (Sander, 1995). Lyons-Ruth (1998) describes "moments of meeting" as occurring when "the dual goals of complementary fitted actions and intersubjective recognition are suddenly realized" (p. 287). Thus, moments of meeting join together two individuals in terms of sharing both their subjective self-states and their goal-related actions. The essential quality, according to Sander (1995), is a clear, expressed, and felt recognition of the other's subjective reality. Lyons-Ruth writes, "These moments of changed intersubjective recognition ratify a change in the range of regulation achievable between the two partners....New forms of shared experience can now be elaborated around previously unrecognized forms of agency" (p. 287).

These moments of coordination are of crucial consequence in psychotherapy because they occur also at the heart of the mother-infant relationship and are then delimiters of experience. The new coordinations of psychotherapy expand those that were available to the infant of a particular mother. Lyons-Ruth ties these directly to attachment processes, exemplifying them in infancy with a detailed discussion of a Strange Situation observation of an 18-month-old. She writes:

> As an extensive attachment literature demonstrates, the infant's strategies for negotiating comforting contact with caregivers are constructed in a series of mutually regulated negotiations with parents and are one of the best-documented forms of implicit relational knowing displayed during the first two years of life. (p. 287)

Attachment as a Skill Involving Decoding and Encoding of Affective Communications and Emotional Self-Regulation.

Fonagy (1998), reflecting on the above-discussed work, writes that "The classification of patterns of attachment in infancy...taps into procedural memory....In this sense attachment is a skill, one that is acquired in relation to a specific caregiver encoded into a teleological model of behavior" (p. 348). Fonagy also writes that "procedural knowledge...is accessible only through performance. It manifests itself only when the individual engages in the skills and operations into which knowledge is embedded" (p. 348). The implicit relational knowing acquired in our original attachment relationships has consequences that extend far beyond them. But how does this happen, both in the case of the original attachment and thereafter? By what procedural, implicit processes, akin to learning to ride a bicycle, does attachment take place as a skill that thereafter shapes future relationships? Based on our earlier discussion in Chapter 3 and on the foregoing, the skills that we

are looking for should lie in the realm of communication, because it is communication that effects coordination and that registers dyadic process within the individual. Acquired, implicit skills in communication offer a means, as Rutter (1997) puts it, for "the transformation of a dyadic quality into an individual characteristic" (p. 22) that is at the heart of attachment processes. By what means might this take place?

One means through which this may occur is by decoding biases in the interpretation of affective communications. Individuals vary with regard to their ability to decode facial and also other expressions of emotion (Buck, Miller, & Caul, 1974; Emde et al., 1993; Thompson & Meltzer, 1964; Zuckerman, Hall, DeFrank, & Rosenthal, 1976). Further, these variations are related to their experiences with their mothers (Daly, Abramovitch, & Pliner, 1980; Malatesta, 1990; Camras et al., 1990). For example, Daly, Abramovitch, and Pliner (1980) found that children are more accurate in decoding and interpreting facial expressions when their mothers are good at communicating them, as judged by external observers; children are poor decoders of facial expressions when their mothers do not communicate them as well, also as judged by external observers. Daly and her colleagues interpret their results to mean "...not only that children learn to be good encoders, but also that this learning may be quite specific to particular types of cues" (p. 32). They continue:

> The results are consistent with the idea that a child whose mother is a good encoder can use the skills available in facial expressions,

> has experience with them, and consequently becomes skilled at decoding; whereas a child whose mother is a poor encoder is less able to use this kind of information, has less experience with it...and is less skilled at decoding. (p. 32)

This suggests that, as part of the pattern of inclusions and exclusions of affective communications in reaching coordinated states, infants and children acquire interpretive and decoding biases with regard to facial expressions of emotions. They become hypervigilant and very sensitive to some emotional expressions, neutrally accurate with some, and relatively impervious to others, depending on the extent to which these affective communications are accurately encoded by their mothers and the consequences for the child of the relational configurations of which they are a part. This has consequences for their self-experience, the interactions and relational configurations which they construct and in which they can effectively participate, and their own emotion regulation.

In part these consequences are likely to be effected through the processes of emotional contagion and facial feedback of emotion. Children will register and experience most strongly incoming affective communications to which they are hypervigilant, for example a parent's anger or sadness. If a mother does not encode some emotions in coordinating with her child, or encodes them only in particular relational configurations, the child will have less self-experience of those emotional states, or will experience them only within particular relational

configurations. Decoding biases then result from the individual's history of coordinated states and effect different types of affective self-experience, requiring in the child different processes of emotion regulation; this makes possible and enables different types of relational configurations and interactions in the future . This fits the findings by Magai, Distel, and Liker (1995) that:

> Secure attachment was associated with elevations on trait joy and interest and with the absence of negative emotion biases. Avoidant attachment was associated with trait contempt and disgust and with decoding biases that involved low accuracy on the identification of joy. Anxious attachment was associated with trait fear and shame and decoding biases that involved anger. (p. 461)

One is also reminded here of Stern's (1985) example of Annie, whose mother coordinated with her not in her enthusiasm but in the moment "when her bubble of enthusiasm had just broken" (p. 209).

The pattern here is more complex, however, than has so far been described. A coordinated state involves what each partner does, and the affective communications with which an infant becomes more or less familiar occur within coordinations to which the infant is making major contributions. His own affective state and affective communications become part of the basis for his judging and registering what his mother is expressing (Schiffenbauer, 1974), as they are part of the basis for her own affective communications and coordinations. The baby and child

comes to recognize not only his mother's encodings, but his mother's encodings in relationship to his own. His own encodings (expressions) then may become more or less defensively mediated and more or less constricted. Given the role of a mother's sensitive responsiveness in secure attachment, one would expect this to vary broadly by attachment classification, with the secure child having freer access to emotional encodings and experiences and insecurely attached children having less. As noted above, Cassidy (1994) has described how patterns of the suppression, expression, and substitution of emotions are related to both attachment classifications and to styles of coordinating social interactions with others. Haft and Slade (1989) found that:

> [Maternal] attunements varied by attachment group according to the affective context in which the mother-infant interaction took place. Close inspection of the data reveals that depending on attachment group membership, mothers tended to reserve high- and true low-order attunements for certain affective contexts and misattunements for others. For the most part, secure mothers responded to a broad range of affective experiences and could correctly assess their baby's affect, whether it was positive or negative....On the other hand, a pattern of selective misattunements was discovered in the insecurely attached groups....Preoccupied mothers responded with misattunements in myriad contexts with their babies....[They] did not attune to or

> validate their babies' expression of initiative or exuberance during play....Overall, the dismissing group distorted their babies' affect by misreading it primarily when it was negative and did so most consistently when the baby directed the negativity toward them....Dismissing mothers distorted and misattuned consistently, following a pattern that was defined by the type of baby affect displayed. (167-168)

This is the sense in which particular coordinations become familiar and known to the child—they involve his experience of both his own affective state and communications and those of his mother, mediated by his own emotion regulation and defensive processes, with the consequent inclusion and exclusion of his own affective states and communications in relation to his mother's in order to maintain coordination. At this point, the building blocks of facial decoding, facial feedback, emotional contagion, and affective self-regulation and defenses rise to the more fully organized level of patterns of possible relational configurations.

Magai (1999) has begun to make an empirical case for the relationship between patterns of maternal-child decoding of affective communication and patterns of attachment. In studies of biases toward or away from the interpretation of particular emotions in mother's and children's decoding of ambiguous facial expressions, Magai & Siegal (1996; Magai, 1999) found that the children's decoding biases, considered alone, were not directly linked to either maternal attachment

patterns, nor to the attachment patterns of the children themselves; i.e. the emotions that were differentially decoded by the children, considered separately from the emotions differentially decoded by their mothers, did not predict attachment classification. However, the researchers did find that "the children's decoding biases were closely linked with maternal decoding biases" and that "the latter effects—maternal decoding biases and emotion socialization practices—were themselves linked to attachment style variables [in the mother]" (Magai, 1999, p.799). In other words, the mother's decoding biases are directly related to her emotion socialization practices (which emotions she rewards and punishes in her child) and to her child's coordinated decoding biases; this interactive system, driven by the mother's differential response to her child's affective communication and her child's coordination with her, is related to the mother's attachment classification:

> Maternal attachment styles were related to maternal decoding biases and maternal emotion socialization practices; in turn, maternal emotion socialization practices predicted children's decoding biases. (Magai, 1999, p. 799)

This is exactly what one would expect to find if a coordinated affective communication between mother and child, involving the differential and sometimes defensively excluded experience of particular emotions and affective communications within relational configurations, was the sought for goal that underlay attachment—if the child were conditioning

his own affective encoding and experience on the affective encoding and state of the mother.

Although this process may also rise to the level of representation and thereby become elaborated into sentences such as "I am bad when..." or "I am good when..." and thereby contour conscious understandings such as theories about the self and about others, all that has been described above operates at the level of procedural, implicit knowledge. Representations rest on and reflect these implicit processes.

Attachment Psychopathology, Communication and Affect Theory

A Critique of "Moments of Meeting" and the Dyadic Expansion of Consciousness from the Perspective of Attachment and Affect theory.

As useful and important as the concepts of the dyadic expansion of consciousness through "moments of meeting" are, they diverge in important ways from attachment theory and do not incorporate important implications of affect theory. Principally, they leave out the idea of the individual as an evolved biological organism designed for adaptation in a particular environment—the "environment of evolutionary adaptedness," in Bowlby's terms—and the role of emotions as critical adaptive and biological processes that enable the individual to accommodate to and to deal effectively with his environment. In their sole focus on processes of coordination, they appear to leave out the

tasks of living in the environment that are faced by the biological organism. Tronick in fact describes the concept of the dyadic expansion of consciousness as part of a move from a vaguely held evolutionary perspective to a reliance on systems theory. Tronick writes:

> Up until now I, like others, simply assumed that the motivation to establish emotional connectedness or intersubjectivity was an inherent characteristic of all humans. The rationale advanced referred to the evolution of our species as a social species, to our use of language and the collaborative nature of meaning making, and to (object) relational theories of the formation of attachments and the self. However, while these rationales (i.e. we seek connectedness because we are built that way) are reasonable they assume the very phenomenon that begs for explanation. What experience makes connected (*sic*) so powerful a force in our lives? (Note: the reader may actually choose their favorite term because there is a vast vagueness associated with many terms—connectedness, intersubjectivity, social contact, attunement, emotional synchrony, reciprocity, attachment—that for the moment need not be dealt with.) The Dyadic Expansion of Consciousness offers a way out of this conundrum of assuming what we would really like to explain by invoking concepts from systems theory. (p. 292)

But an evolutionary perspective, preferably not too vaguely held, offers not only an account of the origins of social communication and relationships *but also of their adaptive functions.* The key systems theory idea used by Tronick to explain the Dyadic Expansion of Consciousness is the postulated propensity of open biological systems such as humans "to incorporate and integrate increasing amounts of meaningful information into more coherent states" (p. 295). Tronick uses this postulate to produce a very powerful explication of human interaction as progressively incorporating and organizing more information in a manner that expands the consciousness of the interactants.

Tronick, Stern (1998), and Lyons-Ruth (1998) each appear to see the patient-therapist interaction as essentially equivalent to the maternal-infant interaction. Both are driven by changes that occur in a "moment of meeting" that involves a shared intersubjective understanding by the interactants of their relationship, and that is in important ways new to that relationship. The criticism of these concepts that is suggested by attachment and affect theory is concerned only with the extent to which the descriptions of the moments of meeting and of dyadically expanded consciousness appear to be formally contentless and do not explicitly take account of the individual as struggling with particular issues of adaptation, with particular constraints and incapacities in conducting relationships and managing interactions with the environment.

Bowlby also invoked and extensively incorporated systems theory to explain the operation of biologically-based behavioral systems (1969 rev. 1982, pp. 40-50, 153-156, 235-262) and especially the attachment behavioral system. But he also extensively incorporated the evolutionary context of biological systems. He emphasized that systems, whether biological or man-made, were "designed" for operation in relation to a particular environment—the environment of evolutionary adaptedness—in order to solve particular problems of adaptation; and that the operation of a system could be understood only in relation to its functions within that environment. Bowlby writes:

> In the case of man-made control systems, structure is designed in the light of explicit assumptions about the kind of environment in which it is to operate. In the case of biological systems, structure takes a form that is determined by the kind of environment in which the system has in fact been operating during its evolution, an environment that is of course usually, though not necessarily, much the same as that in which it may be expected to operate in future. In each case, therefore, there is a particular sort of environment to which the system, whether man-made or biological, is adapted. This environment I propose to term the system's 'environment of adaptedness'. (p. 47)

In other words, systems are designed—whether by natural selection or by man—in order to solve particular problems in particular environments.

The sense of this is missing from the concepts of moments of meeting and the dyadic expansion of consciousness. Bowlby also writes:

> In the previous section it was emphasized that no system whatever can be so flexible that it suits all and every environment. This means that, when the structure of a system is considered, the environment within which it is to operate must be considered simultaneously. (p. 50)

The environment of adaptedness for coordinated states or for attachment is not limited, as Hinde and Stevenson-Hinde (1991) stress, to the environment of its ontogenetic development, i.e. to the environment of mother-infant interaction during which it first develops in the life-course of the individual. In almost all cases, infants and children *do* adapt to their mothers, even very terrible mothers, well enough at least to survive, even though this adaptation may comes at a terrible cost in terms of defenses, the misshaping of the self, and the hobbling of experience. (e.g. Fonagy et al.,1991, 1997). But instances of mothers causing their infant's or child's death remain rare enough to make newspaper headlines. Additional difficulties for children of more or less terrible mothers come when the child must change environments and move outside of the exclusively maternal orbit—play with peers, go to school, find employment, find a mate, make their way in the world of adult relationships. But by this time, their attachment patterns, their patterns of coordinated states are already significantly formed. At that point, their

adaptations to their mothers become markedly maladaptive in their new environment.

While the communicative processes that operate between mothers and infants and patients and therapists may be very similar, the situations are different: the patient has now been formed in certain key respects by interaction with his or her mother, has developed formidable defenses against the experience of certain affects and relational configurations, and is now struggling in a less-than-optimal-way with adaptation to an enlarged and different environment. Patients come to therapists with pressing problems. In his or her struggle, the patient's implicit knowledge and patterns for reaching coordinated states with others preclude some things that the patient needs to be able to do and "force" the patient to do other things that are maladaptive.

Tronick certainly knows this. In writing about the children of depressed mothers, Tronick (1998) writes:

> Given that the infant's system functions to expand its complexity and coherence, one way open for the infant of the depressed mother to accomplish this expansion is to take on elements of the mother's state of consciousness. These elements will be negative—sad and hostile affect, withdrawal, and disengagement....Critically, when the infant of the depressed mother comes to other relationships, the only way he or she has available for expanding the complexity and coherence of his or her states is by establishing

> dyadic states of consciousness around the depressive features that were first established with the mother. Thus one consequence of early dyadic history is often a debilitating attachment to negative relational experiences. (p. 297)

But there is nonetheless a sort of "contentlessness" about the conceptions of moments of meeting and the dyadic expansion of consciousness that is agnostic about what the patient needs and what the therapist should affirmatively do to help. Fonagy (1998), in his comments on the papers by Tronick, Stern, Lyons-Ruth and other members of the Process of Change Study Group, perhaps approaches this issue when he questions the absence of innovation in technique as described in the Group's papers. The essential problem may be that in the descriptions of moments of meeting and of the dyadic expansion of consciousness there is no view of optimal functioning nor of pathology, i.e. of adaptive fitness, as there so clearly is in the attachment theory idea of secure and insecure attachment and as there is throughout affect theory. The concepts describe processes of change, as they are intended to do, but do not give indications of what is problematic or pathological in the patient's current consciousness, nor of what particular changes should be sought through moments of meeting. Consciousness can be expanded in many directions and for quite a long while; so also for moments of meeting, which can be organized around a vast range of potential issues. But what changes are most needed by the patient?

What most ails him or her in his functioning? What is the patient doing to avoid change? What does he or she need to become able to do? What can the therapist do to expedite the process? Both attachment theory and affect theory point in particular directions because they have clear conceptions of optimal and pathological functioning that are based on understandings of what the organism is trying to do in the environment.

The concepts of moments of meeting and the dyadic expansion of consciousness appear relatively contentless with regard to these issues and therefore either directionless about what needs to be done and changed or, as Fonagy suggests, traditionally psychoanalytic in a way that is disappointing and does not do justice to the richness of the ideas. Affect theory, joined to the idea of excluded communication in the search for coordination and attachment, serves as an important corrective for this contentlessness.

The Consequences of Attachment Psychopathology in the Context of Excluded Communication and Affect Theory.

Affect theory understands emotions as organizing experiences that are needed by the organism in order to respond adaptively, coherently, and quickly to events in the real world. They are highly efficient means of organizing processes of appraisal, physiological response, cognition, perception, behavior, and communication toward adaptive goals:

> Emotions are short-lived psychological-physiological phenomena that represent efficient modes of adaptation to changing environmental demands. Psychologically, emotions alter attention, shift certain behaviors upward in response hierarchies, and activate relevant associative networks in memory. Physiologically, emotions rapidly organize the responses of different biological systems including facial expression, muscle tonus, voice, autonomic nervous system activity, and endocrine activity to produce a bodily milieu that is optimal for effective response. Emotions serve to establish our position vis-à-vis our environment, pulling us toward certain people, objects, actions, and ideas, and pushing us away from others. Emotions also function as a repository for innate and learned influences, possessing certain invariant features along with others that show considerable variation across individuals, groups, and cultures. (Levenson, 1994, p.123)

When an individual's affective communication and experience becomes distorted and inaccessible to him—is not fully processed—he loses the capacity for coherent and adaptive behavior in the situation in which he finds himself. Because appraisal rests on affective self-experience and these processes are disrupted, there is an important sense in which the individual does not know what is happening to him. Because affective communication is disrupted, the individual communicates with others

inappropriately, miscuing both himself and them about what is happening and leading the interaction in a distorted and maladaptive direction. Unconscious physiological processes that may begin, but not be fully processed or accurately appraised, are not useable for the implementation of suitable action tendencies and behaviors; they may themselves become disorienting and confusing to the individual. Because of the strong human propensity to find a cognitive interpretation even where none should be possible because of the randomness of the available information (Wright, 1962; Watzlawick, 1976), the individual creates an understanding that incorrectly interprets what is happening both in the self and in others, and then communicates and acts on the basis of the inaccurate interpretation. These interpretations are cognitive and representational, but are built, as described earlier, on a foundation of procedural knowledge; they may be extremely robust and resistant to contrary information, unable to either assimilate or accommodate to it. A new iterative cycle of interaction with the environment begins (LeDoux, 1994) that incorporates and compounds this miscommunication and misinterpretation.

The model of attachment psychopathology in the context of communication and affect that has been described above emphasizes the defensive exclusion of affective experience as an aspect of the child's biologically motivated efforts to achieve a coordinated state with his or her caregiver, and the consequent restriction of the affective-relational

configurations that are available to the individual. Learning a means of achieving a coordinated communicative state, including the internal affective processing and defenses that are part of communicating and achieving the coordinated state, is the exact equivalent of learning a relationship and learning how to have relationships. The defensive exclusion of affective communication and experience and the restriction of affective-relational configurations occur as a pathological aspect of this process. These exclusions and restrictions occur idiosyncratically and on a continuum that may rise to the level of maladaptive pathology. What are the consequences?

Adaptive Affect and Excluded States

Adaptive Affect.

Affects exist for a purpose: they play a central role in perceiving, recognizing, understanding, and responding to interactions with our environment. As previously described (Chapter 2), affect theorists propose that each major affect is a pre-wired organized state for dealing with different kinds of adaptive problems that occurred frequently in our evolutionary past. When they are non-defensively experienced and communicated, for example in the securely attached, they do this accurately in terms of what is occurring both internally and externally. The individual is thereby organized to respond coherently and adaptively

both to his or her internal state and to the external environment. Behavior has a fluent, authentic, and purposeful quality and matches the individual's cognitions about what he or she is doing. The individual feels coherent, present, non-distracted, in touch with him- or herself and with what is happening in the surround. The ability to concentrate is present and, perhaps because of the non-distractedness and more efficient non-defensive processing of information, time seems to move more slowly in a useful rather than tedious way. Athletes speak of this state as being "in the zone," an experience that may occur even under conditions of great stress and difficulty.

Affective communication, which is so intrinsically connected to affective self-experience, is free-flowing and direct when an individual is not in a defensively excluded state. Others therefore, to the extent that they can non-defensively process these affective communications, know what is happening in the individual. They understand his or her motivational state and actions with respect to them and other events in the environment. Under these circumstances, the evolution of intimacy is possible, even if the individual's affective communications and state concern difficult interpersonal emotions such as anger, disgust, or sadness.

Primary and Pre-emptive Excluded States.

In the view elaborated here, non-defended affect is inherently adaptive because it gives the individual access to the information and internal resources that he or she needs to understand and to respond to the environment in a way that is accurate and congruent with his or her own goals. Non-defended affect is true, accurate, and purposive. But when some affective experiences and communications have been placed off-limits to an individual—through developmental experiences of systematic miscoordination in an attachment relationship—these adaptive affects and their associated processes, self-states, and responses are defensively distorted. When an individual begins to experience a defended-against affect in an incipient way, in response to a situation to which it could constitute part of an adaptive response, it leads directly to an experience of anxiety—what we should call attachment anxiety or coordination anxiety; it therefore immediately becomes subject to defensive processes and becomes defensively distorted. The defended against affect remains inchoate, not fully processed or accessible, not useable by the individual for adaptive purposes. The processes that are constituent of or recruited by the affect—appraisal, physiological responses, motivations, communication, perceptions, cognitions, memories, innate action tendencies—are also excluded and defensively distorted. Taken together, they constitute a

defensively excluded affective state, what we shall call a ***primary excluded state.***

A direct consequence of the primary excluded state is a maladaptiveness and a certain incoherence in the individual's behavior. The inability to fully process the affective response to the situation means that what one is experiencing remains to a significant degree out of awareness and unconscious. In this sense, as Izard (1993) suggests, "unconscious motivation may be an emotion experience (motivational/feeling state, action tendency) that is not cognitively tagged or articulated" (pp. 633-634). Because the individual is responding to unconscious motivations and defensively distorted appraisals, cognitions, etc., their behavior and communication acquire an incoherence with respect to the adaptive task. They are not responding to what they think they are responding to. In the iterative cycle of emotional processing, the situation gets worse instead of better. The above is quite consistent with Bowlby's own account. Bowlby (1980) writes:

> Of the many possible consequences [of defensive exclusion] there are two major ones, each with certain contingent consequences, to which...I wish to draw attention:
>
> (a) One or more behavioural systems within a person may be deactivated, partially or completely. When that occurs one or more other activities may come to monopolize the person's time and attention, acting apparently as diversions.

(b) One or a set of responses a person is making may become disconnected cognitively from the interpersonal situation that is eliciting it, leaving him unaware of why he is responding as he is. When that occurs the person may do one or more of several things, each of which is likely to divert his attention away from whoever, or whatever, may be responsible for his reactions:

> He may mistakenly identify some other person (or situation) as the one who (which) is eliciting his responses.
>
> He may divert his responses away from someone who is in some degree responsible for arousing them and toward some irrelevant figure, including himself.
>
> He may dwell so insistently on the details of his own reactions and sufferings that he has not time to consider what the interpersonal situation responsible for his reactions may really be. (pp. 64-65)

In such a situation, the individual's management of the defensively distorted affect becomes maladaptive with respect to his or her own goals. For example, if the person defensively distorts anger, they may indeed express anger, but in a misdirected, situationally incoherent, maladaptive way. They may throw tantrums, find an array of faults with the other that are not related to the central issue or withdraw from engagement with the situation, making excuses to leave. Or they may

direct their anger at themselves, becoming guilty, depressed, and convinced of their own inadequacy.

An individual in a primary excluded state can not feel without distortion what he or she needs to feel in order to act effectively. Their functioning and the way in which they interact with others becomes overly patterned, rigid, and constrained. A stiff, false, or overly conventional quality may enter into those interactions that evoke the excluded emotion—a kind of confabulation to replace affective and interactional qualities that are not available. Similarly, the individual may seek to control his or her environment and interactions in order to avoid the possibility of events or stimuli that would threaten to evoke the excluded state. Situations and people that are likely to require the excluded affect are sources of anxiety and must be avoided or dreaded.

More generally, the individual may adopt an interactional style and a style of living that is shaped in order to prevent the need for the excluded, anxiety-eliciting affect. One instance of this phenomena is the suppression and heightening of affective communication and experience, discussed earlier, that Cassidy (1994) identified in the interactional functioning of avoidant and resistant children and that Dozier and Tyrell (1998) and Fraley, Davis, and Shaver discussed in dismissing-avoidant and preoccupied-resistant adults. These are taken here as illustrations of a basic process that occurs in many ways along many dimensions of self-experience. For example, an individual who experiences anxiety,

exclusions, and defensive distortions in relation to the experience of anger may adopt an interactional style that stresses friendliness, that is hypervigilant to interpersonal cues that avoid conflict, and that is overly pleasing and accommodating to the desires of others in order to preserve their goodwill. But there is more than one way to avoid or at least reduce the likelihood of experiencing an anxiety-eliciting, defensively excluded affect. The same difficulty with defensively excluded anger might be managed with an interactional style that emphasizes not wanting things from others; or by not imposing adequate boundaries; or by staying out of close interactions with others.

In each of these cases, the individual is pursuing what might be described as a strategy of pre-emptive exclusion, and this may be described as a *pre-emptive excluded state*, i.e. a state that excludes not the presently evoked experience of an affect but rather the relationships, situations, and events that may be anticipated as occasions for the evocation of the excluded emotion. Such pre-emptive states depend on the existence of a primary excluded state, which is what the individual seeks to avoid. They operate in a manner similar to a phobia and they may exercise a similarly powerful and constraining influence on an individual's life, foreclosing possibilities for adaptive, fluent action and full experience both in the moment and in the life choices that operate across the many years of his or her life. As with a phobia, a pre-emptive excluded state leads the individual to map their relational and situational

world in terms of what must be avoided. Part of this is a search for ways to reach goals that do not take the individual into affectively excluded territory. The individual's pursuit of goals becomes both complexified and compromised since the direct route may not be taken. Similarly, their conduct of relationships becomes "neurotically" intricate and shaped by the avoidance of some interactional experiences, the false heightening of others, and by indirection and disavowal with regard to purposes.

The Misshaping of the Self.

Taken together, primary and pre-emptive excluded states lead to a misshaping of the self. This position assumes, of course, that each individual has, at least inchoately, a true shape. The argument here is that the true shape of the self is that which is not defensively distorted. It is an individual who has relatively full access to his or her own internal resources and affective experience; who is able to understand the real constraints, difficulties, and opportunities that are present in the environment and can bring their understanding and resources to bear; and who is able to affectively communicate with others in a sufficiently open and accurate way to permit the evolution of intimacy. This is not an ideal type: securely attached children, for example in Crittenden's (1992, 1994) descriptive system, are characterized by their relaxed, intimate, and direct expressions of feelings and desires and by their ability to negotiate conflict and disagreement in relationships.

But for others, there is a distortion of affective communication and affective self-experience that impedes fluent, intimate effective functioning. They are contorted by their defenses. In terms of primary and pre-emptive excluded states, this deformation is experienced as something that the individual is doing but it actually occurs because of something the individual can not do. In each moment of misshaping there is, in addition to what the individual does do, some thing that the individual can not do and that if done would prevent the misshaping from taking place. Just as with a phobia, the thing that can not be done is what produces the actual circumstantial distortion, incoherence, and sometimes chaos. The thing they can not do is the affective communication and its associated self-experience that are defensively excluded. In this sense, when a patient brings a therapist an account of a difficulty, the clinical problem is not in the difficulty itself but in what did not happen just before the difficulty unfolded; the focus in terms of psychopathology is one moment before what the patient wants to talk about; it is what the patient leaves out without knowing that he or she is leaving it out; it is what the patient doesn't know that he or she is unable to do. It is the source of their misshaping. This is the region of the excluded state, and it brings us to a consideration of clinical issues and technique in psychotherapy.

Chapter 4: Implications for Psychotherapy

Clinical Issues and Problems

As described above, attachment theory conceives of psychopathology as a disorder of the communicative-affective system, whereby experiences of attachment-motivated coordinated states engender constraints on the communication and the feeling of certain emotions and their associated self-states. These constraints were necessary and adaptive (though also, of course, self-abnegating) in the local situation with the primary caregiver during development; but outside of this local situation, the constraints limit, impoverish, and confuse self and relational experience and interfere with adaptive interaction with the environment. One might say that the child's first major task is to respond adaptively to the caregiver and that his or her second major task is to respond adaptively to the larger world. When adaptation during the first task constrains capacities that are needed during the second major task, significant impairment has occurred.

This view portrays psychopathology as essentially a misshaping of the self, and it necessarily entails the view that there is an optimal self. This optimal self is characterized by the attributes of securely attached children (though the variety of sub-categories of secure attachment points to a degree of variation of psychopathology and optimal functioning even within this broad group). The attributes of the optimal

self that define psychological well-being from an attachment perspective are fluent access to and open communication of feelings, a capacity for intimacy based on accurate communication, self-disclosure and empathy, and adaptive actions in a variety of situations based on the capacity to experience self-states that are appropriate to the situation; these affirmative capacities are possible when there is a relative absence of defensive exclusion. Strictures, constraints, or distortions in any of these affirmative capacities represent some degree of psychopathology. Psychopathology, then, is an impairment of the affirmative, adaptive capacities of the individual.

This account of the origins and dynamics of psychopathology and psychological health renders a particular view of clinical issues and problems and of stance and technique in the conduct of psychotherapy. We now turn to these issues.

Communication and The Doubleness of Attachment Pathology

A central process in attachment theory is the transformation of a dyadic experience into an individual characteristic and the subsequent re-transformation of this individual characteristic into dyadic experience (Rutter, 1997). This dyadic-individual dynamic is associated with the characteristic doubleness of attachment pathology. Attachment processes face inward and outward simultaneously. In pathology, they simultaneously impair both internal experience and interaction in the

outer world. In terms of the outer world, they exclude affective communications and situations or relationships that require communications or behavior that, it is felt and believed, will lead to the loss of the other; and they overemphasize affective communications and associated situations and relationships that are felt and believed to be necessary to preventing the loss of the other. In terms of internal experience, there is an isomorphic pattern that excludes some affective experiences and overattends to others; this prevents the individual from accurately knowing and feeling what is happening and leads to defensive and incoherent self-experience. In attachment pathology, the individual avoids outer and inner experience in the same patterned ways.

For both Freud, in his structural model, and for Bowlby, anxiety is the experience that initiates the operation of defensive processes. In Freud's conceptualization of defenses, the anxiety results from a fundamental conflict between the biological legacy of the organism in terms of id impulses and the requirements of social reality and conscience as encoded in the functioning of the ego and superego. What is defended against are unacceptable, unrealistic, unworkable impulses that may be allowed some compromised and partial (neurotic) or some transformed (sublimated) gratification, but that fundamentally must be controlled, renounced, converted into something else. These impulses are atavistic artifacts of our bestial nature that intrude on our now-civilized lives, and they must in some way be *excluded.* There is a naïve

evolutionary perspective in this view, within which one is struggling to control and defend against one's biological being and past rather than to live it and express it. For Freud, it is as though evolution had played a bitter trick on us rather than fitted us to our environment, most especially our social environment; it is as though natural selection and evolution had designed us to be maladapted.

For Bowlby, the anxiety that initiates defensive processes is primarily about the loss of the other and then, secondarily, about attributes of the self that are felt to occasion the loss of the other. In this sense, for Bowlby, defenses come from the outside in; their origins are primarily social and dyadic. Rather than excluding impulses which must in some normative and general sense be renounced or transformed, Bowlby's defenses *deform and misshape* the self, causing the loss of capacities that are needed by the individual. For Bowlby, one is primarily struggling to defend against the potential loss of the attachment figure, and what is lost in the operation of defenses is something that one needs rather than something that must, in health, be renounced. In Bowlby's view, this is the essence of pathology.

These are differences that have a profound implication for the model of psychotherapy that emerges from each view. Bowlby's model leads to a psychotherapy that seeks to unleash the adaptive self and to restore to it a fuller, more fluent functioning. It does so because it understands fuller biological functioning—in terms of access to affective

experience and communication—to be inherently adaptive and necessary to effective action and the creation of intimacy, and because it understands individual psychopathology to result from the distorting and constraining effects of pathological social interactions. It is a model based in the process of the actualization of the self against the forces of anxiety as these have arisen in early social interactions.

An attachment-informed psychotherapy therefore focuses in two directions at once: because the individual's defenses, internal working models, and procedural knowledge of relationships are organized to prevent the loss of coordination with the other, there is a detailed focus on the patient's social interactions—what the patient and others actually do and especially what forms of social interaction the patient avoids. Because the external social interactions are isomorphically patterned with the internal inclusions and exclusions of affective experience, there is a focus on the patient's internal experience—especially on what is excluded, distorted, and avoided in that internal experience.

The lynchpin of the dyadic-individual dynamic within attachment theory, and therefore the most refined focus of attachment psychopathology and psychotherapy, is the process of communication. In an article that he completed shortly before his death in 1991, Bowlby (1991) emphasized this, writing:

> During the course of time, the biologically given strategy of attachment in the young has evolved in parallel with the

> complementary parental strategy of responsive caregiving—the one presumes the other. For any systems to work together in harmony, efficient communication must exist between them, and for none more so than for the coupled systems of child and parent. (p. 293)

And:

> The principal function of emotion is one of communication—namely the communication, both to the self and to others, of the current motivational state of the individual....
>
> [There] is the constant interaction of, on the one hand, the patterns of communication, verbal and non-verbal, that are operating within an individual's mind and, on the other, the patterns of communication that obtain between him and those whom he feels he can trust. The more complete the information that a person is able to communicate to someone he trusts the more he himself becomes able to dwell on it, to understand it and to see its implications. (p. 294)

And, summarizing this theme in terms of psychological health and psychopathology:

> A child who has experienced open and coherent communication with his mother develops a pattern of communication within his own mind which is equally open and coherent, and the same holds for faulty patterns. (p. 296)

Communication as the Procedural, Pre-Representational Encoding of Relational Experience

Communication is the lynchpin of attachment processes and of attachment-based psychopathology because it reaches inward and outward at the same moment: it is the individual characteristic that incorporates the dyadic process, and it is generative of both internal experience and social relationships. In other words, communication is not merely an epiphenomenon that only reflects an internal state that has come to exist for other reasons, as it was for Freud and as it is still conceptualized in many object relations theories. It is rather an active agent that is generative of both internal experience and social relationships; affective communication incorporates a set of profoundly influential internal affective processes, such as facial feedback, emotional contagion, and decoding biases, that are themselves influenced by the act of communicating. The shaping of affective communication is the means by which the shaping and the misshaping of internal affective experience occurs. As Bowlby says, what we can communicate to another we can ourselves know, and feel, and understand the implications of; that which we cannot communicate remains inchoate and incoherent, requiring defensive processes of exclusion, misdirection, avoidance, and misattribution.

Because affective communication incorporates powerful self-state processes and because it is shaped by experience with others,

communication encodes relational experience—self and other—at the pre-representational level of implicit, procedural knowledge. This procedural knowledge begins with our relational experience with others and shapes its subsequent evolution. As the child's development proceeds and his or her cognitive capacities unfold, the child tells himself a story about these affective and relational experiences (Stern, 1985; Nelson & Greundel, 1981) that becomes elaborated as more cognitively and symbolically based internal working models or templates of self and other. These developing representational models incorporate theories about the minds and motivations of self and other and their relationships to events and situations (Bretherton, 1990).

But these more elaborated and representational models are based on implicit procedural learning about affective communication and associated self-states; they are elaborations and representations of those experiences. The pre-representational procedural learnings that occur during the sensorimotor stage of development are more akin to learning to ride a bicycle or to swing a tennis racquet than they are to forms of intellectual or representational understanding.

In this sense, the situation of a psychotherapy patient with respect to affective communication and defensive exclusions is akin to the situation of someone trying to learn to swing a tennis racquet—worse, of someone who has learned how to swing a tennis racquet the wrong way and is now trying to change his or her swing. Just as one cannot change

one's tennis swing simply by altering one's cognitive knowledge of how the racquet should be swung, so also one cannot alter his or her affective and relational communication simply by altering one's conscious representations. Implicit procedural processes operate in a different way, using different brain regions that are not responsive to conscious control (LeDoux, 1996, pp. 200-203). They require implicit procedural *experience* for their alteration.

Moreover, pathological procedural learning is specific to particular affective communications and self-states that were problematic during the development of attachment. There have come to be particular things that the individual cannot do. As argued in the preceding chapter, this is the crux of what is problematic in the dyadic expansion of consciousness model: It is contentless or agnostic with regard to the lines along which consciousness (or, more broadly, self-experience) needs to be expanded.

It is not enough to merely expand consciousness; it is necessary to expand affective communication and self-experience in particular realms. It is as specific as changing from a one-handed to a two-handed backhand or learning to ride a bicycle. But unlike (most) experiences of learning to ride a bicycle, new learning experiences in the realm of communication and affect must contend with powerful experiences of dread, anxiety, and a terrible fear of aloneness or of unrequited longing, experiences that are associated—automatically, unconsciously,

implicitly—with the unlearned affective communications and correlated self-states.

The Consequences for Relationships

The procedural, pre-representational encoding of relational experience in communication has important consequences for the relational configurations that the individual is disposed and able to enter into. Just as the developing child's cognitive and representational capacities increase, so also does his ability to engage in more complex interpersonal interactions. The contours of the affective communication and self-experience that were created in the child's earlier coordinations with his mother—including the defenses against excluded feelings and thoughts—influence, shape, and delimit these interactions. In terms of both the fluent internal experience of affect and its communication to others, the child is able to do some things and not do others; those affective experiences that the child cannot "do" well are attended by defensive maneuvers and distortions. The child's behavior with others in relationships is shaped by the contours of affective experiencing, expression, and defenses, and so these contours also shape his relational world. A child who cannot become angry and assertive without feeling self-critical and depressed might well become an affable "politician" in his interpersonal relationships in order to get some of what he wants and still avoid the depressing experience of anger; a child whose enthusiasm

led to discoordination by her mother (Stern, 1985) may find it difficult to be happy and excited in the presence of others and so find herself in relationships, personal and professional, where being happy and excited is not necessary. As the child grows, these "preferred" relational configurations themselves become encoded in the child's cognitive and representational world; she discovers rules for the game that she already knows how to play.

The conception of a self and an other related through affect is a hallmark of object relational theories (e.g. Jacobson, 1964; Kernberg, 1976). Fosha (2000) has described a heuristic triangle of the interrelationship of self, other, and emotion that repetitively occurs as a cohesive unit in individual's relational lives and that aptly represents a primary role for affect in configuring relationships. She writes:

> The self—other—emotion triangle...captures patterns of relatedness and affect. Countless iterations of similarly structured moments become generalized into affective relational patterns that embody the individual's experience in a particular dyad. These patterns characterize what has been and shape interactive expectations, which in turn shape the individual's perceptions and actions. What connects such experiences into a single pattern is their affective fit: they are structured along similar motivational, relational, and experiential lines. (p. 121)

The affective-relational configurations that are and are not available to a patient constitute a major patterning of his or her life. In the present conception, the relational constraints are understood to be structured by defensive exclusions of affects, cognitions, and behaviors, as Bowlby proposed. By facilitating the emergence of what has been excluded, psychotherapy expands the range of the relational configurations that are possible for an individual. It does this both by eliminating the necessity for defensive relational patterns, such as those that avoid anger or excitement, and by making more affectively open relationships directly available.

The Clinical Triad of Anxiety, Depression, and Anger

Anxiety, depression, and inappropriate or non-adaptive anger are common clinical markers of psychopathology and the frequent focus of clinical attention and intervention. Given the ubiquity of these phenomena, one important aspect of any theory of psychopathology and cure is how that theory explains them. Each appears on its face to be a quite different type of experience; but the frequency of their appearance in psychopathology, the high co-morbidity of anxiety and depression (Kaplan, Saddock, & Grebb, 1994, p. 581a), and proposed links between depression and anger (Gabbard, 1994, pp. 223-227) make their systematic explanation and interrelationship from a theoretical point of view especially interesting and significant.

Anxiety and the Misshaping of the Self

From the perspective of attachment, communication and affect, anxiety plays a central role in the development of psychopathology. It is itself the principal pathogenic agent and impetus for defensive exclusions and impairments of affective communication and self-states. Its role in this regard has been described throughout the preceding chapters as the experience that drives defensive processes and the resulting misshaping of the self. This misshaping occurs as part of the process of reaching a coordinated state with the caregiver within which what each communicates is more or less matched to the other. It is described as misshaping because particular rigidities in the caregiver do not allow certain optimal and adaptively useful affective communications and self-states in the attachment-seeker. These useful and naturally-occurring capacities are then diminished or lost—defensively excluded—and are replaced by defensive processes. The individual is constrained, even deformed, in a pattern that is determined by the rigidities of the attachment figure. *This process is driven by anxiety about the loss of a coordinated state and it is effected through processes of suppression of some affective communications and self-states and the heightening of others.* Both strategies result in implicit procedural learnings about how to reach communicative coordination with others, and both leave out and misshape important aspects of the self.

In keeping with the doubleness or dyadic-individual nature of attachment pathology, the strategy of suppression is directed primarily inward, toward the self, toward the suppression of affective communications and self-states, and the strategy of heightening is directed primarily outward, toward the other, toward the heightening of those affective communications and self-states that actively engage coordination with the caregiver. Both strategies misshape the self and are central to clinical work.

Bowlby (1973, pp.404-408) viewed *anxiety* and *alarm* as the two fundamental varieties of *fear. Alarm* was Bowlby's term for the fear of an external stimulus or threat from which one wishes to withdraw or flee. The danger resides in the presence of the external stimulus or threat, and the meaning of *alarm*, then, is close to the conventional meaning of the word *fear. Anxiety* was a term that Bowlby wished to reserve exclusively for fear related to the availability of our attachment figure. *Anxiety* itself comes in two varieties. Bowlby (1973) writes:

> In this work the usage already adopted for the word anxiety is that it denotes (a) how we feel when our attachment behaviour is activated and we are seeking an attachment figure without success (Chapter 6) and (b) how we feel when for any reason we are uncertain whether our attachment figure(s) will be available should we want them (Chapter 15). (p. 404)

There is a subtle distinction between these two types of anxiety that anticipates the distinction between defensive strategies and affect regulation in avoidant and resistant attachment as these have been understood by Cassidy (1994). In the first case, denoted as (a) in the above-quoted excerpt from Bowlby, the attachment system has been activated because the individual is experiencing alarm about a threatening circumstance, and he or she is also experiencing anxiety about the inability to obtain the comfort of the attachment figure. One option in this circumstance, noted by Bowlby in Chapter 6 (p. 95), is to terminate the attachment system, which then reduces the anxiety about attachment, leaving the individual only to deal with his or her alarm. This termination or deactivation of the attachment system is accomplished by suppression or direct exclusion of self-experience.

In the second case, discussed by Bowlby in Chapter 15 and characterized by "clinging behavior, either literal or figurative" (p. 15),

> A person...has no confidence that his attachment figures will be accessible and responsive to him when he wants them to be and...has adopted a strategy of remaining in close proximity to them in order so far as possible to ensure that they will be available. (p. 213)

This second type of anxiety occurs in the absence of alarm and even while in contact with the attachment figure. It engages a strategy of hypervigilance about the attachment figure and the *heightening* of self-

experiences that summon the attachment figure while indirectly excluding other self-experiences, such as exploration and autonomy, that are thereby neglected.

We might call the two varieties of anxiety identified by Bowlby the *fear of feeling* and the *fear of absence*. One is fear directed at an internal state, and one is fear directed externally toward the other. Both are versions of the overarching fear of aloneness, of the loss of coordination with the other. Fear of feeling regards the self; fear of absence regards the other; fear of aloneness, in terms of the self-without-other meaning of the word *alone*, regards the dyad. In fear of feeling, anxiety is resolved by damping the self; in fear of absence, anxiety is managed by focusing on the other. But in keeping with the dyadic doubleness of attachment processes, fear of feeling and fear of absence each simultaneously alter both affective communication toward the other and internal self-experience. This is done in the interest of managing self-with-other and of modulating fear of aloneness. Each type of anxiety constrains adaptive action and misshapes the self. Each type of anxiety limits the relational configurations that are available to an individual.

From within the perspective elaborated in this study, fear of feeling and fear of absence are the two fundamental types of anxiety that are met with in the clinical situation; these anxieties also appear as anxiety about particular affects and relational configurations that are important in the individual's developmental experiences of fear of feeling and fear of

absence. They bear a relationship to the Strange Situation classifications of avoidant and resistant attachment, but, as argued earlier, it is more useful to approach these phenomena in terms of process than in terms of Strange Situation classification. Focusing on the processes that are guided by anxiety, rather than the general classifications, permits a much more clinically textured approach to the complexities of individual experience. Depending on their developmental histories, individuals may present with a preponderance of one or the other type of anxiety or with a mixture of both. In any case, the two types of anxiety both involve suppression and heightening of affects; they each involve some things that are not doable and communicable by the individual as well as some things that are overdone and too persistently communicated. The "avoidant" type defensively suppresses some affective self-states (e.g. distress) and defensively heightens others (e.g. interest); the "resistant" type does the same.

The two types of anxiety may manifest themselves in very different ways. Where the suppression of self-states has been relatively successful, fear of feeling will become visible as overt anxiety primarily when relational configurations or events—either in external circumstances or within the therapeutic setting—provoke an inchoate experience of the suppressed feeling; otherwise, the individual's fear of feeling may lead him or her to focus everywhere except on these feelings and to be relatively comfortable while doing so. The clinical marker of this situation

is likely to be a degree of flatness or deadness in the interpersonal exchange. The clinician may feel that something is missing in the interaction, and indeed it is. Fear of absence is more likely to be directly visible as overt anxiety. The clinician may feel swept up in the patient's distress but may also feel controlled by it as the patient heightens affective communications and self-states that create engagement and insure against absence. But the clinician may also feel that there is somewhere a rigidity and coercive quality in the interaction that ignores other aspects of the patient's experience and of what is going on in the interaction, and indeed there is.

But it is crucial not to conceive of these types of anxieties and associated defensive strategies only as possible global types. Both types of anxiety occur in relation to particular affects, self-states, and relational configurations but not with others. Indeed, even the most globally avoidant patient may have a pet, never discussed with the therapist, or an inanimate object, such as a computer or a photograph, with whom or which excluded affect states inchoately emerge. And few individuals who come for therapy are either globally avoidant or globally resistant. Rather, they fear feeling or fear absence in very particular ways, based on complex histories, that have become established as implicit procedural communicative processes that encode self and other and that have been elaborated as cognitive, representational models of self and other.

The key issue is what particular affective communications, self-states, and relational configurations are being excluded, what in particular these exclusions are related to in the other, and how the patient's life has been constrained by the primary and preemptive excluded states (see Chapter 4). This is a matter of detailed focus on what the patient can and cannot affectively communicate and feel under particular circumstances and how these inabilities and defensive over-emphases have structured and misshapen his or her life, thoughts, and relationships.

In an attachment-communication-affect model, anxiety is an indication that something has been or is about to be excluded, and that this "something" is needed by the individual. It is also an indication that in the individual's past, this "something" led to the loss of coordination with the caregiver; something in the self is potential but excluded because it previously led to the loss of attachment. In this sense, anxiety is not itself the primary problem to be solved but rather a nettlesome symptom, a pathogenic agent, but more importantly a marker that something important and needed is being excluded and distorted. The clinician's task is to undo the exclusion by finding and facilitating the affective communication, the self-state, and the relational configurations that have been left out.

Depression and the Misshapen Self

A central principle of the conceptual framework of affect theory is the proposition that "each affect has a fundamentally adaptive purpose that serves to facilitate commerce with the environment" (Malatesta & Wilson, 1988, p. 100). Sadness and depression are close kin, although they are not identical. They are considered here together, both in terms of their commonalities and their differences. What are the adaptive purposes of sadness and how is sadness related to depression?

Sadness is the emotional state that occurs in order to facilitate and dispose one toward a reduction in activity and withdrawal from a situation in which going forward or maintaining a high level of active involvement can produce no good or satisfactory result. This is how it is allied to an experience of helplessness and the way it is opposite to anger, which disposes us toward very high levels of activity and which functions to remove obstacles that stand in the way of an advance.

Sadness occurs when we are in a situation in which going forward does no good, where the adaptive response is to discontinue doing what we have been doing or to withdraw. Sadness slows down our cognitive and motor systems. The situation we are in may be of various actual kinds, but the key is that the emotional states that would accompany going forward or continuing past activity are no longer useful, whether those emotional states are interest, joy, or anger; the communications and actions for which these states dispose us are apprehended as not

possible and therefore the experience of those states in relationship to the current situation becomes maladaptive.

This common thread may be seen in a variety of very different situations. It is present when someone we love has died and all of the activities and emotions and communications (including negative emotions) that constituted our relationship with the living person are no longer possible, at least not in anything like the same way, because the person is irredeemably not there. The sadness of mourning is an aspect of the process of the giving-up of the actions and affective communications that were involved in our going-forward with the lost loved one. The same pattern is visible in a study of the effect of maternal expressions of sadness on the activity levels of their 9-month-old infants (Termine & Izard, 1988): The mothers' expressions of sadness increased sadness expressions in their infants and led to a reduction in the activity level of the exploratory play in which the infants had been engaging. (Indeed, along these lines one may speculate that the depression that occurs in Seasonal Affective Disorder in response to winter's lower levels of light may be related to mechanisms that appear in other animals as hibernation or increased periods of sleep and that serve to disengage the animal from a now-hostile environment in which ordinary activities cannot be usefully continued. Similarly, dissociation, which is often a response to trauma which one cannot prevent, also shares characteristics with the process of entering a sleep state and thus may

also, speculatively, be linked to hibernation and sleep-like mechanisms of withdrawal from a hostile environment.) Sadness disposes us to lower our activity levels and to withdraw from a situation in which going forward is not possible.

In these terms, the qualitative difference between sadness and depression is less one of degree of negative affect than of the absence in depression of adaptive progress toward the withdrawal and reorganization to which sadness disposes us. Depression is stuck sadness. It is sadness in relation to a situation from which we cannot withdraw, with which we remain in contact and try to go forward in a non-adaptive way, *either because external circumstances require us to continue going forward with actions that can produce no adaptive outcome or because for internal reasons we are unable to access the affective states that would reorganize our relational configurations and self-states and thereby permit more adaptive responses to our situation.* In both situations, our bodies are prompting us to stop doing what we are doing and to try something else, but we are unable to do so, either for internal or external reasons. We are stuck in a continuing experience of sadness without reasonable hope of a useful or desirable response. This is why a key component of depression that distinguishes it from sadness is the element of hopelessness. Sadness includes a version of hope either in the form of intended and possible change and reparation related to what we

had been doing or in the form of a withdrawal and a going forward with other things. These possibilities are absent in the depressed state.

The first type of depression described above, that resulting from external circumstances that require us to go forward in a situation with actions that can produce no adaptive outcome, is exemplified by the classic experiments on learned helplessness (Maier & Seligman, 1976). In these experiments, an environment is manipulated so that the animal or human subjects experience a situation in which no response they may make to the situation is adaptive. For animals, the situations have included inescapable shocks and inescapable submersion in water; for humans, the situations have included inescapable loud noise and unsolvable cognitive problems. Subjects are stuck in a situation in which their attempts to cope, to go forward, produce no desirable result. Eventually, when the situation itself is finally altered so as to permit an adaptively useful response, the subject does not attempt the adaptive actions that would produce a useful result. The subject has "learned" that there is nothing they can usefully do in a situation which they cannot leave. Seligman and his colleagues (Rosenhan & Seligman, 1989) consider the generalization of learned helplessness to be a paradigm for depression. Their position, stated from within a learning and cognitive perspective, is consistent but not co-extensive with the position taken here from within attachment and affect theory. For present purposes, the key element of their findings is that depression seems to emerge from a

situation with which one must remain in contact and in which no adaptive action is possible.

The central element of interest from within attachment, communication, and affect theory is why no adaptive action is possible. In Seligman's classic experiments, the external world is carefully manipulated so that in reality no adaptive action is possible with regard to a highly specific and discrete aversive stimulus. Such situations do occur in the lives of individuals, for example in cases of repeated or prolonged trauma (Herman, 1992). They constitute the occasion for the first type of depression—call it *envirogenic* depression—described above.

In the second type of depression described above—call it *autonomous* depression—adaptive actions are not possible because the individual cannot access the internal affective states that would produce adaptive action and alter his or her relationship to the environment. The inability to access the adaptive state leaves the individual in a situation of remaining in contact with a situation in which no satisfactory response or outcome is possible—but for internal, intrinsic reasons. In keeping with the dyadic structure or doubleness of attachment theory, this inability occurs in relation to particular relational configurations and external stimuli. Thus, autonomous depression includes challenging stimuli from the external environment but describes an internal-external situation in which adaptive responses exist but are not taken because they are not accessible. ***The difference between envirogenic and***

autonomous depression is then not whether there is an external stressor or stimulus, but whether the constraints on an adaptive response are internal or external; on whether there is—internal constraints aside—a possible adaptive response. In the learned helplessness experiments, the *learning* of the helplessness marks a transition from envirogenic to autonomous depression. For example, at the point where animal subjects who have been exposed to inescapable shock are placed in a new situation in which the shocks *could* be avoided, they fail to take the possible actions that would avoid the shock because these actions have become internally inaccessible to them. What begins as a realistic appraisal of possible responses to an environmental stimulus becomes eventually an internally maintained constraint on responses and an intrinsic feature of the individual. Post (1992) has argued for a neurophysiological model of recurrent affective disorder that fits the above pattern; in his model, the brain's initial (depressive) responses to psychosocial stress or trauma are physiologically encoded in a form that makes the initial patterns of neurophysiological response an intrinsic and autonomous characteristic of an individual.

This pattern of realistically appraised external constraints on responses that eventually become autonomous, internal, and intrinsic to the individual is the same as that proposed for the influence of developmentally experienced coordinated states on the affective communications, self-states, and relational configurations that are

internally available to an individual. Affective communications and associated self-states and relational configurations that were systematically not coordinated with during development become internally inaccessible; other affective states and relational configurations—those that were coordinated with—are instead substituted and experienced. When an individual later encounters and remains in contact with a situation to which the excluded affective and relational states constitute part of an adaptive response, they are unavailable. Faced with a situation which he or she cannot leave and to which an adaptive response is impossible, the individual's initial sadness transforms into depression.

Apart from the important exception of instances of trauma, autonomous depression is the more commonly encountered experience. This occurs in response to both external stressors and to particular relational configurations within which the individual in unable to access adaptive affective responses that would reorganize their relationship to others and to the environment. The individual is stuck in a particular situation or relational configuration to which they cannot, for internal reasons, make the adaptive response. Their sadness prompts them to stop going forward with what they are doing, but the alternative adaptive responses are not available and so they cannot; this converts adaptive sadness to the intransigent, sustained, unremitting, hopeless sadness of depression.

Two paradigmatic instances of the understanding of sadness and depression described above are Bowlby's (1962, 1980; Bowlby & Parkes, 1970) conception of pathological or disordered mourning and the factors that distinguish it from healthy mourning; and Gerald Klerman's Interpersonal Psychotherapy for Depression.

Bowlby (1980) described two main variants of pathological mourning:

> In one of the two disordered variants the emotional responses to loss are unusually intense and prolonged, in many cases with anger or self-reproach dominant and persistent, and sorrow notably absent. So long as these responses continue the mourner is unable to replan his life, which commonly becomes and remains sadly disorganized. Depression is a principal symptom, often combined or alternating with anxiety, 'agoraphobia', hypochondria or alcoholism. This variant can be termed *chronic mourning.* At first sight the other variant appears to be exactly the opposite, in that there is a more or less *prolonged absence of conscious grieving* and the bereaved's life continues to be organized much as before. Nevertheless, he is apt to be afflicted with a variety of psychological or physiological ills; and he may suddenly, and it seems inexplicably, become acutely depressed. (pp. 137-138)

I have described Bowlby's account of pathological mourning as a paradigmatic instance of the understanding of depression outlined above

because of the way in which Bowlby understands the central, core difficulty that these apparently divergent variants of disordered mourning have in common. Depression has been described above as a response to a situation in which one tries or is obliged to continue going forward with affective states that can produce no useful or adaptive result—that cannot lead within that situation to the goal that the affect states dispose one to achieve. The individual's sadness or sorrow does not successfully lead him or her to stop doing, affectively, what he or she has been doing, nor is the individual able to withdraw from the situation; their sadness becomes "stuck" and does not lead to a reorganization. The adaptive function of sadness is about the need to say "goodbye" to a situation or way of going forward that can produce no adaptive result; depression occurs when the patient is unable to say "goodbye." This is precisely the phenomenon that Bowlby places at the core of the variants of pathological mourning:

> Opposite in many respects though these two variants are they none the less have features in common. In both, it may be found, the loss is believed, consciously or unconsciously, still to be reversible. The urge to search may therefore continue to possess the bereaved, either unceasingly or episodically, anger and/or self-reproach to be readily aroused, sorrow or sadness to be absent. In both variants the course of mourning remains uncompleted. Because the representational models he has of himself and of the

> world about him remain unchanged his life is either planned on a false basis or else falls into unplanned disarray....In terms of the four phases of mourning described in Chapter 6 [numbing; yearning and searching; disorganization and despair; reorganization] absence of conscious grieving can be regarded as a pathologically prolonged extension of the phase of numbing, whereas the various forms of chronic mourning can be regarded as extended and distorted versions of the phases of yearning and searching, disorganization and despair. (pp. 138-139)

In other words, the individual continues trying to do that which can achieve no desirable or adaptive result within the situation. In terms of Bowlby's four stages of mourning, he or she is unable to get to a stage with an affective state that can produce an adaptive result. Bowlby writes:

> So long as he does not believe that his loss is irretrievable a mourner is given hope and feels impelled to action; yet that leads to all the anxiety and pain of frustrated effort. (p. 139)

Stuck at one of the earlier of the four stages, the mourner repeats what can do no good. In the language of behavior systems, a system remains active when its set-goal cannot be achieved. In this sense, passing through the despair that is part of Bowlby's third stage permits one to reach the sadness and sorrow that finally prompt and accompany a

cessation of non-adaptive affect and behavior and a subsequent, more adaptive reorganization.

Although he does not explicitly say so, Bowlby's two forms of pathological mourning are closely related to the two forms of attachment anxiety described earlier. Prolonged absence of mourning appears to be an instance of fear of feeling; chronic mourning, with its heightened engagement with the lost beloved, appears to be a form of fear of absence. Fear of feeling and a prolonged absence of mourning may be thought of as associated with a defensive affect strategy of suppression; fear of absence and chronic mourning may be thought of as associated with a defensive affect strategy of heightening. In terms of Strange Situation classifications, these are respectively avoidant and resistant attachment.

However, our focus here is on types of anxieties and broad strategies of defense rather than on the Strange Situation classifications. Those described as avoidant in Strange Situation classifications both suppress some affects and heighten others, e.g. they heighten interest in mastery of the environment; those described as resistant in Strange Situation classifications heighten some affects but also suppress others, e.g. they suppress interest in exploring the environment. From the perspective of clinical work, the issue is what keeps a patient repeating non-adaptive affects and behaviors. Bowlby's answer is defensive processes that produce defensive exclusion, an answer that accords with

the relationship of the two variants of pathological mourning to the two forms of attachment anxiety and to the development of defenses that manage that anxiety.

Bowlby argues that defenses in the case of mourning (and implicitly in other difficult situations) may be healthy if they are temporary and limited in scope. Depression is not necessarily pathological as a response to a frank emotional assault, such as the death of a loved one, if it is a temporary stage on the way to sadness. Bowlby writes:

> The criteria that most clearly distinguish healthy forms of defensive process from pathological ones are the length of time during which they persist and the extent to which they influence a part only of mental functioning or come to dominate it completely. (p. 140)

But some defenses and exclusions, Bowlby argues, are rarely effective as temporary palliatives and are incompatible with non-pathological mourning if they lead the patient to get stuck prior to withdrawal and reorganization. These comprise:

> Processes that redirect anger away from the person who elicited it and towards someone else, a process usually referred to in the psychoanalytic literature as displacement.

And

> Processes whereby all the emotional responses to loss become cognitively disconnected from the situation that elicited them, processes that in traditional terminology may be referred to as repression, splitting or dissociation. (p. 141)

In terms of the more general account of depression, of which Bowlby's analysis of mourning is given as an instance, clinical treatment of depression may therefore be expected to focus on defenses and exclusions related to forms of attachment anxiety about coordination that prevent an individual from accessing adaptive affective states in relation to salient situations in which he or she finds himself or herself. It has previously been argued that a principal source of these defenses and exclusions is that these affective states, in relation to particular relational configurations, have previously been excluded from coordination with major attachment figures; they so have become sources of attachment anxiety and dyadically and internally unavailable. This brings us to Klerman's (Klerman, Weisman, Rounsaville, & Chevron, 1984) Interpersonal Psychotherapy of Depression.

Interpersonal Psychotherapy of Depression (IPT) arises from within a Sullivanian interpersonalist approach to psychotherapy. This framework is consistent with but not co-extensive with the framework of attachment theory. To briefly state a key difference now: In terms of the doubleness of attachment theory—its dyadic-individual dynamic—interpersonalist theories focus on the dyadic and neglect internal

individual characteristics, and this is also true of IPT. However, IPT is a model of psychotherapy for depression that is interesting in the present context because it illustrates, consistent with the understanding of depression outlined above, the efficacy of a focus on changing what the patient is able to do in terms of affect and communication in real situations.

IPT focuses on depressed patients' actual situations and interpersonal interactions. It is an active form of psychotherapy in which the therapist offers direct advice, assists the patient in making decisions, and repeatedly seeks to clarify what the patient is actually doing and feeling while with others, then examining the consequences and implications of these behaviors and feelings. It assumes that current interpersonal problems are likely to have originated in dysfunctional aspects of early relationships, and that the current interpersonal situation of the patient is directly related to the patient's depression. IPT was compared to cognitive therapy and psychopharmacological treatment with tricyclic antidepressants in a major NIMH study of 250 patients with moderate to severe unipolar depression (Elkin et al., 1986); it compared favorably to both alternative therapies, especially with moderately depressed patients, and it may be the psychotherapy of choice with severely depressed patients when psychotherapy alone (without medication) is the treatment modality (Kaplan, Sadock, & Grebb, 1994, p. 545).

Because IPT assumes that a current interpersonal situation is directly related to a patient's depression, it focuses on fostering in the patient the ability to take interpersonal actions—to communicate affects, intentions, and goals—that they had been unable to take before. Its major techniques are clarification of feeling states; improvement of interpersonal communication; the testing of interpersonal perceptions; the development of interpersonal skills; and reassurance of the patient as he or she attempts new interpersonal actions (Ursano & Silberman, 1988, p. 861). The clarification, experiencing, and communication of affect is central to these techniques and is understood by Klerman as a principal context for the development of new interpersonal actions. Klerman et al. (1984) write:

> Encouragement of affect denotes a number of therapeutic techniques that are intended to help the patient express, understand, and manage affect. The relatively free expression of affect in psychotherapy distinguishes it from other relationships, in which affective components are often highly constricted. The learning in therapy is an emotional learning, and dealing with affect is essential in bringing about changes. In developing new interpersonal strategies, the elicitation of affect about others may help patients decide on priorities and strive toward emotionally meaningful goals.

Depending on the nature of the affect and the patient, the IPT

therapist may pursue three general strategies:

1. facilitating acknowledgement and acceptance of painful affects that cannot or should not be changed;

2. helping the patient use his affective experiences in bringing about desired interpersonal changes; and

3. encouraging the development of new and unacknowledged desirable affects which, in turn, may facilitate growth and change. (p. 144)

Although it arises from a distinct theoretical context, this view of the therapeutic role of affects is entirely consistent with the understanding of depression that has been described above. Viewed from within the perspective of attachment, communication, and affect theory as elaborated in this study, IPT encourages, coaches, and teaches the patient to include within their coordinative communication with others affective states that have previously been excluded. This effectively reshapes and frees a patient's constrained and misshapen self. It makes possible new affective coordinated states and relational configurations—new and more adaptive ways of going forward in a situation. This dissolves a patient's stuck sadness and depression by effecting the discontinuation of non-adaptive approaches to a situation (which is the adaptive function of the sadness) and thereby permitting a more adaptive reorganization of affective state and behavior.

Anger and the Reshaping of the Self

Anger often figures prominently in psychopathology. As Bowlby (1973) writes:

> Psychoanalysts have for long been especially interested in the interrelationships of love, fear, and hate, since in clinical work it is common to find patients whose emotional problems seem to spring from a tendency to respond towards their attachment figure with a turbulent combination of all three: intense possessiveness, intense anxiety, and intense anger. (p. 254)

For Freud (1917, 1920) and especially for Klein (1932, 1946, 1955), anger in its relationship to aggression derived from deep instinctual sources and was complexly interwoven in the development of personality and character. Their views of anger and aggression find modern expression in the work of Kernberg (1975, 1986), who has emphasized the role of constitutionally excessive and traumatically induced aggression and anger that have not been adequately integrated with loving instincts in the etiology of the more severely pathological forms of personality disorder. Winnicott viewed aggression and anger in part as responses to environmental failure, as in his conception of the antisocial tendency, but more fundamentally as an aspect of appetence and engagement in living (1945), usefully present from its appearance as motility in the womb (1939) to its central role in "ruthlessness" (1954, 1960) and in "the use of an object" (1968), in the experience of "concern"

(1963), and in personal and artistic creativity (1958, 1971). For Fairbairn (1952), aggression and anger are essentially an effort to deal with frustration of needs by the environment, especially needs related to feeding and orality. Bowlby's (1973) view "is close to Fairbairn's" (p. 256), but the needs that are frustrated and which thereby lead to anger are those broadly related to attachment rather than to the much narrower focus of feeding. Bowlby writes:

> In the schema proposed, a period of separation, and also threats of separation and other forms of rejection, are seen as arousing, in a child or adult, both anxious and angry behaviour. Each is directed towards the attachment figure: anxious attachment is to retain maximum accessibility to the attachment figure; anger is both a reproach at what has happened and a deterrent against its happening again. Thus, love, anxiety, and anger, and sometimes hatred, come to be aroused by one and the same person. As a result painful conflicts are inevitable. (p. 253)

And

> Not infrequently vicious circles develop. An incident of separation or rejection arouses a person's hostility and leads to hostile thoughts and acts; while hostile thoughts and acts directed towards his attachment figure greatly increase his fear of being further rejected or even of losing his loved figure altogether. (p. 254)

Consistent with the position and stance taken throughout this study, and consistent with Bowlby's own emphasis in his 1973 volume and thereafter, "separation and also threats of separation" are understood not in terms of loss of mere physical proximity but in terms of the loss of emotional responsiveness; not in terms of the narrow and specific physical separation of the Strange Situation, but in terms of the separation and threat of separation (the loss and threatened loss of emotional responsiveness) that is intrinsic to the loss of a communicative coordinated state.

Within these terms, there are three reasons why anger appears so frequently and figures so prominently within the clinical situation.

First, as Bowlby's analysis suggests, anger is a prominent and principal response—whether in suppressed or heightened form, whether displaced or accurately attributed—to an experience of actual or threatened non-coordination. Patients who are insecurely attached, within either broad or narrow categories of situations and relational configurations, are struggling with experiences in which important and necessary affective communications were not coordinated with. These experiences are the origin of what they come to therapy for, and in the course of eliciting, identifying, and discussing these experiences, in either the genetic past or in present interactions and situations, the patient's anger is a key marker and necessary component of their affective response. It is an indication that the therapy is at that moment

working in a region of torment and misery for the patient, where they have been threatened with or experienced the loss of the other, and around which they have had to engage in defensive processes and exclusions. This type of anger—and it may be difficult to discover in its suppressed or displaced form—is a thread for the therapist to follow.

Anger does not occur only in response to non-coordination, but also appears in relation to other frustration of goals, in response to the anger of others, and as an aspect of self-assertion and appetite. A second reason why anger appears so often in clinical work is because, whether it appears secondarily as a response to non-coordination or for other reasons, anger is itself a difficult affect state for many caregivers to coordinate with. The expression of anger often elicits anger or withdrawal in others (Tomkins, 1961; Tronick, 1989, citing Lelwica & Haviland, 1983; Haft & Slade, 1989); when this occurs between a parent and a child, the child is likely to be the loser and to be forced to give way. For this reason, many individuals, and especially those who have experienced constrained coordinated states with caregivers, are likely to have difficulty in coordinating around negative or aversive affective states such as anger. Their anger may be difficult for them to feel or express; it may be displaced onto inconsequential situations or persons. In these cases, a key aspect of clinical work is finding and coordinating with the patient's anger and thereby helping to make it available to him to think

and feel affirmatively and fluently about important situations and relationships.

This raises the issue of the adaptive function of anger. The third reason why anger is important in clinical work is that anger is often an agent and midwife of change, and may facilitate breakthroughs to new forms of coordinated states. Anger is useful in reshaping a misshapen self. Malatesta and Wilson (1988) argue that the principal adaptive function of anger is to effect "removal of barriers or sources of frustration towards goals" and to communicate "warning of possible impending attack [or] aggression" (p. 99). Izard (1993) suggests that "a unique function of anger is that of mobilizing and sustaining energy at high levels" and that anger serves to "mobilize energy and sustain goal-directed activity" (p. 635) at a higher level than any other emotional state. Tomkins (1991, in Demos, 1995) writes that "Of all the negative affects [anger] is the least likely to remain under the skin of the one who feels it" (p. 197); he proposes that the principal function of anger is to make bad matters worse and so to increase the level of activation of both self and other. These conceptualizations all suggest that a major adaptive function of anger is to increase the probability of change and reorganization in a situation. Anger may function as a precursor and catalyst for new relational configurations and new forms of affective coordination.

The expression of anger communicates a shift in state and an intention to begin doing something different that is likely to affect others. It has a threatening "or else" quality. In this sense anger is a call for a change in state or behavior in the other; it calls on them to stop doing something and to begin doing something else. Earlier, sadness was described as a call for a change in state or behavior in the self, an emotion that disposes the self to stop doing or going forward with what it had been doing. It is in this sense that anger is reciprocal, or obliquely opposite, to sadness: the difference is whether the state to be stopped exists in the self or the other. For this reason, anger and sadness may occur as alternatives to each other (a phenomenon first observed by Freud): sadness switches off anger by focusing on changing what the self is doing wrong; anger switches off sadness by focusing on changing what the other is doing wrong.

Adaptive anger, in its function of removing obstacles, signaling the other of a need to change, and raising levels of energy and activation is useful in altering existing patterns in order to create the basis for new forms of coordinated state and new relational configurations. In clinical work, this type of anger needs to be cultivated, clarified, integrated, and focused.

However, as any clinician has frequently observed, anger can also occur in destructive, non-adaptive forms that threaten mayhem to self and others. This is the case when anger is used defensively to avoid

vulnerabilities and when it is displaced, misdirected, or cognitively disconnected from its source. Bowlby (1973) writes:

> Because of the tendency for anger and hostility directed towards a loved person to be repressed and/or redirected elsewhere (displaced), and also for anger to be attributed to others instead of to the self (projected), and for other reasons too, the pattern and balance of responses directed toward an attachment figure can become greatly distorted and tangled. Furthermore, because models of attachment figures and expectations about their behavior are built up during the years of childhood and tend thenceforward to remain unchanged, the behaviour of a person today may be explicable in terms, not of his present situation, but of his experiences many years earlier. It is, indeed, because of these complexities that the nature and origin of our feeling and behaviour are often obscure, not only to others but to ourselves as well. (pp. 256-257)

Adaptive and Defensive Affect

The perspective taken throughout this study has emphasized the issue of fluent access to and communication of adaptive affect states. In pathology, we have been concerned with the constraints that are imposed on this access by attachment experiences involving the threatened or actual disruption of coordinated states with the caregiver because of

these affects—as they pertain within particular relational configurations—and the subsequent attachment anxiety and defensive processes that thereby attach to and are stimulated by them.

However, all affects may be used defensively (Tomkins, 1962; Malan, 1979; Fosha & Slowiaczek, 1997; McCullough Vaillant, 1997), i.e. as they were used during or in response to experiences of non-coordination, rather than adaptively. This may be especially apparent in the cases of anger and sadness, but also applies to the other categorical emotions. In the case of anger, a patient may be furious at another person or at a situation in a way that seems inappropriate to the clinician. The anger may threaten the patient's job or disrupt and constrain his personal relationships. It may isolate him from his own interests and from relationships to which an adaptive response would lead him to become more involved. It may interfere with, rather than further, intimacy and exploration. Anger may exist as a chronic state rather than as a form of appraisal and response to particular situations, perfusing an individual's experience with inappropriate emotion. Similarly in the case of sadness, and particularly in the defensively stuck form of sadness discussed above as autonomous depression, a patient may become sad about events or in situations that seem inappropriate or redressable to the clinician, and perhaps also to the patient. The patient's inappropriate sadness may sap his energy from projects, interests, and relationships that zestfully engaged in would offer

substantial rewards. The sadness may lead the patient to withdraw from situations or from relationships to which an adaptive response would lead him forward, profoundly muting the capacity for intimacy and achievement. In chronic form, the sadness invokes an undifferentiated appraisal and motivational stance with regard to situations and relationships that are in fact very different, creating a kind of affective blindness. And as with anger and sadness, so also with the defensive versions of the other categorical affects.

Distinguishing between adaptive and defensive forms of affect, with regard to anger as well as other emotional states, is a critical task for the clinician. It is the fundamental task upon which clinical work with affective communication and affect states is based. How may the distinction be reliably made?

McCullough Vaillant (1997, pp. 232-234) has proposed markers to distinguish between adaptive and maladaptive affect. Her distinguishing markers are as follows for adaptive and maladaptive or defensive affect respectively:

1. a flowing, surging, or resonating of physical energy in adaptive affect *versus* an acting-out or intense rush of physical energy in defensive affect;
2. the generation of an adaptive action tendency in adaptive affect *versus* the generation of either a heightened or overly urgent action tendency

in defensive affect; or, the constriction of energy and inhibition of action in defensive affect;

3. an interpersonally adaptive reaction *versus* a maladaptive reaction resulting in greater conflict or problems;
4. an experience of satisfying and continuing relief following adaptive affect *versus* momentary relief (followed by worsened problems) if the urgent action tendency is performed; and increased frustration if it is not or if energy is constricted and action inhibited.

Further, Fosha (2000) has recently proposed the concept of *core affective experiences* as a basis for distinguishing adaptive from defensive affect. "*Core affective experiences*...are the natural, adaptive emotional responses directly experienced when anxiety and defenses are absent" (p. 110). Fosha writes:

> *The core state*...refers to an altered state of openness and contact, where the individual is deeply in touch with essential aspects of his own experience. The core state is the internal affective holding environment generated by the self. In this state, core affective experience is intense, deeply felt, unequivocal, and declarative; sensation is heightened, imagery is vivid, pressure of speech is absent, and the material [in a clinical setting] moves easily. Effortless focus and concentration also are features of the core state. Relating is deep and clear, as self-attunement and other-

> receptivity easily coexist. Communications are marked by a subjective sense of certainty, and often by remarkable eloquence. (pp. 20-21)

There are a variety of markers proposed by Fosha that distinguish this deep form of emotional experiencing, and adaptive affect in general, from defensive forms of affective experience:

1. In adaptive affect, "the self is authentic, the other is perceived accurately, and the interaction is as manageable as the situation permits....If the self is perceived as bad, the other as larger than life or insignificant, and the interaction as simultaneously unsatisfying and unavoidable, then we are not dealing with core affective experience" (p. 157).
2. "Distorted, two-dimensional, or inaccurate views of the other or the self similarly suggest the presence of experiences rendered inaccessible by defenses. If the other is declared to be 'nice' but the self 'unworthy,' for instance, this should alert us to core affects being held off-limits"" (p. 157).
3. "Maladaptive expressions of emotion are accompanied by a subjective experience of being out of control: anxiety is present, and the expression of affect is not for self-expression or communication...The subjective feeling of being out of control almost invariably is a marker for the maladaptive expression of

> emotion, which has undesirable consequences for the individual" (pp. 157-158).

In the above, Fosha emphasizes accuracy and dimensionality about self and other, a sense of being in control, optimal management of the situation, and adaptive outcomes as hallmarks of non-defensive affective experience. These are all qualities of *coherence* that result from fluent access to the appraisals, motivations, communication, and action tendencies that are inherent in emotions when they operate without the distortions—the suppressions and heightenings—that are part of defensive processes and defensive exclusion. They result from an unimpeded, non-defensive coordinated state.

The issues of coherence, accuracy, and adaptiveness in relation to the non-defensive experience of affect return us to the attachment literature. In the scoring system for assessing Adult Attachment Interviews (Main & Goldwyn, 1984, 1989), transcripts are scored for both coherence and an assessment of probable accuracy (termed "plausibility" in the language of the scoring system), and these scorings predict secure attachment. As in the present context, this occurs on the basis of the theoretical understanding that coherence and accuracy each reflect the non-defensive processing of and access to attachment related memories and experiences and indicate greater *coherence of mind*, i.e. a mind that is operating with fewer defensive distortions and exclusions (Main, 1991). Fosha's conceptualization of core state and of non-defensive and

defensive affect may thus be seen to close a circle connecting affect theory to attachment theory in terms of defensive and non-defensive processes present in each. The concept of an affective *core state* is thus joined to Main's concept of *coherence of mind.*

In terms of the *adaptiveness* of an affective experience as a criterion for whether or not it is defensive: As noted in the last chapter, attachment theory is not agnostic about external reality. It takes a child's models of his or her attachment figures as reflective of actual experience. Attachment theory recognizes and is concerned with actual external reality as well as subjective experience. Viewing the likely realistic *effects* of the experience and expression of affect as criteria for whether they are adaptive or defensive is an extension of this non-agnostic view of the patient's reality from within the framework of attachment and affect theory.

This requires clinicians to make a judgement about whether or not an affective experience and the actions to which the affect disposes the patient are adaptive in the patient's real world. This may both comfort and disquiet clinicians. It may comfort them because, even aside from the directly self-destructive behavior around which clinicians routinely intervene, most clinicians do not attempt neutrality when a patient is acting in a way that is likely to cause them other types of less catastrophic but nonetheless significant harm, such as the loss of a necessary job. It may disquiet clinicians because this stance more

directly reveals our role and our responsibility in our patients' lives, in terms of what actually happens to them.

The Issue of More Severe Forms of Pathology

One of the criticisms of attachment theory and research as a basis for clinical theory and practice is that they do not adequately address or depict more severe forms of pathology. Levine and Tuber (1992) write:

> We contend that to have a greater heuristic impact on clinical theory and practice, attachment research needs to differentiate, within the present attachment system, those people who will make "generally successful adaptations" from those who will be more dysfunctional. (p. 83)

As Levine and Tuber argue, this is an issue that is especially evident within an understanding of attachment that is driven by an emphasis on attachment classifications. More severe forms of pathology did not occur to Bowlby as a theoretical problem because his understanding was not founded on the basis of the classifications and because he viewed the pathological processes he identified as operating on a continuum. Similarly, in this study, an effort has been made to shift away from a focus on attachment classifications and toward the more basic processes, the psychodynamics, that underlie the classifications. How does severe pathology appear within this view? In brief, it is seen as

existing on a continuum within the processes that have been previously described.

Tronick and his colleagues (1989; Cohn & Tronick, 1989) have suggested that, within the mother-infant relationship, infant affect that is is not regulated by interindividual coordination must be regulated by the infant on his own through self-directed self-regulation, through defensive processes; they also suggest that this process is inherently difficult and problematic for the infant. Affect occurs in response to stimuli or experience. Some stimuli and experiences elicit more affect than others; for example, some degrees of anxiety are greater than others. In other words, affective states, as adaptive processes, have amplitude and force that is proportional to the degee of adaptive response that is required in the situation that elicits them. An itch elicits less emotional response—less anger, aggression, or fear—than a blow. In the case of an infant or child who experiences pathological caretaking—neglect, trauma, or incoherent relating—the intitial emotional responses will be sharp and strong. When these powerful affective responses are not interindividually regulated through coordination, as they will almost certainly not be in a context of pathological caretaking, Tronick et al.'s analysis suggests that the infant or child will be faced with the massive task of self-regulating unusually strong affective states. The defensive processes that are thereby required will have amplitude and force that is proportional to the strength of the affective states they must constrain and exclude.

Defensive processes that are organized to exclude affective responses that arose in the context of trauma, extensive neglect, or incoherent relating are therefore more forceful and severe than those that arose in less challenging circumstances. They produce correspondingly greater distortion, exclusion, and incoherence in an individual's affective experience and more sharply constrain access to adaptive affect and affective communication during the course of the individual's life. However, the previously described and basic process of attachment-based affective coordination and non-coordination as shaper of affective experience and communication continues to operate.

Although cast in very different language and conceptual terrain, this understanding is broadly consistent with Kernberg's (1975, 1984) description of the origin of borderline conditions as resulting from the use of primitive defenses to control excessive negative affect.

Bowlby's Conception of Psychotherapy

John Bowlby was not very helpful on the subject of the clinical techniques and approaches that follow from the understandings of attachment theory. He did not write very much on the topic and published no detailed case histories of his own clinical work. Much of what he did write about clinical technique and stance is briefly suggestive rather than discursively descriptive. Nonetheless, he left signposts which do indicate some important aspects of his position.

Bowlby noted therapeutic approaches which he thought were consistent with his own understandings of clinical problems from an attachment perspective. A listing, complete to my knowledge, of the clinical approaches that Bowlby (1980, 1988, 1991) saw as generally consonant in some significant degree with attachment theory is as follows (with dates for reference where Bowlby gave one): Fairbairn; Winnicott; Guntrip; Sullivan; Fromm-Reichmann; Gill; Kohut; Beck (1967/1972); Strupp and Binder (1984); Malan (1973); Horowitz et al. (1984); Guidano and Liotti (1983); Peterfreund (1983); Casement (1985); Pine (1985); Raphael (1977); Melges and DeMaso (1980); Fraiberg, Adelson, and Shapiro (1975); Gillett (1986); and Lieberman (1991).

One of the first thing one notices about the therapeutic approaches so noted by Bowlby is how remarkably diverse they are. His listing includes object relationalists; interpersonalists; short-term, brief, and

time-limited theorists and clinicians; active therapists; cognitive therapists; behavior therapists; self-psychologists; bereavement therapists; trauma therapists; clinical social workers; and infant-parent psychotherapists. But Bowlby is not quite catholic in his embrace: the listing is notable for not including any classical psychoanalytic theorists or clinicians. Furthermore, many of the theorists or clinicians on this list would—and some have—sharply disassociated themselves from each other.

Bowlby cited the clinical work of these individuals for different particular reasons, but primarily because their clinical concerns and approaches overlapped in some general or specific way with his own. Bowlby (1988) identified five principal tasks for the therapist in psychotherapy:

1. "To provide the patient with a secure base from which he can explore the various unhappy and painful aspects of his life";
2. "To assist the patient in his explorations by encouraging him to consider the ways in which he engages in relationships with significant figures in his current life";
3. "To encourage...the patient to examine...the relationship between the two of them";
4. "[To] encourage the patient to consider how his current perceptions and expectations and the feelings and actions to which they give rise may be the product either of the events and situations he encountered during his childhood and

adolescence, especially those with his parents, or else as the products of what he may have repeatedly been told by them";

5. "To enable his patient to recognize that his images (models) of himself and of others...may or may not be appropriate to his present and future." (pp. 138-139)

As Bowlby himself says:

> Readers will be aware that the principles set out have a great deal in common with the principles described by other analytically trained psychotherapists who regard conflicts arising within interpersonal relationships as the key to an understanding of their patient's problems. (p. 139)

In all of this, Bowlby portrays his approach to clinical work as essentially flexible and non-doctrinaire, informed primarily by a conception of the nature and origin of clinical problems as arising within the operations of the attachment behavioral system and the psychodynamics of attachment. He seems to have included particular clinicians or clinical approaches based on a judgement of whether they incorporated an understanding of pathology that was substantially compatible with his own. This leaves a rather wide field.

Bowlby did, however, distinguish his particular clinical approach from those of other perspectives in terms of two specific emphases, which appear as items 1 and 4 in his five tasks. The first of these was his conceptualization of the therapist as providing a secure base for the patient, which is the first of the five therapeutic tasks that Bowlby

identifies. Bowlby described the provision of a secure base in terms of two models or metaphors to which he repeatedly returned: the therapist as a "trusted companion" for the patient; and the mother of a securely attached infant as a model for the therapist with a patient. The second specific distinguishing emphasis in Bowlby's clinical theory is the importance he assigns to "knowing what you are not supposed to know and feeling what you are not supposed to feel" (1988, p. 99). This refers essentially to Bowlby's understanding of the origins of defensive processes, exclusions, and pathology, and it has repeatedly been our focus in this study.

Bowlby describes these two emphases as distinctive aspects of his clinical approach. Regarding the first of these emphases—the provision of a secure base, as a trusted companion and like the mother of a secure infant, Bowlby (1988) writes:

> The concept of a secure base is a central feature of the model of psychotherapy proposed. (p. 122)

And

> In providing his patient with a secure base from which to explore and express his thoughts and feelings the therapist's role is analogous to that of a mother who provides her child with a secure base from which to explore the world. (p. 140)

And

> The pattern of interaction adopted by the mother of a secure infant provides an excellent model for the pattern of therapeutic interaction advocated here. (p. 126)

And

> Among points of difference [between his own therapeutic principles and those of others] is the emphasis placed on the therapist's role as a companion for his patient in the latter's exploration of himself and his experiences, and less on the therapist interpreting things to the patient. (p. 151)

Regarding the second of Bowlby's emphases—"on knowing what one is not supposed to know and feeling what one is not supposed to feel," Bowlby (1988) writes:

> Exclusion from consciousness of the thoughts, feelings, and impulses to action that are the natural responses to...events [in which parents have treated children in ways the children find too unbearable to think about or remember]...results in major disorders of personality. (p. 113)

And

> The basic hypothesis [of my therapeutic approach] can be stated simply. So long as current modes of perceiving and construing situations, and the feelings and actions that ensue therefrom, are determined by emotionally significant events and experiences that have become shut away from further conscious processing, the

> personality will be prone to cognition, affect, and behaviour maladapted to the current situation....The therapeutic task is therefore to help the patient discover what these events and experiences may have been so that the thoughts, feelings, and behaviour that the situations arouse, and that continue to be so troublesome, can be linked again to the situations that aroused them. (pp. 117-118)

And

> Failure to express emotion is due very largely to unconscious fear lest the action of which the emotion is a part will lead to a dreaded outcome. (p. 156)

And

> Our role [is] in sanctioning the patient to think thoughts that his parents have discouraged or forbidden him to think, to experience feelings his parents have discouraged or forbidden him to experience, and to consider actions his parents his parents have discouraged or forbidden him to contemplate. (1985, pp. 198-199)

And

> The concern of a psychoanalyst is not only with the extent to which a patient feels free to express his emotions openly, but with the prior questions of whether he knows what his feelings are and what has aroused them. (1991, p. 294)

Thus, Bowlby's position on therapeutic stance can be seen as embracing a variety of techniques for achieving therapeutic goals in the context of a

specific kind of relationship with the therapist and in the context of a particular understanding of pathology. The next two sections consider and extend what we have above described as his distinctive emphases in terms of a particular relationship between therapist and patient and in terms of a specific understanding of pathology.

The Relationship between Therapist and Patient in Attachment Theory

The relationship between the therapist and patient is a central focus in the psychotherapy described here, understood by Bowlby as modeled on that of the mother of a securely attached infant with her child. The mother of a securely attached infant, or a trusted companion, has certain specific characteristics in her relational communications and behaviors, and these characteristics have been extensively studied in developmental attachment research.

The concept of the mother as a "secure base" comes from Ainsworth, appearing quite early in her work (Bretherton, 1992), and it is, of course, Ainsworth who originally studied and described the characteristics of security-engendering mothers. We review these findings in order to more specifically describe what it might mean for a therapist to model his or her relationship with a patient on mothers of securely attached infants. We do so not because patients are children, but because of the fundamental and lifelong nature of the relational processes that elicit secure, non-exclusionary, and well-coordinated affective communication.

Ainsworth and her colleagues (Ainsworth, c1976, Ainsworth, Blehar, Walters, & Wall, 1978) relied primarily on four dimensional scales in distinguishing security-engendering mothers from others. These scale dimensions, applied to observations of general interaction between mothers and babies, were:

1. Sensitivity-Insensitivity to the Baby's Signals and Communications. This scale emphasized both sensitive and accurate perception of the baby's signals and a prompt and appropriate response. When it was reasonably best not to comply with the baby's demands, tactfulness and the offering of an acceptable alternative was emphasized.
2. Acceptance-Rejection of the baby. This scale scored the balance between positive and negative elements in the relationship and the extent to which negative elements are subsumed and integrated within the context of a positive relationship.
3. Cooperation-Interference with the baby. This scale stressed the degree to which mother's facilitated rather than interrupted what the baby wanted to do.
4. Accessibility-Ignoring . This scale rated the mother's psychological accessibility to the infant with an emphasis on her responsiveness and ability to shift from her own thoughts and activities to focus on the baby (Ainsworth, 1976).

Throughout her descriptions of these scales, Ainsworth (1976; Ainsworth et al. 1978) emphasized the centrality of sensitive, helpful responsiveness

and smooth, attuned facilitation of the baby, as well as the strong intercorrelations among these scales (points also emphasized by Bowlby (1973, pp. 357-358). Ainsworth and her colleagues write:

> The most important aspect of maternal behavior commonly associated with the security-anxiety dimension of infant attachment is manifested in different specific ways in different situations, but in each it emerges as sensitive responsiveness to infant signals and communications. The highly significant differentiation between B [secure] and non-B [anxious] mothers...that is provided by a global measure of this variable occurs, we believe, because of the pervasive effect of this quality of maternal behavior throughout many specific kinds of interaction. This and correlated measures of maternal behavior thus do not reflect maternal behavior in absolute terms, but they do tap the extent to which a particular mother is able to gear her interaction with a particular baby in accordance with the behavioral signals he gives of his states, needs, and, eventually, of his wishes and plans....[T]he sensitive responsiveness of mothers to infant signals and communications seems to be the key variable in accounting for environmental influences on the development of a secure versus an anxious attachment relationship (p. 152).

Bowlby adopted Ainsworth's understanding of the patterns of maternal behavior that elicit secure attachment and a secure base for exploration, emphasizing—also in terms of global qualities--the responsiveness and

sensitivity to infant signals, emotional availability, and helpfulness of the maternal figure (1969 rev. 1982, pp. 345-347; 1973, pp. 357-359; 1988, pp. 123-126). It is these characteristics to which he refers as a model for the therapist.

Bates, Maslin, & Frankel (1989) also studied security-engendering mothers, but with children older than those studied by Ainsworth. Their findings were consistent with but extended and further specified Ainsworth's findings. The caregiving qualities, behaviors, and communications identified by Bates et al. as engendering secure attachment were: maternal sensitivity and responsiveness to infant signals; quick responsiveness to distress with a high level intervention; high maternal emotional involvement; maternal warmth and affection, quick responsiveness to social elicitations by the child, mother's teaching and organization of the environment, mother's emotional and verbal responsiveness and communicative competence, positive mutuality, low negative control, harmonious handling of the child's independence, acceptance of child explorations, and maternal involvement.

Finally, De Wolff and van IJendoorn (1997) have published an especially rigorous conceptual and meta-analytic review of 66 published and unpublished research reports concerning maternal behavior and infant attachment. De Wolff and IJzendoorn (1997) observe that maternal sensitivity has been defined variously in the research literature and has often been augmented by measures related to but not identical to Ainsworth's (as in the Bates et al. study above). They survey these

variations and also report on the related measures of maternal behaviors included in the same studies in a manner that summarizes and critiques a large number of studies and a vast amount of data (e.g. results from 7,225 participants). Their report is especially useful for present purposes because they identify an extensive set of maternal caregiving characteristics derived from attachment theory that have been empirically related to security of attachment. These characteristics then bear on the role, behavior, and stance of the optimal therapist as viewed from within attachment theory.

De Wolff and IJzendoorn identified 55 characteristics of maternal behavior and mother-infant interaction from the research literature that had been related as predictor variables to secure attachment. These 55 predictor variables were sorted, via expert sort and principal components analysis, into the following nine categories:

1) Sensitivity, which included variables that conformed to Ainsworth et al.'s original definition.
2) Contiguity of Response, defined as promptness and frequency of response to the infant's signals.
3) Cooperation, which "included constructs that bore on the presence or absence of interfering maternal behavior" (p. 573).
4) Synchrony (mutual interaction; three-step-exchanges; coordinated social play; synchrony; synchronous interaction) defined as, citing Isabella, Belsky, & Von Eye, (1989), "the

extent to which interaction appeared to be reciprocal and mutually rewarding."

5) Mutuality (harmony; positive mutuality) which entails, citing Kiser, Bates, Maslin, & Bayles (1986), "the mother's skill at modulating the baby's arousal, her entertainment value, and her responsiveness to the infant's cues" and, from the infant, "expression of positive affect, nonavoidance, active maintenance of the interaction, and amount of gazing at the mother."

6) Emotional Support (warmth and support; involvement; playful interaction; mutual play; structuring; quality assistance; accessibility; stimulation; attitude; positive presence) De Wolff and van IJzendoorn exemplified this cluster by the component "positive presence," which, citing Erikson, Sroufe, & Egeland (1985) and Matas, Arend, & Sroufe (1978), was defined as follows: "The extent to which the mothers appeared attentive and available to the children and supportive to their efforts" by "providing a secure base by making the child feel comfortable" and by "being involved as manifested by attentiveness to the child and the task."

7) Positive Attitude (positive affect; affectivity; delight; warmth; affectionate contact; empathy; positive interaction; integration; affective quality; attention) This cluster was exemplified by the component "affective quality," which, citing Zaslow, Rabinovich, Suwalsky, & Klein (1988), is defined as "the mother's

expression of positive affect to the baby, and the degree to which the mother and infant engaged in reciprocal interactions."

8) Physical Contact, defined as the quality and quantity of physical contact.

9) Stimulation (encouragement; effective stimulation; stimulation/arousal; stimuius potential) This cluster, citing Miyake, Chen, & Campos (1985), was described as "any action on the part of the mother directed toward her baby."

The authors' meta-analysis concluded that maternal sensitivity as defined by Ainsworth had been robustly supported as a moderately strong predictor of secure attachment with a very substantial and meaningful effect on infants and children. They also concluded that the other related caregiving factors, listed above, especially Mutuality, Synchrony, Positive Attitude, Emotional Support, and Stimulation, had been found to be similarly significant as predictors for security of attachment.

Taken together, these studies paint a detailed picture of the relationship between security-engendering mothers and their infants that Bowlby repeatedly described as the model for the relationship between therapist and patient. These mothers, and therefore attachment-based psychotherapists, are: sensitively responsive to signals; emotionally, verbally, and socially responsive; emotionally warm, supportive, and positive; involved and engaged; synchronous and mutual in interaction;

stimulating, organizing, and facilitative of the child or patient; responsive to distress with high levels of intervention; harmoniously cooperative, non-interfering and facilitative of appropriate independence; accepting; psychologically accessible and able to focus on the other; low in negative affect, control, and rejection of the other.

Technique and Clinical Practices from the Perspective of Attachment, Communication, and Affect Theory

The following discussion of therapeutic technique is written in the context of Bowlby's own embrace of diverse psychotherapies and with particular awareness of his distinctive emphases. It is, however, most particularly based on the understanding of attachment, communication, and affect theory in relationship to psychopathology that has been presented throughout this study. Bowlby is more detailed and specific on the causes of pathology than he is on the means and techniques necessary to address it, other than for his prescription of a particular kind of relationship. As previously discussed, his understanding of the causes of pathology centers on defensive exclusions of thoughts, feelings, and behaviors and on the defensive processes and attachment relationships that impel these exclusions. In this section, we consider techniques that are focused by this particular understanding of pathology, in the context of communication and affect theory.

A search for a communicative coordinated state lies at the core of attachment; in seeking to establish a coordinated state in non-optimal situations, infants and children defensively process and lose access to affective communications and self-states that result in lost coordination with the caregiver. These defensive processes and defensively excluded affect states and cognitions lie at the heart of psychopathology (Bowlby, 1980, p. 65). The task of psychotherapy is to restore lost affective states and lost capacities for affective communication, and with these affective states and affective communications to restore lost capacities for cognitions, memories, perceptions, and adaptive behavior. What techniques and technical practices facilitate this process? We address this question in terms of a series of *focuses* for the therapist that collectively describe a particular, differentiated clinical approach.

A Focus on the Relationship. A Focus on Sensitive, Helpful, Responsiveness to the Patient's Signals and Communications.

Attachment theory views the relationship with the patient as a *primary* rather than adjunctive element in therapy—a fundamental biologically-based process that is not merely a precondition but an active, causal agent for change. From the initial contact on the telephone and first meeting in the waiting room, the therapist is attentive to the construction of a relationship with the patient that incorporates security-engendering and companionate qualities and that will promote a deepening communicative coordination. These qualities primarily

concern warmth, openness, interest, helpfulness, and a sensitive, genuine responsiveness to the communications of the patient, as well as the relative absence of rejecting, hostile, or controlling behaviors and communications.

There is no standard or particular way in which this must be done or may be done for all therapist-patient dyads, and what is suggested here is a general orientation and disposition rather than a set of concrete practices. The key element in this orientation is the belief that establishing and maintaining a security-engendering, companionate relationship—becoming a secure base for the patient—is a priority, the first and the principal continuing task of therapy. It is essential that the patient feel that the therapist is on his or her side in a fundamental sense that transcends particular issues, confrontations, and interventions.

As noted earlier, Ainsworth and her colleagues identified sensitive and helpful responsiveness to infant signals as the key variable in distinguishing security-engendering mothers from the mothers of insecurely attached infants, and this process characteristic was specifically noted by Bowlby as crucial for both mothers and therapists. A sensitive, helpful responsiveness may also be seen to underlie the processes of communicative coordination that have been placed by Tronick at the center of both early maternal-infant interaction and of the "dyadic expansion of consciousness" that he and the Process of Change Study Group have argued is at the core of psychotherapeutic change.

A *sensitive, helpful responsiveness to patient signals* constitutes the basic relational stance of the therapist informed by attachment, communication and affect theory. This stance is directly at variance with the classical psychoanalytic triad of *abstinence, anonymity, and neutrality.* To judge how much these two triads—sensitive, helpful responsiveness versus abstinence, anonymity, and neutrality—are at variance with each other as guiding principles of stance, and how different are their theoretical origins, one might try to imagine the notion of recommending to mothers of infants and small children that they conduct themselves with their children according to the recommended stance of classical psychoanalytic treatment. Yet Bowlby explicitly and repeatedly invoked the stance of the security-engendering mother as a model for the psychotherapist.

While a full consideration of these differences would lead us well beyond our present purposes, it is clarifying to briefly consider the different theoretical bases for these different recommendations on basic stance. Freud (1919) wrote:

> Analytic treatment should be carried through, so far as is possible, under privation—in a state of abstinence....Cruel though it may sound, we must see to it that the patient's suffering, to a degree that is in some way or the other effective, does not come to an end prematurely. (pp. 162-163)

The principal reason for the frustration of the patient and the maintenance of his suffering is to permit the full development of a

"transference neurosis" in a treatment, and the consequent full and clear emergence of the demands for unrealistic infantile gratifications that unconsciously motivate and trouble the patient in his everyday life. Only when these demands for unrealistic infantile gratifications emerge clearly from the ground of their consistent frustration can they be fully identified and then renounced (Glover, 1955; Greenson, 1967; Menninger & Holzman, 1973). As Greenson writes:

> In order to insure the maintenance of adequate motivation, (a) it is necessary for the psychoanalyst consistently to point out to the patient the infantile and unrealistic quality of the instinctual satisfaction which the patient is attempting to obtain; and (b) to make sure that the analyst is in no way consciously or unconsciously gratifying the patient's infantile neurotic instinctual needs. (p. 276)

The key idea here is that the patient is attempting to gratify an infantile and unrealistic need which must be explicitly renounced. It is this idea that is most directly at variance with the understanding offered by attachment, communication, and affect theory.

For Bowlby, on the other hand, what the patient is trying to do is both necessary and positive: he or she is seeking to establish a coordinated attachment, and it is the vicissitudes of affective communication and anxiety about coordinating with the other that construct defenses and pathology. Bowlby (1982, Chapter 1) explicitly distinguished his own understanding of motivation and pathology from

the energic model (on which the recommendation of abstinence is based) and emphasized the life-long nature of needs for attachment and the damage done by considering such needs to be regressive or infantile. *The reason that Bowlby took the security-engendering mother as a model for the therapist is not that patients are children; it is rather the persistence throughout the lifespan of the fundamental processes of attachment-motivated behavior and affective communication that have been described extensively in preceding chapters.* Moreover, in his conception of pathology Bowlby did not describe out-of-awareness feelings and cognitions that needed to be given up and renounced but rather feelings and cognitions that needed to be taken up and included in order to restore full, fluent, non-defensive functioning to the individual.

The patient seeks attachment through versions of coordination that include defensive distortions. Studies of maternal-infant communication in well-functioning dyads and affect theory, as argued in previous chapters, both support the importance of the inclusion and coordination with an individual's affect states and cognitions. Affect theory argues that affects are necessary adaptive responses of the human animal that need to be incorporated in thinking and behavior rather than given up or repressed or otherwise defended against. *The fundamental proposition in attachment, communication, and affect theory is that pathology results from something that is needed by the individual and that is distorted or not accessible or excluded rather than by something that must be renounced or otherwise give up. What is not fully*

processed must be rendered fully accessible so that it can be used rather than excluded. It is the defensive distortions that are given up; the underlying "impulses," in the form of adaptive affects and desires for attachment, are considered as good in themselves.

Of course there are caveats. An important danger in taking such a stance is that the therapist may mistakenly coordinate with defenses, including defensive affect, rather than with excluded but necessary and emergent self-experiences. Traditional psychoanalytic conceptions of neutrality emphasize the importance of not "contaminating" the emergence of the patient's material (e.g. Greenson, 1967, pp. 269-275), a view that has been extensively critiqued (e.g. Mitchell, 1997). In the present conception, the therapist's task is to actively encourage the communication of the excluded. In taking such an elaborative, empathic stance, one of the therapist's necessary and principal tasks is to discriminate between defense and excluded affect and cognition, to actively elaborate the latter and to avoid coordinating with the former. Some guidelines for making this distinction have been discussed above and the issue is extensively considered by McCoullough Vaillant (1997, 1994), Magnavita (1997), and Fosha (1997, 2000), among others. The therapist does not wish to coordinate with or facilitate defensive, non-adaptive feelings and behavior.

But the essential conception of the therapist is as a secure base and trusted companion for the patient, rather than as an abstinent, neutral, and anonymous target of forbidden impulses. This leads in a

very different direction than classical metapsychology, toward a fundamental stance of sensitive, helpful responsiveness and active facilitation of the patient.

A Focus on a Progressively Deepening Coordination with the Patient through Communicative Elaboration and Facilitation.

This occurs in different ways at different points in the course of psychotherapy and at different points within the epicycles that comprise psychotherapy. Communicative elaboration involves an interest and curiosity about the patient's story and, once a focus has been selected within a particular session, a gentle, progressive, step-by-step inquiry that leads the patient deeper into her account of her experiences. It also involves a close focus on and continuing invitation to elaborate on the feelings that are part of the patient's experiencing. The focus on feelings, which by their nature always involve an actual physiological experience and occur in the present tense, should produce in the patient a subjective sense of living through the experience again in the present moment; the therapist's responsiveness, elaborative stance, and felt closeness to the patient should give the patient the subjective sense of going through the experience in the presence of a trusted companion with whom all aspects of the experience can be freely shared and thus fully experienced and processed. The therapist actively communicates his or her presence by phatic and empathic murmurs, through facial, postural, and vocal signals of engagement, and through questions,

comments, and confirming or transitional restatements that deepen and elaborate the patient's account and her experience in the session. Further, consistent with the experiential mode of *accompanying* the patient in her experience, the therapist may self-disclose his or her own affect states in response to the experiences and events described and in response to the interaction with the patient, just as in fact a trusted companion actually present within the experiences would be likely to do.

This process, in its emphasis on experiential elaboration, crystallizes the difference between communicative coordination and defensive exclusion. The therapist *wants to know* what the patient is feeling and thinking and welcomes its expression. The patient comes to believe this and to *feel* it as a new context for his or her self-experiencing. The process is forward-leaning and progressively intimate, with the patient progressively discovering excluded aspects of her experience as she communicates these to the therapist and comes to believe more deeply in the therapist's openness to their expression.

A Focus on Affective Communications I: The Patient's Communications.

Focusing on affect means several things. The therapist more or less continuously scans and consciously processes the affective state and communications of the patient. This especially includes attention to the patient's face and vocal qualities, but also includes postural and rhythmic cues such as how the patient sits and moves. But the face is

particularly important and is viewed, with Tomkins, as the seat of affect and as the primary source of affective communication. The therapist is informed and guided by what is happening on the patient's face, much as are Tronick's optimally coordinating mothers with their infants. The patient's affective state is viewed as a continuously present phenomenon that is monitored by the therapist throughout their interaction. The therapist's ability to discern and register affective communications from the patient's face and other sources is a crucial component of the sensitive responsiveness to patient signals described above.

The therapist is especially alert for two affective events: fleeting expressions of affect and transitions in affect. Both of these events are likely to mark either inchoate and defended against affect states or emergent affects, or both, and so are of special importance. Fleeting expressions of affect are intrinsically difficult to catch; a need on the patient's part to keep these affects out of communication and self-experience invokes defensive maneuvers and distracts the therapist and the patient from their occurrence. For example, the patient may change the subject or begin to tell a long story in great detail; internally, the patient seeks to move away from what he is experiencing. The therapist has to consciously watch for momentary expressions of particular affects in order to catch them. The stance is not unlike that of watching a summer sky for the momentary flash of a shooting star. Because the patient is very unlikely to be aware of these momentary affects, the therapist actively inquires about them, perhaps saying "what happened

on your face a moment ago?" or "you looked sad (or annoyed, frightened, etc.) for a moment." With such prompting and permission, the patient can usually identify and begin to talk about the fleeting feeling, which the therapist can then help to elaborate. The purpose is to bring warded-off affective states and self experiences into fuller expression and conscious experience.

Transitions in feeling state as they occur during a session are especially important in regard to whether they mark a deepening of feeling and involvement or a "shallowing" of affective experience and closeness. A shifted-away-from affective state is likely to mark feelings with which the patient is uncomfortable because they lead to places fenced off by anxiety or because they are not well elaborated for the patient as part of her relational configurations with others, i.e. they are unfamiliar and not fluently integrated. In such a case, the task of the therapist is to return and hold the patient on the feelings that are being transitioned from. The therapist might say "let's go back to what you were feeling a moment ago" or "whenever we start talking about your annoyance, we wind up talking about something else" or "it's hard to keep talking about something that makes you so uncomfortable." In the case of an affective deepening, the therapist's task is to facilitate the deepening by elaborating and resonating to it and accepting it with all the interpersonal skill at her command. In other words, the therapist ***coordinates*** with deepened affective communications and ***avoids coordinating*** with defensive shifts.

In general, the therapist is not reluctant to directly comment on the patient's affective state as it is present in the patient's nonverbal communications, fleeting or otherwise, throughout the session, and he or she often does so. The therapist comments on the patient's feelings often enough to keep them prominent as a focus for experiencing and communication. The selection of what to comment on is guided by what is being defensively excluded and what is there to be deepened.

Direct comment by the therapist about a fleeting affective expression by the patient is usually a coordination by the therapist with an excluded affect state. It often produces a striking and very marked deepening of affect in the patient, as the disowned is suddenly included and experienced in the company of a trusted and coordinating companion. The patient's awareness of her core affective state (Fosha, 2000) is thereby heightened, and it becomes more immediately accessible.

A Focus on Affective Communications II: The Therapist's Affective Experience of the Patient.

The therapist's own affective experience of the patient is a critical focus in the psychotherapy we are describing. This affective experience both informs the therapist and may be explicitly disclosed to the patient.

In focusing attentively on the affective communications of the patient, especially those that are conveyed by the patient's facial expressions, the therapist permits himself to participate in the processes of facial mimicry, facial feedback, and emotional contagion that were discussed in Chapter 2. The therapist's facial muscles move in subtle, often sub-perceptual, reflection or imitation of the patient's expressions, and, through the process of facial feedback, the therapist experiences a version of the patient's affective state within himself. The patient's affective state becomes available to the therapist *as an internal experience*. As the therapist closely tracks what the patient is feeling in the context of the events or situations the patient is describing, the therapist achieves an *experience* of the patient's inner world. He experiences a version of the patient's affect in the context of particular relational configurations. This is an important source of the therapist's felt empathy with and understanding of the patient (Bavelas et al., 1987). Processes similar to these have been described in different conceptual terms in the psychoanalytic literature as projective identification, countertransference, and containment; they are here described less metaphorically in terms of communication and affect.

The therapist's emotional experience of the patient's affect not only constitutes a major source of data about the patient but, in the case

of genuine adaptive affects, also becomes an essential foundation for the creation of a coordinated state between them. This disclosure of the therapist's experience occurs as both implicit and explicit communication. The therapist's communications to the patient are altered as a consequence of his own experiencing of what the patient is feeling; they in significant part reflect the patient's experiencing and this may be registered and responded to by the patient. *Through the inclusion of his own affective experience of the patient's emotions, the therapist matches and synchronizes with the patient in a manner that defines the experience of coordination and that is intrinsically affirming for the patient.*

In the case of difficult or excluded emotions, the expressed affective experiencing of the therapist shifts the patient from a state in which affective self-regulation must be managed on an exclusively intraindividual and defensive basis to a state in which these same difficult or excluded emotions may be self-regulated interindividually and non-defensively—through the communicative coordination with the therapist. This is the essential experience of Bowlby's trusted companion, of secure base attachment, and of security-engendering mother-infant interaction. Within the therapy setting, the patient experiences this new interindividual, non-defensive self-regulation of difficult and excluded affect states as profound relief and relaxation, as an occasion of cognitive clarity and motivational purpose, and as a source of closeness to the therapist.

The therapist's experience is of course not identical to the patient's; he experiences a *version* of what the patient is feeling, a version that is both attenuated and also placed in the different context of the therapist's personal history, affective and cognitive processing, and current motivational state, including the motivation of helping the patient. This partial but not exact overlapping of experiencing is similar to the mid-range of matching in vocal tracking of an infant by her mother that Beebe (1997) has found to be associated with secure attachment. i.e., neither too little nor too much matching is associated with security. Along similar lines, Greenberg (1998) has suggested that an effective therapist needs to have had at least two kinds of life experiences: one experience that has led him to attune very closely to what another is feeling and thinking; and a second that permits him to separate himself from the other and reflect on his experience of attunement through his own affective and cognitive responses.

The similarities and the differences between the patient's and the therapist's experiencing provide the therapist with the necessary leverage to work with the patient's experience. This work, as discussed elsewhere in this chapter, may include accepting, tolerating, and understanding the patient's affect; describing and deepening it; relating it to genetic and current relationships; exploring its role in the therapy relationship; and examining how the patient defensively avoids an excluded affect and what she does and experiences instead. It may also very usefully include the therapist's explicit self-disclosure of his own experience of the

patient, undertaken non-intrusively and with relevance to the patient's goals.

The therapist's self-disclosures incorporate both the similarities and differences in their experiencing. This furthers several important processes in the therapeutic dialogue. By incorporating similarities, it strengthens the patient's sense of the intersubjective reality, validity, and importance of what she is communicating and of her own previously excluded experiencing. It also deepens the degree of coordination that exists within the dyad and may further elicit the emergence of excluded affects and cognitions. By incorporating differences, it provides an opportunity to experience, to step around, and to understand defensive processes in the living moment of the interaction. And, in disclosing the differences in the therapist's experience as these are fostering of and closely relevant to the patient, it invites the patient to coordinate with another way of experiencing herself and her situations; in Vygotsky's terms, it offers the patient a proximal zone of development that leads toward another way of being.

A necessary condition of this process is that the therapist be open to the affects in relational context that the patient is experiencing. As was noted previously, when our emotional communications elicit matching experiences that are intrapsychically uncomfortable to others and that they do not wish to experience, they may seek to avoid us, misunderstand us, divert the interaction in another direction, or otherwise seek to block an internal experience of the state we are

communicating (Fraiberg, Adelson, & Shapiro, 1975; Main & Weston, 1981). Loewald (1960) has observed, speaking of psychoanalysis, that the therapeutic relationship between patient and analyst has the effect of raising the patient to the developmental level of the analyst. Badalamenti (1984) writes, "If the therapist is not already actualized where the client needs to be, then he cannot give the client what he needs: an affective invitation from realized human potentials to unrealized potentials. The therapist/client relation in this sense is comparable to the first and most primitive one a person has" (p. 128). In our present terms, if the therapist is unable to permit himself to experience internally a version of the patient's affective state—if he defends against and excludes it—then coordination will have failed and a repetition of the patient's pathogenic experience with earlier attachment figures may occur.

A Focus on Affect III: A Focus on Adaptive and Maladaptive Behavior and their Accompanying Affects; a Focus on What Affect States Are Difficult for the Individual to Bear and Which Ones They Experience Instead.

The therapist assumes that individuals who have fluent, non-defensive access to their own affects and cognitions are able to plan their lives and to conduct themselves adaptively; given such non-defensive access, their plans and conduct will unfold in a manner that is

congruent with their own circumstances, preferences, and values without the assistance or guidance of the therapist. Maladaptive behavior is understood to result from defensive exclusions and defensively distorted affects and cognitions. Therefore, the therapist surveys the patient's life and listens to the patient's accounts of experiences while thinking in terms of the differences between the circumstances in which he or she behaves adaptively and those in which behavior is maladaptive. The therapist notes the affects that accompany each type of behavior, arriving at an understanding of which affects are difficult for this particular patient, and notes the types of relational configurations that are present when defensive affective processing occurs. This is a way of understanding both the patient's strengths and her difficulties.

This affective-relational analysis has two components: what is excluded or difficult and what is substituted in place of what is difficult. What emotions and emotional states are difficult for this patient to bear and to remain within and what are the alternative or defensive emotional states that they experience instead? What are the characteristics of the relational configurations that are in operation when the excluded emotions occur? To which relational configurations does the patient strive to make a defensive switch? What is the patient feeling that they are not communicating? What do they communicate instead? The delineation of defensive emotional processes, excluded affective communications, and the interpersonal events that set off and occur as

part of these processes constitute a key diagnostic assessment and form of understanding of the patient.

The therapist must therefore be able to make a judgement about what is adaptive and maladaptive for the patient; the attachment informed therapist is no more agnostic about external reality than is the security-engendering mother of a well attached infant. But the patient is, of course, not the therapist's child and the purpose is not to advise the patient on what to do; the security-engendering mother, as noted above, is appropriately non-intrusive and comfortable with her child's independence. However, the therapist's survey of adaptive and maladaptive areas of the patient's functioning gives the therapist a target for inquiry and intervention with the patient. Maladaptive behavior guides the therapist to excluded affect and cognition, and identifies key areas of difficult attachment experiences. The relational configurations that are present when defensive processing occurs tells the therapist what type of situations with attachment figures required defensive exclusions. The therapist's task is to focus on these areas of maladaptation in terms of the defensive exclusions and distortions, to help the patient to bring the excluded material into coordination with the therapist, and thereby to make it possible for the patient to more freely enact an adaptive course of his or her own choosing.

A Focus on the Elision of Defenses in the Context of Directly Helping the Patient. A Focus on Clarification of Maladaptive, Defensive, and Aversive Affect States.

Bowlby stressed the role of defenses and defensive distortions in the operation of psychopathology, with the major difference that he viewed what was defended against as needing to be expressed and embraced rather than renounced. Bowlby described defenses as adaptive only in the genetic situation in which they originally arose or as temporary expedients in circumstances of unusual stress and difficulty, such as during the period immediately following the death of a loved one. Therapeutic work with defenses that is directed primarily at their reduction therefore constitutes a major aspect of a psychotherapy informed by attachment theory.

Work with defenses is well-traveled territory within psychoanalytic, psychodynamic, and many other theoretical perspectives. What distinguishes an approach from within attachment, communication, and affect theory is the following: the above-noted principle that defenses distort adaptive functioning by excluding useful and necessary self-experiences from full processing; and the principle that the therapist function primarily with the characteristics of a trusted companion or security-engendering mother in addressing defenses, which by definition place patient and therapist on opposite sides—unless stance parameters are introduced.

The therapist's role as a trusted companion or security-engendering mother suggests that defenses be addressed, by and large, in a manner that constitutes an aspect of *helpfulness* toward the patient in his or her struggles. Confrontation or neutral interpretation are not incompatible with being an optimal companion or mother, but they are not the ordinary or preferred forms of interaction. But even confrontation can be approached from an affirmative stance, as in the loving limit-setting of an optimal mother.

Working with defenses as an aspect of the therapist's fundamental disposition to be helpful to the patient means that defenses are addressed as impediments to something important and adaptive that the patient is trying to do. This dictates both when they are addressed and how they are understood with the patient. Defenses are best addressed when in fact they arise in conjunction with the patient's efforts to do something important that he or she wants to do. At such moments, the understanding of defenses presents itself as a helpful solution to a problem with which the patient himself is actively struggling. The problem may be various: success at work; difficulties with an intimate relationship; progress in therapy; relinquishing an addiction; a surcease of anxiety or depression.

Often, the patient will present what she wants to do in negative form by saying that she is unable to do it. By understanding with the patient at that moment how the patient's defenses impede, for example, finding intimacy in a relationship, the therapist actually helps the patient

with a currently salient problem and is felt by the patient to be helpful. The patient and therapist share a joint goal. The understanding of defenses becomes a way of being with the patient rather than of judging or dissecting or of viewing him dispassionately from afar. At such moments and within such a stance, there is often a great deal of give-and take between therapist and patient. The therapist may even repeatedly and tactfully interrupt the patient to point to the activation of a defensive distortion, evasion, or exclusion. When this is done successfully, there will be a deepening of the patient's affect. There is not a sudden revelation of an unacknowledged maneuver by the patient nor of a previously concealed understanding by the therapist, but rather a joint and companionate working on an actual difficulty in the context of deepening feelings and new cognitions.

The stance and construction of helpfulness with regard to defenses rests on the above-noted principle that defenses distort adaptive functioning by excluding useful and necessary self-experiences from full processing. It is in these terms that defenses are understood with the patient. The patient's defenses become interesting primarily for how they lead the patient to avoid something that in fact he wants, needs, and can adaptively use. The focus is therefore on moving as rapidly as possible behind the defenses to the excluded affects and cognitions that will motivate the patient in a new direction.

The excluded affect and cognition are excluded precisely because they threatened attachment and coordination in the past; therefore, the

incipient experience of the affect and cognitions is likely to provoke one or both of the forms of attachment anxiety, fear of feeling and fear of absence. With the patient, therefore, there is an emphasis on understanding how defensive functioning, impelled by adaptive purposes in an earlier, non-optimal setting, is related to maladaptive behavior and situations and to aversive affects such as anxiety, depression, and loneliness. There is a corresponding emphasis on exploring where the excluded affects and cognitions might lead the patient and how their inclusion might produce adaptive results.

The therapist, as a secure base, coordinates with and elaborates the excluded affects and cognitions and continues to elide defenses as necessary. When the opportunity presents itself and the therapist is herself the object of the excluded affects and cognitions—for example, in the patient's yearning for contact with or negative feelings about the therapist—she remains in coordination with the patient, unlike the earlier attachment figures, and interpersonally recognizes and honors the patient's affective communications.

As defenses and anxiety dissolve and exclusions emerge, the patient—and the therapist with the patient—experience an increased degree of emotional coherence, genuineness of contact, and depth of motivation. This authenticity, coherence, and depth of motivation characteristically give the patient a very precious feeling of surefootedness in regard to communication and action.

Fosha and Slowiaczek (1997) present an approach to the *identification, labeling,* and *clarification* of defenses that is essentially consonant with the above understanding. They write:

> The...therapist uses her empathy to begin talking about defenses in a nonjudgmental way. She explores with the patient when defenses are most prominent and how they operate. By becoming aware of his defenses in the context of the therapeutic interaction, through the therapist's empathic and nonjudgmental feedback, the patient can also learn what it is like for others to relate to him when he is so defended. Often, as the patient's awareness grows, so does his realization of how his defenses have alienated and distanced others, and have limited his growth. (pp. 240-241)

This emphasis on a nonjudgmental understanding of how the patient's defenses limit his growth and constrain his interactions with others is characteristic of a helpful approach to the patient.

In more severe forms of pathology, where defenses are more powerful and more extensively distort and exclude adaptive affects, a period of working within defensive distortions will extend for a longer period of time. The unfolding or elision of defenses will proceed more gradually and adaptive affects in clear form will be reached more slowly. Each movement toward elicitation and communication of adaptive affect will be smaller. This extended period will be proportional in length to the severity of pathology. However, the essential pattern of the process remains the same.

A Focus on Defenses Against Closeness.

Individuals with pathology related to their attachment motivations always and by definition have difficulties with closeness and intimacy. In the paradigmatic modes of avoidant and resistant insecure attachment, the individual either (a) dismisses the feelings associated with the significance of close relationships or (b) is so preoccupied with threats to or the loss of closeness that the experience of intimacy is substantially distorted. This is a key reason for the primacy of a security-engendering, companionate relationship between therapist and patient. It is a principal reason why such a secure relationship—in the context of the unfolding and communication of previously excluded affects and cognitions—is itself a curative experience for the patient.

Given the primacy of such a secure relationship, the therapist is actively attentive to the patient's defenses against closeness and intimacy within the therapeutic relationship. These defenses may take a variety of forms that are widely recognized by psychodynamic therapists: not having anything to talk about; a sense of aggrievement at having to pay; a dismissal of the significance of warm feelings; attacks on the self as inadequate and unworthy; an insistence on the purely formal and professional aspects of the relationship; coming late or missing sessions; sexualization; making impossible demands; anger that the therapist has other patients; rapid, difficult to follow speech; excessive detail; idealization of the therapist; passivity; grandiosity; etc., etc., etc.

While such patient experiences are widely seen as resistances by psychodynamic therapists, from within the present perspective they are understood and attended to as defenses against closer, more intimate affective coordination—as defenses against the secure, intimate attachment that (optimally) is being offered by the therapist and that intrinsically must include the communication of defensively excluded affective states.

Patients surely *want* a secure attachment. But they have learned, at the level of implicit relational knowing (Lyon-Ruth, 1998), that they cannot have one; they have learned especially that they cannot have one in the context of certain feelings and thoughts; and, they have also learned, at the implicit, procedural level of automatic functioning, how to have a non-intimate, insecurely attached relationship. Their defenses organize and maintain insecure attachment and avoid a more intimate and secure relationship when one is available. They are defenses against something that is longed for but implicitly understood and deeply believed to be impossible, at least in the context of particular affective states.

Secure attachment intrinsically must include fluent affective communication, including the communication of defensively excluded affects. The patient must avoid those affects and the relational configurations that entail them. From the perspective of attachment, communication, and affect theory, patients are constrained in their ability to enter into close communicative coordination around particular

affects and affective states. Defenses occur most actively precisely in those areas of affect and cognition in which it is most difficult for patients to communicate and coordinate with the therapist. As defensive processes become more prominent and active, intimacy is most actively evaded. By removing defenses against affective communication of excluded states, the therapist is engendering close, secure attachment and is accomplishing crucial therapeutic work. As this occurs within a session, both therapist and patient will experience a shift—a deepening of emotional experience, a marked degree of calmness and fluency, and an enhanced feeling of closeness and intimacy.

A Focus on the Initial Emergence of New Adaptive Responses.

As the patient struggles to bring excluded states into communication with the therapist and to non-defensively experience his or her own affects and cognitions, the therapist is especially attentive to the emergence of new adaptive responses. The patient is seen as struggling with different ways of being in the world, and in the course of therapy these ways of being alternate with each other. Emergent adaptive responses take an endless variety of forms: a patient whose self expression and desire to explore the world was stunted by verbally abusive and excessively critical parents may buy a camera and register for a photography course; a narcissistically defended patient may loan his beloved car to his daughter without anxiety or regret; a patient whose anger occasions strong anxiety may stand up for his own interests at

work; or a patient who hides and denies her painful feelings may begin to speak more openly to the therapist in the session. As these emergent adaptive responses show themselves in the interaction with the therapist or in the patient's life outside of the sessions, the therapist's task is to notice them and to highlight and elaborate them with the patient and to encourage their experiencing, however incipient and partial they may be. The elaboration of these experiences includes noting how they are new and different forms of behavior for the patient, discussing and assuaging the anxieties that may have accompanied the new behavior, and contrasting the new behavior with the old patterns of behavior in the patient's recent and genetic past. Encouraging the patient to experientially focus on these emergent responses involves attending to, coordinating with, and deepening the experience of the affects and self-experiences that motivate the new responses.

In order to do this with each patient, the therapist must become an expert in that individual's ways of managing affect and relationships. The therapist must know what the patient usually excludes and avoids, what defenses are invoked to implement the exclusion, and what new behaviors constitute a divergence from these old patterns.

A Focus on the Inappropriate Suppression or Heightening of Affect.

In the paradigmatic modes of avoidant and resistant attachment, attachment anxiety is regulated through the defensive suppression and heightening of affect. Therefore, in listening to and interacting with the

patient, the therapist is especially alert and attentive to affects that seem weaker or stronger than one might normatively expect in the given circumstances. Such suppressions and heightening depict defensive operations and provide a focus for the elicitation of excluded experiences.

The therapist therefore actively inquires and intervenes when the patient is elaborating an experience with what appears to be inappropriately reduced or excessive and overly intense feeling. The therapist slows the patient down and "holds" them in regions of the communicated experience that are problematic in terms of what the patient is feeling. The therapist thinks in terms of the patient's experiencing one of the two major forms of attachment anxiety—fear of feeling and fear of absence—about an anticipated separation or loss of coordination with the other.

At such moments, the patient is understood to have entered a defensive posture that excludes key elements of adaptive self-experience in an effort to control separation from/loss of coordination with the other. In understanding what has been excluded, the therapist attends to *what did not happen* just before the situation or problem the patient is describing, i.e. what did the patient maneuver away from within their own self-experience just before the situation they are describing began to go wrong? The patient's excluded state is not obviously present. Patients have become expert at evading their excluded states and preventing them from reaching full processing and incorporation in behavior. The therapist notices what he or she might have felt or done and actively

inquires and seeks to elaborate the precursors to the problematic situation. The focus is especially on what the patient *might have done* if he or she had not inappropriately suppressed or heightened an affective response.

A Focus on the Genetic Antecedents within Attachment Relationships of Aversive Affect States, Especially Anxiety, Anger, and Sadness. A Focus on Cognitions, Memories, and Behaviors that Occur in Relation to Aversive Affects and Their Genetic Antecedents. A Focus on Attachment Anxiety in Relationship to Maladaptive Behavior and the Heightening or Suppression of Affect.

The affective experiencing of the patient guides inquiry. In the course of focusing on the patient's affect and understanding her anxieties, defenses and exclusions, the therapist inquires about when else the patient has felt in a similar way. This inquiry should occur at a moment of relative depth in the session, when the patient is experiencing strong feeling in relationship to an actual situation that they are confronting. Affect, especially affects related to fears and anxieties, function as a powerful cue and organizer to memories (Bower, 1992; LeDoux, 1996). Therefore, if the currently experienced affect and relational pattern has in fact been developmentally significant for the patient, and if the moment of inquiry has been well-chosen, the patient will usually be able to immediately relate the current feeling and the relational configuration of which it is a part to an important string of

genetic antecedents. These will primarily concern experiences with attachment figures.

These genetic antecedents are explored in terms of the attachment motivations and affective experiences of the patient, including especially an understanding of what was defensively excluded in the earlier situations. Excluded or incompletely communicated affects will usually include attachment anxiety (either fear of feeling or fear of absence), anger at the behavior of the attachment figure, and sadness or grief at a loss of attachment, coordination, and their associated positive self-states; these experiences are elicited and clarified with the patient.

The role of attachment anxiety as a cause of the patient's maladaptive behavior and exclusionary self-experience is highlighted for the patient. Patient and therapist explore the characteristics of primary and secondary attachment figures in terms of the patient's experience of them. This includes especially how the attachment figures separated or withdrew from coordination with the patient and what the patient did in order to maintain or re-establish whatever forms of coordination were possible. This inevitably includes a consideration of the patient's necessary defenses and his excluded feelings, thoughts, and behaviors.

There are at least two uses to which these explorations of the past may be put. First, the genetic antecedents may be used to understand the patient's experience and behavior in the current situation and in current functioning more generally; this understanding of the present in terms of the past informs both the therapist and patient. Optimally, their

understanding emerges jointly as part of a shared exploration. Secondly, the past may be re-experienced in its own rite and given new meaning, becoming a part of a new narrative understanding of the patient's life. For example, a patient may come to understand that his feelings of "badness" come from the defensive and distorted experience of his own anger, which was met in his past by rejection and the withdrawal of attachment figures. The therapist will usually need to make a choice about where to place the emphasis within the session, though the patient's own inclinations often provide a clearly marked direction.

In either case, however, the therapist emphasizes the progressive inclusion of what was previously excluded, both in affective experiencing and communication and in terms of new cognitions about self and other. In the case of the focus on the past, the therapist, in a form of re-living the past, may elicit and help to fully process emotional responses that the patient could not safely communicate in the original situations; the full processing of these affects will include an elicitation and experience of what the patient wanted to do, i.e. toward what behaviors and actions the previously excluded affects disposed her. In the case of a focus on the present, the therapist will highlight the exclusion of affect and cognition in the current situation, will elicit these affects and cognitions in the present moment, and will consider with the patient the actions toward which these now-included affects dispose the patient in the current situation. With the clarification and full processing of affective experience

comes clarity of appraisal and motivation and thus an enhanced capacity for adaptive action.

A Focus on Eliciting and Deepening the Communication and Experience of Adaptive Affects. A Focus on Adaptive Action and Adaptive Affective Communication, within the Therapy Relationship and in the External World. A Focus on Cognitions, Memories, and Behaviors that Occur in Relationship to Emergent Adaptive Affect States.

As adaptive affects, cognitions, and behaviors that have been previously excluded by attachment anxiety are reached and become progressively more accessible to the patient, the therapist acts to highlight and affirm these adaptive responses. This principle follows not only from the theoretical rationale that in conducting psychotherapy one is seeking to facilitate the emergence of excluded affects and cognitions that are needed by the patient because of the appraisals and adaptive action tendencies that they contain; it also follows from the role of the security-engendering mother as a teacher, organizer, and facilitator in regard to her child's behavior and goals. It is an aspect of the therapist's responsive helpfulness toward the patient.

This principle directly challenges the notion of neutrality as it is traditionally conceived (though not necessarily as it is often practiced) and so immediately involves us in some difficulties. Some of the ways in which a therapist might affirm adaptive responses are not particularly problematic, and many of the most useful of these occur within the

therapy relationship. For example, a therapist may choose to respond especially promptly and generously to a phone call from a patient who usually deals with feelings and problems through isolation and suppression or who has otherwise been afraid of how the expression of his difficulties or need for help may affect his attachment figures. In so doing, the therapist is affirming the patient's emergent capacity to communicate when he is in difficulty by responding in a coordinative manner.

While this example is not particularly problematic, it is worth noting that the tendency of many psychoanalytic writers and therapists in considering instances of a therapist's positively responding to a patient's request would be to focus on and to worry primarily about the dangers of a countertransference enactment. While the therapist's feelings, personal responses, and motivations in regard to the patient remain of great interest within the present model, the focus and conceptual frame used here has a different emphasis; the critical judgement is whether the emergent impulse and behavior is defensive or adaptive. If the impulse and behavior is judged to be an adaptive emergence of an excluded but necessary affect, the therapist will coordinate with it in order to affirm and further it. To take an actual example of the differences between a therapeutic interaction grounded in therapeutic neutrality and one informed by the perspective taken here: a poorly educated and isolative clinic patient once began a session with her therapist by asking who had won the presidential election the day before.

There are many ways to understand such a question. The therapist's psychoanalytic supervisor, perhaps struck by the patient's not knowing what everyone else did, suggested that the question should be interpreted to the patient as an aspect of her dependence on the therapist, a tack the therapist in fact carried out. In the present model, the patient's question would more likely be understood as an effort by the isolative patient to establish the therapist, at the beginning of a session, as a helpful and responsive secure base and therefore as a pathway to exploring the unknown and frightening wider world. The question might therefore be directly answered in a warm, open, and friendly manner and used to foster the relationship between patient and therapist. Similarly and in general, the therapist will seek to facilitate the experience and communication of other adaptive affects within the therapy relationship, including negative affects such as anger and sadness.

More difficult instances concern the patient's efforts to behave more adaptively in the world beyond the therapeutic dyad and the therapist's role in facilitating adaptive affect and cognition in relation to these efforts. The therapist need not actually advise the patient, although inevitably she will influence him in the actions he takes in the outside world. Indeed, the therapist conceives her role as including the active fostering of the patient through her communications to him. But direct advice on behavior is usually therapeutically useless because what is at therapeutic issue is the patient's access to his own affective and cognitive

responses. Behaviors outside the context of the patient's affective motivations are generally not of interest. Therefore, as the patient presents real problems and situations with which he is struggling, the therapist will seek—through questions, elaborations, restatements, and nonverbal responses—to both elicit and affirm the adaptive affects and cognitions of the patient as they emerge in relationship to the situation the patient is discussing; the therapist will also seek to elide the defensive maneuvers and to assuage the anxieties that usually accompany their emergence. Because affects include an action tendency, a disposition to particular actions and behaviors, all of this inevitably disposes the patient to some behaviors rather than to others. By eliciting, elaborating, and encouraging the experience of selected emotions the therapist is playing an important role in making these behaviors possible for the patient. The therapist's judgement of what emotions need to be facilitated in the patient has a key influence on what the patient may decide to do, and the therapist may well discuss particular behaviors with the patient in terms of their affective context and meaning. What is essential is that the therapist elicit, affirm, and coordinate with what is genuine and deep in the patient's experiencing rather than what is defensive and motivated by anxiety.

As a key part of this work, the therapist inquires about the patient's experience of the emergent emotions, thoughts, and behaviors. As noted earlier, Fosha (2000) has suggested that the experience of genuine core affects in the absence of defenses, a *core affective state*, is

accompanied by a characteristic pattern of self-experience which should be highlighted for the patient. When genuine and previously unavailable affects emerge without defenses, patients experience themselves in an affirmative way. This is the case even when the emotions involved are themselves painful. Patients who are experiencing deep sadness or grief that they had previously defended against may say, as one such patient recently did, "I feel really sad but really good." Or a patient who is experiencing previously excluded anger may also find himself feeling very strong and surefooted and calm. The positive aspect of these emotional experiences is a key marker that the emotions involved are genuine and adaptive.

As part of an inquiry about the patient's experience of adaptive affects and cognitions, the therapist may ask the patient when else he has felt this way. The patient may have had some partial experiences in the past of the same adaptive emotions and thoughts that are now emerging more fully from exclusion. On inquiry, these memories will be recruited by the patient's current affective experience. As they are communicated to and elaborated by the therapist, they become more fully a part of the patient's narrative and understanding of his own experience.

However, as genuine and adaptive emotions emerge strongly and clearly from exclusion, patients will often say that they have never felt this way before. They will have a sense of themselves as new. This an important moment for the therapist to continue to stay in close

coordination with the patient and to not back away from the patient's positive feelings in and about the relationship with the therapist; for what the patient is doing *is* new—and fragile—in relationship with another person. The exploration of and mutual coordination with these feelings in the patient-therapist relationship, often involving the therapist's self-disclosure and expression of feeling, can provide a corrective emotional experience for the patient. This corrective experience leads to a felt knowledge of the positive and deepening self and relational consequences of including, experiencing, and expressing rather than excluding, defending, and avoiding.

A Final Note on the Power of Non-Exclusionary Communication

As psychotherapists, we work with our patients by communicating with them, and a central theme in this study has been the power of coordination and communication with an other to shape and also to transform the self. The emphasis throughout has been on the affirmative power of this communicative coordination when it permits the emergence of authentic and non-exclusionary self-experience—affects and cognitions that are not distorted by fear and anxiety about the loss of coordination with the other. This has been described as a natural and biologically embedded human process that is not unique to the setting of psychotherapy. In this sense, psychotherapy participates in and makes special use of a dimension of experience that is always potentially present in human relationships. It is psychotherapy's focused

participation in this dimension of experience that confers its power and efficacy. We do, after all, only communicate with our patients.

Martin Buber (1965) has described this natural and broader process, in which psychotherapy may sometimes participate, in words that emphasize the emergence of the excluded and the power of authentic, non-exclusionary communication:

> In the great faithfulness which is the climate of genuine dialogue, what I have to say at any one time already has in me the character of something that wishes to be uttered, and I must not keep it back, keep it in myself. ... Where the dialogical word genuinely exists, it must be given its right by keeping nothing back.... To speak is both nature and work, something that grows and something that is made, and where it appears dialogically, in the climate of great faithfulness, it has to fulfill ever anew the unity of the two.
>
> But where the dialogue is fulfilled in its being, between partners who have turned to one another in truth, who express themselves without reserve and are free of the desire for semblance, there is brought into being a memorable common fruitfulness which is to be found nowhere else. At such times, at each such time, the word arises in a substantial way by men who have been seized in their depths and opened out by the dynamic of an elemental togetherness. ***The interhuman opens out what otherwise remains unopened.*** (p. 86, italics added)

References

Adamson, L. B. (1996). *Communication development during infancy.* Boulder, CO and Oxford, England: Westview Press.

Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love.* Baltimore: Johns Hopkins University Press.

Ainsworth, M. D. S. (1976) System for rating maternal care behaviors. No. 008053. Educational Testing Service Test Collection. Princeton, NJ: Educational Testing Service.

Ainsworth, M. D. S. (1976.). System for coding infant attachment and reciprocal maternal behaviors. No. 008054. Educational Testing Service Test Collection. Princeton, NJ: Educational Testing Service.

Ainsworth, M. D. S., (1992). A consideration of social referencing in the context of attachment theory and research. In S. Feinman (Ed.), *Social referencing and the social construction of reality.* New York: Plenum.

Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1972). Individual differences in the development of some attachment behaviors. *Merrill-Palmer Quarterly, 18,* 123-143.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Hillsdale, NJ: Lawrence Erlbaum.

Alper, G. (1996). *The dark side of the analytic moon: A memoir of life in a training institute.* New York: International Scholars Publications

Anderson, S. W., & Jaffe, J. (1972). *The definition, detection, and timing of vocalic syllables in speech signals* (Scientific Report No. 12). New York: Department of Communication Sciences, New York State Psychiatric Institute.

Angyal, A. (1941). *Foundations for a science of personality.* New York: Commonwealth Fund.

Badalamenti, A. F. (1984). Successful psychotherapy. *Journal of Contemporary Psychotherapy, 14* (2), 120-130.

Baldwin, J. M. (1911). *The individual and society.* Boston: Goreham.

Bates, J. E., Maslin, C. A., & Frankel, K. A. (1985). Attachment security, mother-child interaction, and temperament as predictors of behavior-problem ratings at age three years. In I. Bretherton and E. Waters (Eds.), Growing points in attachment theory and research (pp. 167-193), *Monographs of the Society for Research in Child Development, 50* (1-2, Serial 209). Chicago: University of Chicago Press.

Bavelas, J. B. , Black, A., Lemery, C. R., & Mullett, J. (1987). Motor mimicry as primitive empathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 317-338). New York: Cambridge University press.

Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects.* New York: Harper & Row. Republished by University of Pennsylvania Press with changed sub-title as *Depression: Causes and treatment,* 1972.

Beebe, B. (1986). Mother-infant mutual influence and precursors of self- and object representations. In J. Masling (Ed.), *Empirical studies of psychoanalytic theories, Vol. 2* (pp. 27-48). Hillsdale, NJ: Analytic Press.

Beebe, B., & Lachmann, F. M. (1988a). Mother-infant mutual influence and precursors of psychic structure. In A. Goldberg (Ed.), *Frontiers in self psychology: Progress in self psychology, Vol. 3.* (3-26). Hillsdale, NJ: Analytic Press.

Beebe, B., & Lachmann, F. M. (1988b). The contribution of mother-infant mutual influence to the origins of self- and object representations. *Psychoanalytic Psychology,* 5, 305-337.

Beebe, B., & Lachmann, F. M. (1992). The contribution of mother-infant mutual influence to the origins of self- and object representations. In N. Skolnick & S. Warshaw (Eds.), *Relational perspectives in psychoanalysis* (pp. 83-118). Hillsdale, NJ: Analytic Press.

Beebe, B., & Stern, D. N. (1977). Engagement-disengagement and early object experiences. In N. Freedman & S. Grand (Eds.), *Communicative structures and psychic structures* (pp. 35-55). New York: Plenum.

Beebe, B., Jaffe, J., & Lachmann, F. M. (1992). A dyadic systems view of communication. In N. Skolnick & S. Warshaw (Eds.), *Relational perspectives in psychoanalysis* (pp. 61-81). Hillsdale, NJ: Analytic Press.

Belsky, J. (1999). Modern evolutionary theory and patterns of attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 141-161). New York: Guilford.

Biringen, Z. (1994). Attachment theory and research: Application to clinical practice. *American Journal of Orthopsychiatry, 64,* 404-420.

Bower, G. (1992). How might emotions affect learning? In S. A. Christianson (Ed.), *Handbook of emotion and memory: Research and theory.* Hillsdale, NJ: Erlbaum.

Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis,* 29, 1-23.

Bowlby, J. (1959). Separation anxiety. *International Journal of Psychoanalysis,* 41, 1-25.

Bowlby, J. (1960). Grief and mourning in infancy and early childhood. *Psychoanalytic Study of the Child,* 15, 3-39.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation.* New York: Basic Books.

Bowlby, J. (1979). *The making and breaking of affectional bonds.* London and New York: Routledge.

Bowlby, J. (1980). *Attachment and Loss: Vol. 3. Loss, sadness, and depression.* New York: Basic Books.

Bowlby, J. (1982). *Attachment and Loss: Vol. 1. Attachment* (2nd ed.). New York: Basic Books. (Original work published 1969)

Bowlby, J. (1985). The role of childhood experience in cognitive disturbance. In M. J. Mahoney & A. Freeman (Eds.), *Cognition and psychotherapy* (pp. 181-200).New York: Plenum.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development.* New York: Basic Books.

Bowlby, J. (1991). Post-script. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 293-297). London: Routledge.

Bowlby, J., & Parkes, C. M. (1970). Separation and loss within the family. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: International yearbook of child psychiatry and allied professions* (pp. 197-216). New York: Wiley.

Boysson-Bardies, B. de, Halle, P., Sagart, L., & Durand, C. (1989). A crosslinguistic investigation of vowel formants in babbling. *Journal of Child Language, 6,* 1-17.

Boysson-Bardies, B. de, Sagart, L., & Durand, C. (1984). Discernible differences in the babbling of infants according to target language. *Journal of Child Language, 11,* 1-15.

Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28* (5), 759-775.

Bretherton, I., (1990). Open communication and internal working models: Their role in the development of attachment relationships. In R. Thompson (Ed.), *Socioemotional development* (Nebraska Symposium in Emotion, 1988, Vol. 36, (pp. 57-114). Nebraska: University of Nebraska Press.

Bruner, J. (1975). From communication to language—a psychological perspective. *Cognition, 3*, 255-287.

Buber, M. (1965). *The knowledge of man: A philosophy of the interhuman.* (M. Friedman, Ed. & Intro.). New York: Harper & Row.

Buck, R., Miller, R. E., & Caul, W. F. (1974). Sex, personality, and physiological variables in the communication of affect via facial expression. *Journal of Personality and Social Psychology, 30*, 587-596.

Bush, L. K, Barr, C. L., McHugo, G. J., & Lanzetta, J. T. (1989). The effects of facial control and facial mimicry on subjective reactions to comedy routines. *Motivation and Emotion, 13* (1), 31-52.

Cacioppo, J. T., Bush, L. K., & Tassinary, L. G. (1992). Microexpressive facial actions as a function of affective stimuli: Replication and extension. *Personality and Social Psychology Bulletin, 18*, 515-526.

Camras, L. A. (1992). Expressive development and basic emotions. *Cognition and Emotion, 6* (3/4), 269-283.

Camras, L. A., Holland, S. T., & Patterson, M. J. (1993). Facial expression. In M. L. Lewis & J. M Haviland (Eds.), *Handbook of emotions* (pp. 199-208). New York: Guilford.

Camras, L. A., Malatesta, C., & Izard, C. (1991). The development of facial expressions in infancy. In R. Feldman & B. Rime (Eds.), *Fundamentals of nonverbal behavior* (pp. 73-105). Cambridge, England: Cambridge University Press.

Camras, L. A., Ribordy, S., Hill, J., Martino, S. (1990). Maternal facial behavior and the recognition and production of emotional expression by maltreated and normal-treated children. *Developmental Psychology, 26*, 304-312.

Casement, P. J. (1985). *Learning from the patient.* London: Tavistock.

Cassidy, J. (1994). Emotion regulation: Influence of attachment relationships. *Monographs of the Society for Research in Child Development, 69* (240), 228-249.

Cassidy, J., & Berlin, L. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development, 65*, 971-991.

Chappell, P. F., & Sander, L. W. (1979). Mutual regulation of the neonatal-maternal interactive process: Context for the origins of communication. In M. Bullowa (Ed.), *Before speech: The beginning of interpersonal communication* (pp. 89-109). Cambridge: Cambridge University Press.

Cohn, J. F., & Elmore, M. (1988). Effect of contingent changes in mothers' affective expression on the organization of behavior in 3-month-old infants. *Infant Behavior and Development, 11*, 493-505.

Cohn, J. F., & Tronick, E. Z. (1987). Mother-infant face-to-face interaction: The sequence of dyadic states at 3, 6, and 9 months. *Developmental Psychology, 23*, 68-77.

Cohn, J. F., & Tronick, E. Z. (1989). Specificity of infants' response to mothers' affective behavior. *Journal of the American Academy of Child and Adolescent Psychiatry, 28* (2), 242-248.

Condon, W. S., & Sander, L. W. (1974). Neonate movement is synchronized with adult speech: Interactional participation and language acquisition. *Science, 183*, 99-101.

Cooley, C. H. (1902). *Human nature and the social.* New York: Charles Scribner's Sons.

Crittenden, P. M. (1992). *Preschool Assessment of Attachment.* Unpublished manuscript. Family Relations Institute, Miami, FL.

Crittenden, P. M. (1994). *Preschool Assessment of Attachment* (2nd ed.) Unpublished manuscript. Family Relations Institute, Miami, FL.

Cupchik, G. C., & Leventhal, H. (1974). Consistency between expressive behavior and the evaluation of humorous material: The role of sex and self-observation. *Journal of Personality and Social Psychology 30* (3), 429-442.

Daly, E. M., Abramovitch, R., & Pliner, P. (1980). The relationship between mothers' encoding and their children's decoding of facial expressions of emotion. *Merrill-Palmer Quarterly, 26*(1), 25-33.

Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain.* New York: Grosset/Putnam.

Damasio, A. R. (1999). *The feeling of what happens: Body and emotion in the making of consciousness.* New York: Harcourt Brace.

Darwin, C. (1872/1998) *The expression of the emotions in man and animals* (3rd ed.) New York: Oxford University Press.

Dawson, G. (1994). Frontal electroencephalographic correlates of individual differences in emotion expression in infants: A brain systems perspective on emotion. In N. Fox (Ed.), The development of emotion regulation. *Monographs of the Society for Research in Child Development, 50* (2-3, Serial No. 240), 135-152.

Dawson, G., Groefer Klinger, L., Panagiotides, H., Hill, D., & Spieker, S. (1992c). Frontal lobe activity and affective behavior of infants of mothers with depressive symptoms. *Child Development, 63*, 725-737.

Dawson, G., Groefer Klinger, L., Panagiotides, H., Spieker, S., & Frey, K. (1992b). Infants of mothers with depressive symptoms: Electroencephalographic and behavioral findings related to attachment status. *Development and Psychopathology, 4*, 67-80.

Dawson, G., Panagiotides, H., Groefer Klinger, L., & Hill, D. (1992a). The role of frontal lobe functioning in infant self-regulatory behavior. *Brain and Cognition, 20,* 152-175.

De Wolff, M., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development,* 68(4), 571-591.

DeCasper, A. H., & Fifer, W. P. (1980). Of human bonding: Newborns prefer their mother's voice. *Science, 208,* 1174-1176.

Deckers, L., Kuhlhorst, L., & Freeland, L. (1987). The effect of spontaneous and voluntary facial expressions on surprise and humor. *Motivation and Emotion, 11*(4), 403-412.

Demos, E. V. (1995). *Exploring affect: The selected writings of Silvan S. Tomkins* (1995) (pp. 284-294). New York: Cambridge University Press.

Dimberg, U., & Hansson, G. (1998). Rapid facial reactions to emotion facial expressions. *Scandinavian Journal of Psychology, 39*(1), 39-46.

Dimberg, U., Hansson, G., & Thunberg, M. (1998). Fear of snakes and facial reactions: A case of rapid emotional processing. *Scandinavian Journal of Psychology, 39*(2), 75-80.

Dixon, N. F. (1971). *Subliminal perception: The nature of a controversy.* New York: McGraw-Hill.

Doherty, W. R. (1998). Emotional contagion and social judgement. *Motivation and Emotion, 22*(3), 187-209.

Dozier, M., & Lee, S. (1995). Discrepancies between self- and other-report of psychiatric symptomology: Effects of dismissing attachment strategies. *Development and psychopathology, 7*, 217-226.

Dozier, M., & Tyrrell, C. (1998). The role of attachment in therapeutic relationships. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 221-248). New York: Guilford.

Duclos, S. E., Laird, J. D., Schneider, E., Sexter, M., Stern, L., & Van Lighten, O. (1989). Emotion-specific effects of facial expressions and postures on emotional experience. *Journal of Personality and Social Psychology, 57*(1), 100-108.

Duncan, J., & Laird, J. D. (1977). Cross-modality consistencies in individual differences in self-attribution. *Journal of Personality, 45*, 191-206.

Edelman, B. (1984). A multiple factor study of body weight control. *Journal of General Psychology, 110*, 99-114.

Eibl-Eibesfeldt, I. (1970). *Ethology: The biology of behavior.* New York: Holt, Rinehart and Winston.

Eibl-Eibesfeldt, I. (1971). *Love and hate: The natural history of behavior patterns.* New York: Holt, Rinehart and Winston.

Eibl-Eibesfeldt, I. (1989). *Human ethology.* New York: Aldine de Gruyter.

Ekman, P, & Davidson, R. J. (1994). *The nature of emotions: Fundamental questions.* New York: Oxford University Press.

Ekman, P. (1972). Universals and cultural differences in facial expressions of emotion. In J. Cole (Ed.), *Nebraska Symposium on Motivation* (Vol. 19, pp. 207-253). Lincoln: University of Nebraska Press.

Ekman, P. (1984). Expression and the nature of emotion. In K. R. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 319-343). Hillsdale, NJ: Lawrence Erlbaum.

Ekman, P. (1992). An argument for basic emotions. *Cognition and emotion, 6,* 1992, 169-200.

Ekman, P. (1993). Facial expression and emotion. *American Psychologist, 48,* 384-392.

Ekman, P. (1998). Afterward. In Darwin, C. (1872/1998) *The expression of the emotions in man and animals* (3rd ed.) (pp. 363-394). New York: Oxford University Press.

Ekman, P. Friesen, W. V., & Ancoli, S. (1980). Facial signs of emotional experience. *Journal of Personality and Social Psychology, 39*(6), 1125-1134.

Ekman, P., & Friesen, W. V. (1971). Constants across culture in the face and emotion. *Journal of Personality and Social Psychology, 17,* 124-129.

Ekman, P., Friesen, W. V., O'Sullivan, M., Chan, A., Diacoyanni-Tarlatzis, I., Heider, K., Krause, R., LeCompte, W. A., Pitcairn, T., Ricci-Bitti, P. E., Scherer, K. R., Tomita, M., Tzavras, A. (1987). Universals and cultural differences in the judgements of facial expressions of emotion. *Journal of Personality and Social Psychology, 53,* 712-717.

Ekman, P., Levenson, R. W., & Friesen, W. V. (1983). Autonomic nervous system activity distinguishes among emotions. *Science, 221,* 1208-1210.

Ekman, P., Sorenson, E. R., & Friesen, W. V. (1969). Pancultural elements in facial displays of emotions. *Science, 164,* 86-88.

Elkin, I., Shea, M. T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., Glass, D. R., Watkins, J. W., Pilkonis, P. A., Leber, W. R., Docherty, J. P., Fiester, S. J., & Parloff, M. B. (1989). NIMH treatment of depression collaborative research program: General effectiveness of treatments. *Archives of General Psychiatry, 46,* 971-983.

Emde, R. N. (1985). An adaptive view of infant emotions: Functions for self and knowing. *Social Science Information, 24,* 337-341.

Emde, R. N., Osofsky, J., & Butterfield, P. M. (Eds.), *The IFEEL pictures.* Madison, CT: International Universities Press.

Erdelyi, M. H. (1974). A new look at the new look: Perceptual defense and vigilance. *Psychological Review, 81,* 1-25.

Erdelyi, M. H. (1985). *Psychoanalysis: Freud's cognitive psychology.* New York: Freeman.

Erikson, M. F., Sroufe, L. A., & Egeland, B. (1985). The relationship between quality of attachment and behavior problems in pre-school in a high-risk sample. In I. Bretherton and E. Waters (Eds.), Growing points in attachment theory and research (pp. 147-166), *Monographs of the Society for Research in Child Development, 50* (1-2, Serial 209). Chicago: University of Chicago Press.

Fairbairn, W. R. D. (1952). *An object-relations theory of the personality.* New York: Basic Books.

Field, T. M., Cohen, D., Garcia, R., & Greenberg, R. (1984). Mother-stranger face discrimination by the newborn. *Infant Behavior and Development, 8,* 19-25.

Fonagy, P. & Target, M. (1997). Attachment and reflective function: Their role is self-organization. *Development and Psychopathology, 9* (4), 679-700.

Fonagy, P. (1998). Moments of change in psychoanalytic theory: Discussion of a new theory of psychic change. *Infant Mental Health Journal,* 19(3), 348-353.

Fonagy, P., Steele, H., Moran, G. S., & Higgitt, A. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal, 12,* 201-218.

Fonagy, P., Steele, M., Steele, H., Leigh, T., Kennedy, R., Matoon, G., & Target, M. (1995). Attachment, the reflective self, and borderline

states. In S. Goldberg, R. Muir, & J. Kerr (Eds.), *Attachment theory: Social, developmental, and clinical perspectives* (pp. 223-278). Hillsdale, NJ: Analytic Press.

Fonagy, P., Target, M., Steele, M., Steele, H., Leigh, T., Levinson, A., & Kennedy, R. (1997). Morality, disruptive behavior, borderline personality disorder, crime, and their relationship to security of attachment. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and Psychopathology* (pp. 223-276) New York: Guilford.

Fosha, D. (2000). *The transforming power of affect: A model of accelerated change.* New York: Basic Books.

Fosha, D., & Slowiaczek, M. L. (1997). Techniques to accelerate dynamic psychotherapy. *American Journal of Psychotherapy, 51*(2), 229-251.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: a psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry, 14*, 387-421.

Fraley, R. C., Davis, K. E., & Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249-279). New York: Guilford.

Freud, S. (1917). Mourning and melancholia. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 14, pp. 237-258). London: Hogarth Press.

Freud, S. (1919). Lines of advance in psycho-analytic therapy. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 18). London: Hogarth Press.

Freud, S. (1920). *Beyond the pleasure principle.* In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 18, pp. 3-64). London: Hogarth Press.

Frijda, N. H. (1986). *The emotions.* London: Cambridge University Press.

Frijda, N. H. (1987). Emotions, cognitive structure, and action tendency. *Cognition and Emotion, 1,* 115-144.

Frijda, N. H. (1988). The laws of emotion. *American Psychologist, 43,* 349-358.

Gabbard, G. O. (1994). *Psychodynamic psychiatry in clinical practice: The DSM-IV edition.* Washington, DC: American Psychiatric Press.

Gianino, A., & Tronick, E. Z. (1988). The mutual regulation model: The infant's self and interactive regulation coping and defense. In T. Field, P. McCabe, & N. Schneiderman (Eds.), *Stress and coping* (pp. 47-68). Hillsdale, NJ: Erlbaum.

Glover, E. (1955) *The technique of psycho-analysis.* New York: International Universities Press.

Greenberg, M. T., & Marvin, R. S. (1979). Attachment patterns in profoundly deaf preschool children. *Merrill-Palmer Quarterly, 25* (4), 265-279.

Greenson, R. R. (1967). *The technique and practice of psychoanalysis, Vol. 1.* Madison, CN: International Universities Press.

Grieser, D. L., & Kuhl, P. K. (1988). Maternal speech to infants in a tonal language: Support for universal prosodic features in motherese. *Developmental Psychology, 24,* 14-20.

Grosskurth, P. (1987). *Melanie Klein: Her world and her work.* Cambridge, MA: Harvard University Press.

Grossman, K. E. (1995). The evolution and history of attachment research and theory. In S. Goldberg, R. Muir, & J. Kerr (Eds.), *Attachment theory: Social, developmental, and clinical perspectives* (pp. 85-122). Hillsdale, NJ: Analytic Press.

Guidano, V. F., & Liotti, G. (1983). *Cognitive processes and emotional disorders.* New York: Guilford.

Haft, W., & Slade, A. (1989). Affect attunement and maternal attachment: A pilot study. *Infant Mental Health Journal, 10,* 157-172.

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion.* Cambridge: Cambridge University Press.

Herman, J. L. (1992). *Trauma and recovery.* New York: Basic Books.

Hietanen, J. K., Surakka, V., & Linnankoski, I. (1998). Facial electromyographic responses to vocal affect expressions. *Psychophysiology, 35*(5), 530-536.

Hinde, R. A., & Stevenson-Hinde, J. (1991). Perspective on attachment. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 52-64). London: Routledge.

Holmes, J. (1993). *John Bowlby and attachment theory.* London: Routledge.

Holmes, J. (1995). "Something there is that doesn't love a wall": John Bowlby, attachment theory, and psychoanalysis. In S. Goldberg, R. Muir, & J. Kerr (Eds.), *Attachment theory: Social, developmental, and clinical perspectives* (pp. 19-44). Hillsdale, NJ: Analytic Press.

Horowitz, M., Marmar, C., Krupnick, J., Wilner, N., Kaltreider, N., & Wallerstein, R. (1984). *Personality styles and brief therapy.* New York: Basic Books.

Isabella, R. A., Belsky, J., & Von Eye, A. (1989). Origins of infant-mother attachment: An examination of interactional synchrony during the infant's first year. *Developmental Psychology, 25,* 12-21.

Izard, C. (1993). Organizational and motivational functions of discrete emotions. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (631-642). New York: Guilford.

Izard, C. E. (1971). *The face of emotion.* New York: Appleton-Century-Crofts.

Izard, C. E. (1977). *Human emotions.* New York: Plenum.

Izard, C. E. (1990). Facial expressions and the regulation of emotion. *Journal of Personality and Social Psychology, 58,* 487-498.

Izard, C. E. (1991). *The psychology of emotions.* New York: Plenum.

Izard, C. E., & Malatesta, C. Z. (1987). Emotional development in infancy. In J. Osofsky (Ed.), *Handbook of infant development.* (2nd ed., pp. 494-554). New York: Wiley.

Jacobson, E. (1964). *The self and the object world.* New York: International Universities Press.

James, W. (1890). *The principles of psychology* (Vol. 1). New York: Henry Holt.

Kaiser, S., & Scherer, K. R. (1998). Models of "normal" emotions applied to facial and vocal expression in clinical disorders. In W. F. Flack, Jr., & J. D. Laird (Eds.) *Emotions in psychopathology: Theory and research* (pp. 81-98). New York: Oxford University Press.

Kaplan, H. I., Sadock, B. J., & Grebb, J. A. (1994) *Synopsis of psychiatry: Behavioral Sciences, Clinical Psychiatry* (7th ed.). Baltimore: Williams & Wilkins.

Kellerman, J. M., & Laird, J. D. (1982). The effect of appearance on self-perception. *Journal of Personality and Social Psychology, 50*(3), 296-315.

Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism.* New York: Jason Aronson.

Kernberg, O. F. (1976). *Object relations theory and clinical psychoanalysis.* New York: Jason Aronson.

Kernberg, O. F. (1984). *Severe personality disorders.* New York: Jason Aronson.

Kiser, L. J. Bates, J. E., Maslin, C. A., & Bayles, K. (1986). Mother-infant play at six months as a predictor of attachment security at thirteen months. *Journal of the American Academy of Child Psychiatry, 25,* 68-75.

Klaus, M., & Kennell, J. (1976). Parent-to-infant attachment. In D. Hull (Ed.), *Recent advances in pediatrics* (pp. 129-152). London and New York: Churchill Livingstone.

Kleck, R. E., Vaughan, R. C., Cartwright-Smith, J., Vaughan, J. B., Colby, C. T., & Lanzetta, J. T. (1976). Effects of being observed on expressive, subjective, and physiological responses to painful stimuli. *Journal of Personality and Social Psychology, 34* (6), 1211-1218.

Klein, M. (1932). The psycho-analysis of children. In *The writings of Melanie Klein.* London: Hogarth Press.

Klein, M. (1946). Notes on some schizoid mechanisms. In J. Riviere (Ed.), *Developments in psycho-analysis* (pp. 292-320). London: Hogarth Press.

Klein, M. (1957). *Envy and gratitude.* New York: Basic Books.

Kleinke, C., & Walton, J. (1982). Influences of reinforced smiling on affective responses in an interview. *Journal of Personality and Social Psychology, 42*, 557-565.

Klerman, G. L., Weissman, M. M., Rounsaville, B. J., & Chevron, M. S. (1984). *Interpersonal psychotherapy of depression.* New York: Basic Books.

Kobak, R. (1999). The emotional dynamics of disruptions in attachment relationships: Implications for theory, research, and clinical intervention. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 21-43). New York: Guilford.

Kraut, R. E. (1982). Social presence, facial feedback, and emotion. *Journal of Personality and Social Psychology, 42*(5), 853-863.

Laird, J. D. (1984). The real role of facial response in the experience of emotion: A reply to Tourganeau and Ellsworth, and others. *Journal of Personality and Social Psychology, 47*(4), 909-917.

Laird, J. D., & Crosby, M. (1974). Individual differences in self-attribution of emotion. In H. London & R. E. Nisbett (Eds.), *Thought and feeling* (pp. 44-59). Chicago: Aldine.

Laird, J. D., Wagener, J. J., Halal, M., & Szegda, M. (1982). Remembering what you feel: Effects of emotion on memory. *Journal of Personality and Social Psychology, 42*(4), 646-657.

Lanzetta, J. T., Cartwright-Smith, J., & Kleck, R. E. (1976). Effects of nonverbal dissimulation on emotional experience and autonomic arousal. *Journal of Personality and Social Psychology, 33* (3), 354-370.

Larsen, R., Kasimatis, M., & Frey, K. (1992). Facilitating the furrowed brow. *Cognition and Emotion, 6*(5), 321-338.

Lazarus, R. S. (1991). *Emotion and adaptation.* New York: Oxford University Press.

Lazarus, R. S., & Lazarus, B. N. (1994). *Passion and reason: Making sense of our emotions.* New York: Oxford University Press.

LeDoux, J. (1996). *The emotional brain: The mysterious underpinnings of emotional life.* New York: Simon & Schuster.

LeDoux, J. E. (1994). Emotional experience is an output of, not a cause of, emotional processing. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions.* New York: Oxford University Press.

Lester, B., Hoffman, J., & Brazelton, T. B (1985). The structure of mother-infant interaction in term and preterm infants. *Child Development, 56,* 15-27.

Levenson, R. W. (1994). Human emotions: A functional view. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions.* New York: Oxford University Press.

Levenson, R. W. (1996). Biological substrates of empathy and facial modulation of emotion: Two facets of the scientific legacy of John Lanzetta. *Motivation and emotion, 20*(3), 185-204.

Levenson, R. W., & Ruef, A. M. (1997). Physiological aspects of emotional knowledge and rapport. In W. J. Ickes (Ed.), *Empathic accuracy* (pp. 44-72). New York: Guilford.

Levenson, R. W., Ekman, P., & Friesen, W. V. (1990). Voluntary facial action generates emotion-specific autonomic nervous system activity. *Psychophysiology, 27*, 363-384.

Levine, L. V., & Tuber, S. B. (1992). Measures of mental representation: Clinical and theoretical considerations. *Bulletin of the Menninger Clinic, 57* (1), 69-87.

Lieberman, A. F. (1991). Attachment theory and infant-parent psychotherapy: some conceptual, clinical, and research considerations. In D. Cicchetti & S. Toth (Eds.), *Rochester symposium on developmental psychopathology, Vol. 3.* Hillsdale, NJ: Erlbaum.

Loewald, H. (1960). On the therapeutic action of psychoanalysis. *International Journal of Psychoanalysis, 58*, 463-472.

Lorenz, K. (1957). *Instinctive behavior.* New York: International Universities Press.

Lorenz, K. Z. (1952). *King Solomon's Ring.* New York: Thomas Y. Crowell.

Lundqvist, L. O., & Dimberg, U. (1995). Facial expressions are contagious. *Journal of Psychophysiology, 9*(3), 203-211.

Lyons-Ruth, K. (1998). Implicit relational knowing: Its role in development and psychoanalytic treatment. *Infant Mental Health Journal,* 19(3), 282-289.

MacFarlane, J. A. (1975). *The psychology of childbirth.* Cambridge, MA: Harvard University Press.

MacFarlane, J. A. (1977). Olfaction in the development of social preferences in the human neonate. In *The human neonate in parent-infant interaction* (Ciba Foundation *Symposium No. 33,* pp. 103-117).

Magai, C. (1999). Affect, imagery, and attachment: Working models of interpersonal affect and the socialization of emotion. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 787-802). New York: Guilford.

Magai, C., & McFadden, S. H. (1995). *The role of emotions in social and personality development: History, theory, and research.* New York: Plenum.

Magai, C., & Siegel, H. (1996). Children's emotion decoding biases and parental emotion socialization. Unpublished manuscript, Long Island University.

Magai, C., Distel, N., & Liker, R. (1994). Emotion socialization, attachment, and adult personality traits. *Cognition and Emotion, 9* (5), 461-481.

Magnavita, J. J. (1997). *Restructuring personality disorders: A short-term dynamic approach.* New York: Guilford.

Maier, S. F., & Seligman, M. E. P. (1976). Learned helplessness: Theory and evidence. *Journal of Experimental Psychology, 105*(1), 3-46.

Main, M. (1981). Avoidance in the service of proximity: A working paper. In K. Immelmann, G. Barlow, L. Petrinovitch, & M. Main (Eds.), *Behavioral development: The Bielefeld interdisciplinary project* (pp. 651-693). New York: Cambridge University Press.

Main, M. (1990). Cross-cultural strategies of attachment and attachment organization: Recent studies, changing methodologies, and the concept of conditional strategies. *Human Development, 33*, 48-61.

Main, M. (1991). Metacognitive knowledge, metacognitive monitoring and singular (coherent) versus multiple (incoherent) models of attachment: Findings and directions for future research. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 127-159). London: Routledge.

Main, M., & Goldwyn, R., (1984). Predicting rejection of her infant from mother's representation of her own experience: implications for the abused-abusing intergenerational cycle. *Child Abuse and Neglect, 8*, 203-217.

Main, M., & Weston, D. (1981). Security of attachment to mother and father: Related to conflict behavior and the readiness to establish new relationships. *Child Development, 52*, 932-940.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In I. Bretherton and E. Waters (Eds.), Growing points in attachment theory and research (pp. 66-104), *Monographs of the Society for Research in Child Development, 50* (1-2, Serial 209). Chicago: University of Chicago Press.

Malan, D. M. (1973). Therapeutic factors in analytically-oriented brief psychotherapy. In R. H. Gosling (Ed.), *Support, innovation, and autonomy* (pp. 187-209). London: Tavistock.

Malan, D. M. (1979). *Individual psychotherapy and the science of psychodynamics.* London: Butterworth.

Malatesta, C. Z. (1990). The role of emotion in the development and organization of personality. In R. Thompson (Ed.), *Socioemotional development* (Nebraska Symposium in Emotion, 1988, Vol. 36, pp. 1-56). Nebraska: University of Nebraska Press.

Malatesta, C. Z., & Haviland, J. (1982). Learning display rules: The socialization of emotion expression in infancy. *Child Development, 53,* 991-1003.

Malatesta, C. Z., & Wilson, A. (1988). Emotion cognition interaction in personality development: A discrete emotions, functionalist analysis. *British Journal of Social Psychology, 27,* 91-112.

Marvin, R. S., & Greenberg, M. T. (1982). Preschoolers' changing conceptions of their mothers: A social-cognitive study of mother-child

attachment. In D. L. Forbes & M. T. Greenberg (Eds.), *Children's planning strategies* (pp. 47-60). New Directions for Child Development, No. 18, December, 1982. San Francisco, CA: Jossey-Bass Publishers.

Matas, L., Arend, R. A., & Sroufe, L. A. (1978). The relationship between quality of attachment and later competence. *Child Development, 49*, 547-556.

McArthur, L. Z., Solomon, M. R., & Jaffe, R. H. (1980). Weight differences in emotional responsiveness to proprioceptive and pictorial stimuli. *Journal of Personality and Social Psychology, 39*(2), 308-319.

McCullough Vaillant, L. (1997). *Changing character: Short-term anxiety-regulating psychotherapy for restructuring defenses, affects, and attachment.* New York: Basic Books.

Mead, G. H. (1934). *Mind, self, and society.* Chicago: University of Chicago Press

Mehler, J., Jusczyk, P., Lambertz, G., Halsted, N., Bertoncini, J., & Amiel-Tison, C. (1988). A precursor of language acquisition in young infants. *Cognition, 29*, 143-178.

Melges, F. T., & DeMaso, D. R. (1980). Grief resolution therapy: reliving, revising, and revisiting. *American Journal of Psychotherapy, 34*, 51-61.

Menninger, K., & Holzman, P. (1973). *Theory of psychoanalytic technique* (2nd ed.). New York: Basic Books.

Mills, M., & Melhuish, E. (1974). Recognition of mother's voice in early infancy. *Nature, 252,* 123-124.

Mitchell, S. (1997). *Autonomy and Influence in psychoanalysis.* New York: Analytic Press.

Miyake, K., Chen, S., & Campos, J. (1985). Infant temperament, mother's mode of interaction, and attachment in Japan: An interim report. In I. Bretherton and E. Waters (Eds.), Growing points in attachment theory and research (pp. 276-297), *Monographs of the Society for Research in Child Development, 50* (1-2, Serial 209). Chicago: University of Chicago Press.

Nathanson, D. L. (1992). *Shame and pride: Affect, sex, and the birth of the self.* New York: Norton.

Nelson, K. & Greundel, J. M. (1981). Generalized event representations: Basic building blocks of cognitive development. In M. E. Lamb & A. L. Brown (Eds.), *Advances in developmental psychology, Vol.1.* Hillsdale, NJ: Erlbaum.

Norman, D. A. (1976). *Memory and attention: Introduction to human information processing* (2nd ed.). New York: Wiley.

Peterfreund, E. (1983). *The process of psychoanalytic therapy: Modes and strategies.* New York: Analytic Press.

Pine, F. (1985). *Developmental theory and clinical process.* New Haven: Yale University Press.

Plutchik, R. (1962). *The emotions: Facts, theories, and a new model.* New York: Random House.

Plutchik, R. (1980). *Emotion: A psychoevolutionary synthesis.* New York: Harper & Row.

Plutchik, R. (1993). Emotions and their vicissitudes: Emotions and psychopathology. In M. L. Lewis & J. M Haviland (Eds.), *Handbook of emotions* (pp. 53-66). New York: Guilford.

Raphael, B. (1977) Preventive intervention with the recently bereaved. *Archives of General Psychiatry, 34,* 1450-1454.

Rhodewalt, F., & Comer, R. (1979). Induced-compliance attitude change: Once more with feeling. *Journal of Experimental Psychology, 15,* 35-47.

Ricceli, P. T., Antila, C. E., Dale, A., & Klions, H. L. (1989). Depression and elative mood inductions as a function of exaggerated versus contradictory facial expressions. *Perceptual and Motor Skills, 68,* 443-452.

Roberts, N., & Noller, P. (1998). The associations between adult attachment and couples violence: The role of communication patterns. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 317-352). New York: Guilford.

Rosenhan, D. L., & Seligman, M. E. P. (1989). *Abnormal psychology* (2nd ed.). New York: W. W. Norton.

Rowland, T., & McGuire, C. (1968). The development of intelligent behavior: III. Robert W. White. *Psychology in the Schools, 5* (3), 230-239.

Russell, M. H. (1976). Human olfactory communication. *Nature, 260*, 520-522.

Russell, M. J.. Mendelson, T., and Peeke, H. V. S. (1983). Mothers' identification of their infants' odors. *Ethology and Sociobiology, 4*, 29-31.

Rutledge, L. L., & Hupka, R. B. (1985). The facial feedback hypothesis: Methodological concerns and new supporting evidence. *Motivation and Emotion, 9*(3), 219-240.

Rutter, M. (1997). Clinical implications of attachment concepts: Retrospect and prospect. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and Psychopathology* (pp. 17-46) New York: Guilford.

Sagi, A. (1981). Mothers' and non-mothers' identification of infant cries. *Infant Behavior and Development, 4*, 37-40.

Sander, L. (1995). Identity and the experience of specificity in a process of recognition. *Psychoanalytic Dialogues, 5*, 579-593.

Sander, L. W. (!977). The regulation of exchange in the infant-caregiver system and some aspects of the context-content relationship. In M. Lewis & M. A. Rosenblum (Eds.), *Interaction, conversation, and the development of language* (pp. 133-156). New York: Wiley.

Sander, L. W., Chappell, P. F., & Snyder, P. A. (1982). An investigation of change in the infant-caregiver system over the first week

of life. In R. M. Emde & R. J. Harmon (Eds.), *The development of attachment and affiliative systems* (pp. 119-136). New York: Plenum.

Sander, L. W., Stechler, G., Burns, P., & Julia, H. (1970). Early mother-infant interaction and 24-hour patterns of activity and sleep. *The Journal of the American Academy of Child Psychiatry, 9*, 103-123.

Scherer, K. R. (1984a). On the nature and function of emotion: A component process approach. In K. R. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 293-317). Hillsdale, NJ: Erlbaum.

Scherer, K. R. (1984b). Emotion as a multicomponent process: A model with some cross-cultural data. In P. Shaver (Ed.), *Review of personality and social psychology: Vol. 5. Emotions, relationships, and health* (pp. 37-63). Beverly Hill, CA: Sage.

Scherer, K. R. (1993). Neuroscience projections to current debates in emotion psychology. *Cognition and Emotion, 7*, 1-41.

Schiffenbauer, A. (1974). The influence of emotional state on judgments of the emotional state of others. *Journal of Personality and Social Psychology, 30*, 31-35.

Simpson, J. A. (1999). Attachment theory in modern evolutionary perspective. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 115-140). New York: Guilford.

Slade, A. (1999). Attachment theory and research: Implications for the theory and practice of individual psychotherapy with adults. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications.* (pp. 575-594). New York: Guilford.

Slade, A., & Aber, J. L. (1992). Attachments, drives, and development: Conflicts and convergences in theory. In J. Barron, M. Eagle, & D. Wolitzsky (Eds.), *Interface of psychoanalysis and psychology* (pp. 154-186). Washington, DC: American Psychological Association.

Spitz, R. A. (1960). Discussion of Dr. John Bowlby's paper. *Psychoanalytic Study of the Child,* 15, 85-208.

Sroufe, L. A. (1986). Appraisal: Bowlby's contribution to psychoanalytic theory and developmental psychology; Attachment: Separation: Loss. *Journal of Child Psychology and Psychiatry, 27* (6), 841-849.

Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years.* Cambridge: Cambridge University Press.

Sroufe, L. A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development,* 48 1184-1199.

Stern, D. (1977). *The first relationship.* Cambridge, MA: Harvard University Press.

Stern, D. N. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology.* New York: Basic Books.

Stern, D. N. (1998). The process of therapeutic change involving implicit knowledge: Some implications of developmental observations for adult psychotherapy. *Infant Mental Health Journal, 19* (3), 300-308.

Strachey, J. (1934). The nature of the therapeutic action of psycho-analysis. *International Journal of Psycho-analysis, 15*, 127-159.

Strack, F., Martin, L. L., & Stepper, S. (1988). Inhibiting and facilitating conditions of the human smile: A non-obtrusive test of the facial feedback hypothesis. *Journal of Personality and Social Psychology, 54*(5), 768-777.

Strupp, H. H., & Binder, J. L. (1984). *Psychotherapy in a new key: A guide to time-limited dynamic psychotherapy.* New York: Basic Books.

Tansey, M. J., & Burke, W. F. (1989). *Understanding countertransference: From projective identification to empathy.* Hillsdale, NJ: Analytic Press.

Termine, N. T., & Izard, C. E. (1988). Infants' responses to their mothers' expressions of joy and sadness. *Developmental Psychology, 24*(2), 223-229.

Teti, D. M. (1999). Conceptualizations of disorganization in the preschool years: An integration. In J. Solomon & C. George (Eds.), *Attachment disorganization* (pp. 213-242). New York: Guilford.

Thompson, D. F., & Meltzer, L. (1964). Communication of emotional intent by facial expression. *Journal of Abnormal and Social Psychology, 68*, 129-135.

Tomkins, S. S. (1962). *Affect, Imagery, and consciousness: Vol. 1. The positive affects.* New York: Springer.

Tomkins, S. S. (1963). *Affect, imagery, and consciousness: Vol. 2. The negative affects.* New York: Springer.

Tomkins, S. S. (1981). The role of facial response in the experience of emotion: A reply to Tourangeau and Ellsworth. *Journal of Personality and Social Psychology, 40,* 355-357.

Tomkins, S. S. (1990). Inverse archaeology: Facial affect and the interfaces of scripts within and between persons. Paper presented at Plenary address at annual meeting of the International Society for Research on Emotions, Rutgers University. In E. V. Demos (Ed.), *Exploring affect: The selected writings of Silvan S. Tomkins* (1995) (pp. 284-294). New York: Cambridge University Press.

Tomkins, S. S. (1995). Anger. In E. K. Sedgwick & A. F. Frank (Eds.), *Shame and its sisters: A Silvan Tomkins reader* (pp. 197-234). Durham, NC: Duke University Press.

Tomkins, S. S., & McCarter, R. (1964). What and where are the primary affects? Some evidence for a theory. *Perceptual and Motor Skills, 18,* 1, 119-158.

Tourganeau, R., & Ellsworth, P. C. (1979). The role of facial response in the experience of emotion. *Journal of Personality and Social Psychology, 37*(9), 1519-1531.

Tronick, E. Z. (1980). On the primacy of social skills. In D. B. Sawin, L. O. Walker, & J. H. Penticuff (Eds.), *The exceptional infant: Psychosocial risks in infant-environment transactions* (pp. 144-158). New York: Brunner-Mazel.

Tronick, E. Z. (1989). Emotions and emotional communication in infants. *American Psychologist, 44* (2), 112-119.

Tronick, E. Z. (1998). Dyadically expanded states of consciousness and the process of therapeutic change. *Infant Mental Health Journal, 19* (3), 290-299.

Tronick, E. Z., & Cohn, J. F. (1989). Infant-mother face-to-face interaction: Age and gender differences in coordination and the occurrence of miscoordination. *Child Development, 60*, 85-92.

Tronick, E. Z., & Field, T. (1986). *Maternal depression and infant disturbance: New directions for child development* (Vol. 34). London: Jossey-Bass.

Tronick, E. Z., Als, H., & Adamson, L. B. (1979). The communicative structure of early face-to-face interaction. In M. Bullowa (Ed.), *Before speech: The beginnings of interpersonal communication* (pp. 349-372). Cambridge: Cambridge University Press.

Tronick, E. Z., Als, H., & Brazelton, T. B. (1980). Monadic phases: A structural descriptive analysis of infant-mother face-to-face interaction. *Merrill-Palmer Quarterly, 26*, 3-24.

Tronick, E. Z., Als, H., Adamson, L., Wise, S., & Brazelton, T. B. (1978). The infant's response to entrapment between contradictory messages in face-to-face interaction. *Journal of Child Psychiatry, 17,* 1-13.

Ursano, R. J., & Silberman, E. K. (1988). Individual psychotherapies. In J. A. Talbott, R. E. Hales, & S. C. Yudofsky (Eds.), *The American psychiatric press textbook of psychiatry.* Washington, DC: American Psychiatric Press.

Vaughan, K. B., & Lanzetta, J. T. (1981). The effect of modification of expressive displays of vicarious emotional arousal. *Journal of Experimental Psychology, 17,* 16-30.

Vygotsky, L. S. (1962). *Thought and language.* Cambridge, MA: MIT Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Wallbott, H. G. (1995). Congruence, contagion, and motor mimicry: Mutualities in nonverbal exchange. In I. Markova & C. F. Graumann (eds.), *Mutualities in dialogue* (pp.82-98). Cambridge: Cambridge University Press.

Watzlawick, P. (1976). *How real is real? Confusion, disinformation, communication.* New York: Random House.

Watzlawick, P., Bavelas, J. B., & Jackson, D. D. (1969). *Pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes.* New York: Norton.

Weinberg, K., & Tronick, E. Z. (1998). The impact of maternal psychiatric illness on infant development. *Journal of Clinical Psychiatry, 59,* 53-61.

Weinberg, M. K., Tronick, E. Z., Cohn, J. F., & Olson, K. L. (1999). Gender differences in emotional expressivity and self-regulation during early infancy. *Developmental Psychology, 35(1),* 175-188.

Werker, J. F., & Pegg, J. E. (1992). Infant speech perception and phonological acquisition. In C. A. Ferguson, L. Menn, & C. Stoel-Gammon (Eds.), *Phonological development: Models, research, implications* (pp. 285-311). Timonium, MD: York Press.

Werker, J. F., & Tees, R.C. (1984). Cross-language speech perception: Evidence for perceptual reorganization during the first year of life. *Infant Behavior and Development, 7,* 49-63.

Werker, J. F., Gilbert, J. H. V., Humphrey, K., & Tees, R. C. (1981). Developmental aspects of cross-language speech perception. *Child Development, 52,* 349-355.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66,* 297-333.

Winnicott, D. W. (1939). Aggression. In *The child and the outside world* (1957, pp. 167-175). London: Tavistock.

Winnicott, D. W. (1945) Primitive emotional development. In *Through Pediatrics to Psychoanalysis* (1958, pp.145-156). New York: Basic Books.

Winnicott, D. W. (1954). The depressive position and normal development. In *Through Pediatrics to Psychoanalysis* (1958, pp. 262-277). New York: Basic Books.

Winnicott, D. W. (1960a). Ego distortion in terms of true and false self. In D. W. Winnicott, *The maturational process and the facilitating environment* (1965, pp. 140-152). New York: International Universities Press.

Winnicott, D. W. (1960b). Aggression, guilt, and reparation. In *Home is where we start from* (1986, pp. 80-89). New York: Norton.

Winnicott, D. W. (1963). The development of the capacity for concern. In *The maturational processes and the facilitating environment: Studies in the theory of emotional development* (1965). New York: International Universities Press.

Winnicott, D. W. (1965). *The maturational processes and the facilitating environment: Studies in the theory of emotional development.* New York: International Universities Press.

Winnicott, D. W. (1968). The use of an object and relating through identifications. In C. Winnicott, R. Shepherd, & M. Davis (Eds.), *Psychoanalytic explorations* (1989, pp. 218-227). Cambridge, MA: Harvard University Press.

Winnicott, D. W. (1971). Creativity and its origins. In *Playing and reality* (pp. 65-85). London: Tavistock.

Winnicott, D. W. (1971). Mirror-role of mother and family in child development. In D. W. Winnicott, *Playing and reality* (pp. 111-118). London and New York: Tavistock. (Original work published 1967)

Winnicott, D. W., (1958) Psycho-analysis and the sense of guilt. In *The maturational processes and the facilitating environment: Studies in the theory of emotional development* (1965). New York: International Universities Press.

Wright, J. C. (1962). Consistency and complexity of response sequences as a function of schedules of noncontingent reward. *Journal of Experimental Psychology, 63*, 601-609.

Zaslow, M. J., Rabinovich, B. A., Suwalsky, J. T. D., & Klein, R. P. (1988). The role of social context in the prediction of secure and insecure/avoidant infant-mother attachment. *Journal of Applied Developmental Psychology, 9*, 287-299.

Zuckerman, M., Hall, J. A., DeFrank, R. S., & Rosenthal, R. (1976). Encoding and decoding of spontaneous and posed facial expression. *Journal of Personality and Social Psychology, 34*, 966-977.

Zuckerman, M., Klorman, R., Larrance, D. T., & Spiegel, N. H. (1981). Facial, autonomic, and subjective components of emotion: The facial feedback hypothesis versus the externalizer-internalizer

distinction. *Journal of Personality and Social Psychology, 41*(15), 929-944.