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Disorders of Attachment

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As early as the turn of the century, the medical literature cautioned about the deleterious effects of maternal deprivation on young children. Twelve years after completing an intervention study on the effects of institutionalization on infants, Chapin (1915) asserted:

The best conditions for an infant require a home and a mother. The further we get away from these vital necessities of life, the greater will be our failure to get adequate results in trying to help the needy infant. Strange to say, these important conditions have often been overlooked or not sufficiently emphasized by those working in the field. (p. 1)

By midcentury, there was also a considerable scientific literature describing the adverse effects of less than adequate caregiving environments on infant development (Goldfarb, 1945; Spitz, 1945, 1946). These included a high mortality rate, poor growth, frequent infections, and delayed and deviant development. These effects occurred even when the infants' physical needs were met, and they could be reversed with individualized care by a mothering figure. The extant studies on the catastrophic effects of maternal deprivation were critically reviewed for the first time by John Bowlby in his monograph entitled *Maternal Care and Mental Health* (Bowlby, 1951). He concluded that maternal care was as vital to mental health as vitamins and other nutrients were to physical health. Ethological observations that primate infants are primed to become attached to their caregivers, and

Harlow and Zimmerman's (1959) experimental evidence that attachment is independent of having physical needs met, led Bowlby to conclude that normal development is contingent on attachment to a mothering figure.

Diagnostic criteria for syndromes of disordered attachment, on the other hand, have appeared only within the last 15 years. Criteria for diagnosing attachment disorders were first provided by the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association [APA], 1980). Surprisingly, these clinical syndromes have inspired virtually no empirical research. As a result, there are no data on their validity. Zeanah and Emde (in press) have suggested that the criteria appear to have been derived from research on social behavior of maltreated children and infants raised in institutions. They have also observed that the substantially larger body of data on attachment in infancy and childhood, derived from developmental research with normal and high-risk populations, has not yet been integrated into the nosologies. Clearly, data from developmental research bear on issues of qualitative differences in attachment relationships, as well as the question of the point in disturbed parent-child relationships at which an attachment disorder should be designated. In this chapter, we propose diagnostic criteria for five types of clinical disorders of attachment, and use a developmental perspective to add to our understanding of their phenomenology.

THE CONSTRUCT OF ATTACHMENT

Attachment has proven to be a compelling construct in contemporary developmental research, and in clinical evaluation and treatment of young children. Bowlby's (1969, 1973, 1980) ethological attachment theory has provided a number of testable hypotheses and has stimulated important research paradigms to test them. Controversies have arisen about whether qualitative or quantitative features of attachment are more important, and about whether attachment refers to feelings or behaviors of infants, of caregivers, or of both. Some confusion in the literature is apparent because of the varied ways in which the term has been used. In the contemporary literature, the term "attachment" has been used in the following four ways: "attachment behaviors," "attachment bonds," "attachment system," and "attachment relationships."

"Attachment behaviors" in the infant are signaling behaviors (such as smiling, vocalizing, or crying) and approach behaviors (such as crawling and walking toward the caregiver) that are designed to promote proximity to the caregiver. Although "attachment bonds" can refer to affiliative feelings between individuals in a close relationship, most commonly they refer to the affiliative feelings between parents and infants.

In his outline of attachment theory, Bowlby (1969) used "attachment" to refer to one of four behavior control systems that operate to motivate infant behavior. In addition to the "attachment system," Bowlby described the "exploratory system," responsible for motivating the infant to explore the object world; the "affiliative system," motivating the infant to be with others; and the "fear/wariness system," responsible for monitoring the infant's safety and danger. The attachment system has an external goal of motivating the infant to seek proximity to the attachment figure and an internal goal of motivating the infant to seek felt security. As a behavior control system, attachment involves the infant's use of the attachment figure as a "secure base" from which to explore novel environments (Ainsworth, 1967). At times when the attachment system is activated, the child uses the attachment figure as a "safe haven" to which to return in stressful or dangerous situations (Bretherton, 1980).

Finally, "attachment" is used increasingly to refer to the "attachment-relationship," which is the domain of the parent-child relationship

involving the caregiver's provision of nurturance and of emotional availability in times of need, as well as the child's seeking of comfort when needed.

DEVELOPMENTAL RESEARCH ON ATTACHMENT

Development of Attachment

Primate parents and infants are biologically motivated to become attached to each other at birth. The infant is born with a number of characteristics that elicit affiliative responses in adult caregivers. The physical attributes of babyishness are characteristic throughout mammalian species. On the infant's side, the rudiments of attachment are present at birth only through recognition of the mother through auditory and olfactory channels. Infants are born able to distinguish their mothers' voices; in fact, they express a preference for their mothers' voices over other voices, even as newborns (DeCasper & Fifer, 1980). In the olfactory realm, newborns turn preferentially toward their mothers' breast pads instead of toward the pad of another lactating woman (MacFarlane, 1975).

From birth to 3 months, according to Bowlby, the infant is in the phase of limited discrimination of the attachment figure. In fact, social responsiveness is not obvious until after the initial biobehavioral shift at 2 to 3 months.

From 3 to 6 months, the infant is in phase of discriminating social responsiveness. Following the 2- to 3-month biobehavioral shift (Emde, Gaensbauer, & Harmon, 1976), social smiling begins, along with increased visual responsiveness and cooing. Infants as young as 2-3 months of age have been shown to interact differently with their mothers, their fathers, and a stranger. Still, they do not consistently express a preference for a specific attachment figure until after the onset of focused attachment at about 8 months of age.

The third phase of attachment, according to Bowlby, is from 8 months to 3 years. The infant is in the phase of actively seeking proximity and contact. Most of the research on infant attachment concerns itself with this period, when "secure base" and "safe haven" behaviors are most apparent.

In the third year, infants enter the phase of goal-corrected partnership. At this time, infants begin to infer the set goals and plans of their

attachment figures and to incorporate the feelings and motives of these others into planning for their own behavior. The essence of this phase is cooperative planning and maintaining plans for attachment-related events, such as proximity and separations. In this phase, the relationship is negotiated by more sophisticated symbolic and communicative abilities, which were not possible for an infant in earlier phases.

Because of the invariance of the sequence of the development of attachment across the vast majority of infants, important differences are more apparent in the qualitative aspects of the organization and representation of attachment. Also, the organization of the attachment system has significantly greater stability and predictive value than do specific attachment behaviors (Sroufe & Waters, 1977; Waters, 1978).

According to Bowlby's theory, the development of infants' organizations of attachment is based on real interactive experiences (as opposed to fantasies) with attachment figures. Those who experience sensitive and emotionally available caregiving, for instance, develop a sense of others as dependably available and supportive, a sense of themselves as worthy of attention and affection, and generally positive expectations of intimate relationships. In contrast, when caregiving is inadequate, the child develops deficiencies in feelings about self and others, and a different set of expectations regarding relationships.

Feelings about the self and expectations of others in intimate relationships are organized by "internal working models." These are large-order memory structures, internal representations that contain all of the processes involved in the individual's subjective experience of others in social relationships (Zeanah & Anders, 1987). They include processes of attention and perception, of affect selection, of memory evocation, and of behavioral responses to others in important relationships (Main, Kaplan, & Cassidy, 1985). Because internal working models evolve from the actual experiences of individuals, they enable the individuals to form expectations of "the other" in relationships and also influence the way the individuals evaluate ongoing interactions in relationships. According to Bowlby (1969), internal working models are constructed during the latter part of the first year of life, based on an infant's experiences of caregiving.

Bowlby's theory, with its careful attention to observable behavior and emphasis on the importance of actual experience in the organization of

the child's relationship with his or her caregivers, has stimulated a rich outpouring of empirical research on attachment infancy. In the following section, we review this research briefly.

Attachment Classifications in Developmental Research

By 1 year of age, the infant's attachment behavioral system is well organized, and attachment relationships may be reliably identified and assessed. Developmental research has relied mainly on a laboratory procedure, the Strange Situation procedure (SSP), to assess the organization of attachment in infants (Ainsworth, Blehar, Waters, & Wall, 1978). This moderately stressful laboratory paradigm was designed to evaluate the balance between an infant's attachment and exploratory systems. Inviting toys in a comfortable but unfamiliar environment activate the exploratory system. The procedure relies on separation from the attachment figure in an unfamiliar setting as a means of activating the attachment system. Results from dozens of investigations involving the procedure have generated considerable advances in our understanding of socioemotional development, and no small amount of controversy as well. This research has been reviewed extensively elsewhere (Bretherton & Waters, 1985; Lamb, Thompson, Gardner, & Charnov, 1985; Sroufe, 1988). Before summarizing the major findings with respect to clinical implications, we briefly describe the classification and implications of infant behavior in the SSP.

Infant attachment classifications of "secure," "avoidant," and "resistant" as measured in the SSP have been reliably identified in samples of infants all over the Western world (van Ijzendoorn & Kroonenberg, 1988). Infants classified as secure may or may not cry upon separation, but they approach their caregivers directly or re-establish positive interaction upon reunion. If upset, they are easily comforted on reunion, resuming play and exploration comfortably within a short time. From studies linking sensitive care to the secure pattern and from the infants' reunion behavior (reviewed in Main et al., 1985), we infer that secure infants anticipate that their caregivers will be available for comfort when necessary, and therefore, upon being comforted, the infants resume exploration. Infants classified as avoidant tend not to protest when their caregivers leave the room, and

they ignore their caregivers upon reunion and focus instead on the external environment. From a history of caregiving characterized by rejection of the infants' bids for attachment and from the reunion behavior (Ainsworth et al., 1978; Sroufe, 1988), we infer that these infants have learned to suppress the external manifestations of their distress in order not to elicit further rejection (Cassidy & Kobak, 1988). Those infants classified as resistant cry vigorously upon separation and approach their caregivers upon reunion. Nevertheless, they also resist comforting, are not easily soothed, and take a long time to settle down and play with the toys. From a history of inconsistent caregiving (Ainsworth et al., 1978; Sroufe, 1988) and from the pattern of reunion behavior, we infer that these infants have ambivalent feelings about their caregivers as reliable safe havens and secure bases.

The validity of the classifications rests primarily on the demonstrated relationships between them and previous and concurrent patterns of mother-infant interaction. A number of studies have demonstrated that secure attachments are associated with maternal sensitivity prior to and concurrent with the SSP. Ainsworth et al. (1978) suggested that mothers of avoidant infants are more rejecting (turning away the infants' bids for contact and comfort) and that mothers of resistant infants are more inconsistent than mothers of infants later classified as secure. Findings in subsequent investigations have provided modest support for these assertions, although methods of assessment and specific hypotheses have varied across studies (Main & Stadtman, 1981; Belsky, Rovine, & Taylor, 1984; Isabella & Belsky, 1991; Vaughn & Waters, 1990).

Stability of the three major classifications in infants between 12 and 18 months has ranged from 53% (Thompson, Lamb, & Estes, 1982) to 96% (Waters, 1978), and in most investigations it is about 75% (Lamb et al., 1985). Stability is lower in high-risk, low-income samples, and changes from secure to insecure classification have been related to an increase in stressful life events reported by mothers (Vaughn, Egeland, Sroufe, & Waters, 1979). Some long-term stability has been demonstrated, in that infant attachment classifications predicted attachment classifications in 6-year-old children (Main & Cassidy, 1988).

Considerable predictive validity of infant attachment classifications has also been demonstrated.

Insecure attachment in infancy predicts subsequent behavioral problems, impulse control problems, conflicts and struggles with caregivers, low self-esteem, and seriously problematic peer relationships (Lewis, Feiring, McGuffog, & Jaskir, 1984; Erickson, Sroufe, & Egeland, 1985; Easterbrooks & Goldberg, 1990; Sroufe, 1983; Troy & Sroufe, 1987; Cassidy, 1988).

Main & Solomon (1986, 1990) have described a fourth classification of attachment, the "disorganized/disoriented" type. The disorganized classification is made on the basis of the child's demonstrating interrupted, confused, or incomplete strategies for obtaining comfort from the caregiver during the SSP. The conflict behaviors used to classify the infant as disorganized indicate disturbances in the functioning of the attachment system and of the use of the caregiver as a secure base and a safe haven. These behaviors may occur in children whose attachment otherwise could be classified into one of the secure, avoidant, or resistant patterns, or may occur in children whose attachment does not fit one of the other three patterns.

In the Berkeley Longitudinal Study, 14% of a low-risk, middle-class sample of infants were classified as disorganized with one parent, although classifications with each parent were independent (Main & Solomon, 1990). In high-risk samples, the proportion of infants classified as disorganized increases dramatically. The classification is more prevalent in infants whose parents have not successfully resolved losses or traumatic experiences (Main & Goldwyn, in press), parents who have bipolar affective disorder (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985), parents who are active alcoholics (O'Connor, Sigman, & Brill, 1987), and parents who are maltreating (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Cicchetti & Barnett, 1991). Recent findings suggest that disorganized attachment in infancy strongly predicts controlling (role-reversed) behavior in middle-class samples (Main & Cassidy, 1988) and behavior problems in impoverished samples (Lyons-Ruth, Repacholi, Alpern, & Connell, 1991).

Perspectives on Attachment Classifications

There are two major hypotheses about what attachment classifications represent. One position is that the classifications reflect infant dispositions of emotional expressiveness. In its

extreme form, this formulation holds that attachment classifications are actually temperamental types. Resistant infants (who are not easily soothed upon reunion in the SSP) are most emotionally expressive; avoidant infants (who do not display distress and ignore their caregivers upon reunion in the SSP) are least expressive; and secure infants (who may or may not cry upon separation but are easily soothed) are intermediate between the other two. Evidence supporting this position comes from studies linking early endogenous infant characteristics elicited during the Brazelton Neonatal Behavioral Assessment Scale (NBAS) examination (Brazelton, 1973) to later attachment classifications (Grossman, Grossman, Spangler, Suess, & Unzner, 1985; Lester & Seifer, 1990).

A less extreme form of this argument is that emotional expressiveness determines how aroused the infant becomes during separations, rather than whether the infant is secure or insecure. Evidence supporting this position comes from an investigation in which NBAS autonomic instability predicted amount of arousal in the SSP, but did not predict security versus insecurity (Belsky & Rovine, 1987). Essentially, this position holds that endogenous temperament affects the type of security or insecurity of the infant, rather than security or insecurity per se.

The second major hypothesis is that attachment classifications are not characteristics of the infant, but instead reflect qualitative features of the attachment relationship with the caregiver with whom the infant is assessed. Evidence in support of this assertion come first from studies demonstrating that infants may be classified differently with different caregivers (Belsky, Garduque, & Hrncir, 1984; Belsky & Rovine, 1987; Grossman, Grossman, Huber, & Wartner, 1981; Main & Weston, 1981; Sagi et al., 1985). Relationship specificity of attachment classifications argues against attachment as a within-the-infant characteristic. In a recent investigation, prenatally measured maternal attachment classifications predicted a baby's attachment to the mother but not to the father over a year later, and prenatally measured paternal attachment classifications predicted an infant's attachment to the father but not to the mother over a year later (Steele, Steele, & Fonagy, 1991). These differential antecedents of attachment to mother and to father emphasize the relationship specificity of SSP classifications, although a recent meta-analysis found a modest tendency for classification to one parent to be dependent upon

classification to the other parent (Fox, Kimmerly, & Schafer, 1991).

A growing consensus among investigators considers infant attachment classifications as types of internal representations or internal working models of attachment (Bowlby, 1988; Bretherton, 1985; Cicchetti, Cummings, Greenberg, & Marvin, 1990; Main et al., 1985; Zeanah, in press). Theoretically, these may be affected both by relationship experiences and by endogenous characteristics of the infant.

DISORDERS OF ATTACHMENT

Current Nosologies

Any classification of disorders must meet tests of reliability and validity. Disorders of attachment have not been systematically investigated to address these questions; in fact, we have been unable to identify a single study attempting to validate attachment disorders. Of course, a disorder must be identified and characterized before it can be validated (Rutter, 1965); nevertheless, the lack of research about these disorders raises questions about the adequacy of current criteria.

DSM-IV (APA, 1991) and ICD-10 (World Health Organization [WHO], 1992) designate two major types of attachment disorders of childhood. Both refer to a persistent disturbance in the child's social relatedness beginning before age 5 years that extends across social situations and is distinguished from pervasive developmental disorders. One type of disorder is inhibited, wherein ambivalent, inhibited, or hyper-vigilant responses are centered on one or more adults. The other type is disinhibited; it includes indiscriminate oversociability, a failure to show selective attachments, a relative lack of selectivity in the persons from whom comfort is sought, and poorly modulated social interactions with unfamiliar persons across a range of social situations.

DSM-IV (APA, 1991) requires that there be evidence of grossly pathogenic caregiving (e.g., frank neglect, harsh treatment) or repeated changes in caregivers. ICD-10 (WHO, 1992) does not include this requirement, although the child must have the capacity for social responsiveness as revealed in interactions with "non-deviant" adults. In contrast, DSM-IV emphasizes that abnormal social behavior ought to be apparent in most social contexts.

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These classifications are limited in three ways. First, even though developmental research has clearly demonstrated that attachment may vary across different relationships, DSM-IV and ICD-10 are less emphatic on this point. Second, the criteria appear to be narrowly drawn from maltreatment syndromes, rather than focused specifically on attachment. This also limits the disorder to children in extreme situations; it does not account for children who are in stable, albeit unhealthy, relationships without gross abuse or neglect. Third, our clinical experiences suggest that the disorders as defined do not adequately capture the presentations of disordered attachment.

Below, we propose criteria for Nonattached, Indiscriminate, Inhibited, Aggressive, and Role-Reversed Attachment Disorders. This is preceded by outlining the assumptions, derived from developmental research, that we believe should inform a consideration of disorders of attachment.

Underlying Assumptions for Clinical Disorders

Infants are biologically programmed to develop selective attachments to a relatively small number of caregiving adults. These preferences begin to be clearly expressed at about 7 to 8 months of age. After the age of 1 year, only severe intrinsic abnormalities (such as profound mental retardation or extremely abnormal caregiving environments) are associated with absence of a preferred "attachment figure" in a child. Where the limits of a child's adaptability to large numbers of different caregivers end is unknown.

Attachment is a characteristic of an individual that is differentially expressed toward others. Disorders of attachment represent disorders within the individual that may be manifested differently, depending on the nature of the tie between the child and different adult caregivers. An infant may have a disordered attachment relationship with an important caregiver without manifesting other socially deviant or symptomatic behavior outside the context of that relationship. In our experience, conflicted attachment behavior does generalize beyond the primary caregiving relationship as the child becomes older, but in the first 3 years of life it is most often relationship-specific.

Between the ages of 1 and 3 years, the attachment behavioral system operates to produce a feeling of "felt security" in a child, initially via

proximity to the attachment figure. As representational processes mature during the second and third years, literal proximity becomes gradually less necessary. The attachment system and the exploratory system operate in tandem within the child to produce an attachment-exploration balance. Disturbances in this balance represent disturbances in the use of the attachment figure as a secure base from which to explore with confidence, or disturbances in the use of the attachment figure as a safe haven to which to retreat in times of danger.

Disorders of attachment are not synonymous with individual differences in patterns of attachment as measured by the SSP, but instead represent more profound and pervasive disturbances in the child's feelings of safety and security. Attachment classifications derived from the SSP are not diagnoses. It is hardly surprising that a categorical scheme developed for all 1-year-old infants, and including only three or four different types, covers a broad range of adaptations within each type. Sroufe (1988) has emphasized that secure attachment may provide some protection against psychopathology generally, but it does not confer absolute protection. Similarly, he points out that insecure attachments may increase an individual's risk for psychopathology without being linearly related to subsequent psychiatric disorders.

The attachment relationship between the child and a caregiving adult is an unequal partnership in which the adult provides for the child's safety and security, but the child does not provide for the adult's safety and security. Adult-child attachment relationships that invert this pattern to a significant degree, and that are detrimental to the child, represent role reversal.

Caseness and Disorders of Attachment

The problem of "caseness"—that is, the question of when signs and symptoms are severe enough to constitute a case or disorder—is not unique to psychiatry. The answer to the question depends on the purpose intended to be served by making a diagnosis (Rutter & Sandberg, 1985). In infant mental health, this sometimes includes intervening to correct an obviously deviant developmental trajectory, which can be reasonably expected to result in impairment at a later date. DSM-IV defines psychiatric disorders as conditions confined to individu-

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als that cause impairment (distress or disability) or substantially increase the risk of impairment. It does not emphasize abnormalities of relationships or the developmental appropriateness of the presentation at hand. Rutter and Graham (1968) on the other hand, define psychiatric disorders in children as "abnormalities of emotions, behaviors or relationships which are developmentally inappropriate and of sufficient duration and severity to cause persistent suffering or handicap to the child" (p. 563).

Borrowing the emphasis on increased risk for subsequent disorders from DSM-IV, and the emphasis on relationships from Rutter and Graham (1968), we propose that attachment problems become psychiatric disorders for infants when emotions and behaviors displayed in attachment relationships are so disturbed as to indicate, or substantially to increase the risk for, persistent distress or disability in the infants. We are maintaining an emphasis here on defining attachment disorders as disorders within rather than between individuals. Some have argued compellingly that a child's relationship with the primary caregiver is actually the locus of the disorder and the most appropriate focus of intervention (see Sameroff & Emde, 1989), but this position runs counter to long traditions in science and medicine and has not yet been widely accepted. Our point is that it is possible to identify, diagnose, and treat attachment disorders within an individual child, bearing in mind that the child's relationship context will be the focus of intervention for these disorders.

Proposed Types of Attachment Disorders

Following from these assumptions, and drawing on clinical experience and the limited empirical evidence available, we propose five major types of attachment disorders. These are similar to the clinical disorders of attachment described previously by Lieberman and Pawl (1988, 1990). We consider the criteria that follow to be an extension of their work. In fact, the similarities in cases described by two different clinical groups provide preliminary face validity for this typology. The proposed criteria for Nonattached Attachment Disorder, Indiscriminate Attachment Disorder, Inhibited Attachment Disorder, Aggressive Attachment Disorder, and Role-Reversed Attachment Disorder are provided in Table 22.1.

We suggest that these disorders may be diagnosed in children between the ages of 1 and 4.5 years, based on the behavior of the children alone. With the exception of Nonattached Attachment Disorder and a few selected symptoms in the other types, there is no requirement that a child exhibit these behaviors across all significant social relationships; they need only be shown in the presence of at least one attachment figure.

Type 1: Nonattached Attachment Disorder

Rather than a disturbance in the attachment-exploration balance, the first type of attachment disorder represents a failure to develop a preferred attachment figure. It is presumably somewhat more common in children who have been institutionalized, those who have experienced extremes of neglect, or those who have experienced multiple changes in primary caregivers. If children with these symptoms and signs do have a history of extreme neglect, they may have significant developmental delays as well. The young twins who inspired the Skeels (1966) longitudinal study are examples of young children who were delayed and unresponsive, but who made significant gains once placed in a more nurturing environment. Other empirical support for this type comes from Tizard and colleagues' longitudinal study of institutionalized children in London (Tizard & Rees, 1974, 1975; Tizard & Hodges, 1978). Of the 26 children who were institutionalized throughout their first 4 years of life, 8 children were observed to be largely detached from everyone, hardly following the staff around and showing little interest in strangers. These children could not be meaningfully engaged by others, and they were perceived by the staff as having no attachments to anyone.

The following case underscores that children with this type of disorder may not lack the capacity to form attachments, but rather may not have had the experiences to facilitate formation of attachments.

Case 1. Mike was a 20-month-old boy referred for evaluation by a pediatrician who felt that he was either depressed or autistic. He had been removed from his biological mother at age 11 months and placed in his current foster family. His foster mother complained that he seemed to be a "vege-

TABLE 22.1. Proposed Types of Attachment Disorders

Type I: Nonattached Attachment Disorder

1. Child fails to demonstrate a preference for a particular adult caregiver, even when hurt, frightened, sick, or in other situations that ordinarily stimulate the attachment behavioral system.
2. Child fails to exhibit separation protest or exhibits indiscriminate separation protest (cries when almost anyone leaves).
3. If the child is social with anyone, he or she is likely to be indiscriminately social.
4. Child has a mental age of at least 8 months.

Type II: Indiscriminate Attachment Disorder

1. Child repeatedly leaves the safety provided by the presence of the attachment figure and wanders off without checking back (e.g., leaves the house and goes into the street or "slips away" in public).
2. Child exhibits a pattern of entering situations that place him or her at risk for physical harm.
3. Child may exhibit socially promiscuous behavior by demonstrating friendly overtures toward or by seeking comfort and nurturance from relatively or completely unfamiliar adults.
4. Symptoms cannot be explained by Attention-Deficit Hyperactivity Disorder.
5. There are two subtypes:
 - a. Socially Promiscuous
 - (i) Indiscriminate friendliness and shallow social responsiveness are the most prominent features of the child's behavior.
 - (ii) Child may seek comfort when distressed, albeit he or she does not express a preference and is often difficult to soothe.
 - b. Reckless/Accident-Prone/Risk-Taking
 - (i) Child appears to exhibit a pattern of recklessness, accident proneness, and risk-taking behavior that is more than can be explained by a failure to check back with an attachment figure.
 - (ii) The child's reckless behavior may have a driven quality to it.

Type III: Inhibited Attachment Disorder

1. Child exhibits an ongoing reluctance to approach, touch, or manipulate inanimate objects such as toys in unfamiliar surroundings, and especially in the presence of unfamiliar people.
2. Child actively avoids or withdraws too readily from social interaction with people other than the attachment figure.

3. Child exhibits a restricted range of affect in social situations, even in the presence of the attachment figure, with predominant mood ranging from sober scrutiny to hypervigilance.

4. There are two subtypes:

- a. Excessive Clinging
 - (i) Child appears comfortable in attachment figure's immediate vicinity, but is easily frightened by unfamiliar settings, objects, or individuals. Still, proximity to the attachment figure is anxiety-laden.
 - (ii) Separation from the attachment figure is vigorously resisted and leads to severe distress.
- b. Compulsive Compliance
 - (i) Child readily complies with directives from the attachment figure, with little or no hesitation or resistance.
 - (ii) Child has limited positive affective interchanges with the attachment figure.
 - (iii) Child appears frightened of attachment figure.
 - (iv) Child may appear less inhibited, frightened, and uninvolved in absence of attachment figure.

Type IV: Aggressive Attachment Disorder

1. Child has a clear preference for an attachment figure, but comfort seeking is often interrupted by the child's aggressive, angry outbursts directed toward the attachment figure or toward the self.
2. Anger (which may be expressed physically, verbally, or both) is a pervasive feature of the attachment relationship and goes well beyond age-appropriate noncompliance and transitory frustrations. N.B.: General noncompliance alone is not sufficient to make the diagnosis, because aggression in the context of the attachment relationship (self-directed or other-directed) is the hallmark of this type.
3. Symptoms of anxiety (separation anxiety, sleep disturbances, etc.) may be apparent but are not a focus of concern because of the prominence of the child's aggression.

Type V: Role-Reversed Attachment Disorder

1. Parent-child relationship is characterized by inversion, so that child assumes roles and responsibilities ordinarily assumed by parent. This is a pervasive pattern in the relationship.
2. Child maintains a nonanxious proximity to the attachment figure in unfamiliar settings.
3. Child is oversolicitous, bossy, overnurturing, or controlling during interactions with the caregiver.
4. Child maintains an unusual degree of scrutiny about caregiver's psychological well-being.

table." She said that he was unresponsive to social interaction except to be aggressive with the other young foster children in her care, including his twin sister. She was especially concerned about his biting himself and others. With regard to exploratory behavior, she said that he tended to remain wherever she put him down, even for hours at a time, and that he would make no effort to reach for toys. She also reported that he seemed to be less responsive than he had been initially, and that the few vocalizations he had originally produced had disappeared. In addition, he seemed interested only in staring at spinning objects.

On evaluation, Mike was initially quite unresponsive and had no discernible reaction to his foster parents' leaving the interview playroom. In general, he seemed more wary than somber. Later, he became interested in a pop-up box and once seemed to have a hint of a smile as the examiner demonstrated it to him. Nevertheless, he was remarkably reticent about interacting. On formal speech and language assessment, he was found to be a passive, reluctant communicator who responded infrequently and inconsistently. His receptive and expressive language were noted to be at a 12-month level, although his wariness and reluctance to interact were felt to be contributory to an extent.

Formal assessment with the Bayley Scales of Infant Development also revealed delays, with overall functioning at approximately 19 months. Mike exhibited early forms of self-directed symbolic play, but he did not use combinatorial play schemes or other-directed symbolic play. Most striking was his reluctance to interact. The degree to which his behavior was the result of developmental impairment or more willfully under his control was not clear.

An intensive outpatient intervention was arranged. Before it could be implemented, however, the foster parents decided to give Mike up. He was placed in a shelter while authorities looked for another foster home for him. Within 2 weeks in the shelter, where he was the youngest and favored child, he improved dramatically. His relatedness blossomed, his expressive language developed at a rapid pace, and he developed a preferred attachment to a particular staff member. Re-evaluation 3 months later confirmed that he had made substantial developmental gains in language, cognitive, and social domains.

Although an Autistic Spectrum Disorder had been suspected, Mike's rapid recovery following placement in a presumably more nurturing environment indicated an attachment disorder.

Type II: Indiscriminate Attachment Disorder

The second type has been recognized implicitly in DSM-IV (APA, 1991) as the "diffuse attachment" criterion of Reactive Attachment Disorder, and explicitly in ICD-10 (WHO, 1992) as Disinhibited Attachment Disorder. In this disorder, the child exhibits an imbalance in the attachment-exploration functions by failing to check back with the caregiver in unfamiliar settings and by failing to retreat to the caregiver as a safe haven when frightened or threatened. Instead, there is an indiscriminate and promiscuous use of others for comfort and nurturance. The major empirical support for the Type II pattern comes from studies of institutionalized children, although clinical experience suggests that it also may be apparent in children with disrupted early attachment histories, such as multiple foster placements.

In their study of institutionalized children independent of physical and emotional deprivation, Tizard and her colleagues (Tizard & Rees, 1974, 1975; Tizard & Hodges, 1978) compared three groups of children who had spent at least their first 2 years in an institution. Of the original 65 children, 24 were adopted between the ages of 2 and 4 years; 15 were restored to their original families between ages 2 and 4 years; and 26 remained in the institution. Of the 26 who remained in the institution, 10 children were described as not having deep attachments, and they were markedly attention-seeking, clingy, and overfriendly with strangers. A minority of adopted and restored institutional children also exhibited overfriendly behavior toward strangers that was a cause of concern for their families. In a comparison group of 65 children of a working-class sample of London families, none of the children exhibited this pattern (Tizard & Hodges, 1978).

Our experience suggests that the Type II disorder may have two subtypes: one with accident proneness and risk-taking behavior as prominent features, and the other limited primarily to children with social promiscuity and indiscriminate comfort seeking.

The following case example illustrates the Reckless/Accident-Prone/Risk-Taking subtype of Indiscriminate Attachment Disorder as it presents in a clinical setting.

Case 2. Robert was referred to an infant mental health clinic when he was 34 months old for evaluation of a variety of behavioral problems, includ-

ing frequent tantrums, aggressive behavior, running out of his house and into the street, and a willingness to "go with anyone." All of these problems had been apparent since he was about 1½ years old. He had always lived with his mother and a younger sister who was 16 months old at the time of the referral.

There were significant concerns at the time of the referral about Robert's mother's ability to manage him, given that she was already receiving intensive services from the community. These included individual psychotherapy at a community mental health center, a weekly parenting group at another community agency, and an in-home parent aide 2-3 hours a day for 2 or 3 days a week.

During the intake family interview, which included the three family members and the parent aide, Robert seemed initially to ignore his mother and interacted primarily with the parent aide. He showed her toys and sought contact with her. Progressively, his behavior became more unruly and disruptive. He could not sustain an activity, and he was quite provocative with his mother. She seemed uncertain of how to manage him, despite encouragement from the parent aide and the interviewer. As a result, Robert was taken out of the room by the parent aide in order to settle him down and to permit the interviewer to obtain needed history from his mother. He ran around the waiting room, and two adults could not interest him in toys or activities. Suddenly, he bolted into an adjacent room and began pulling a pot of hot coffee off a warmer. He was stopped just before it spilled on him.

Because of his frenetic, out-of-control, and risk-taking behavior at home, and because neither his mother nor the parent aide felt he could be safely managed at home, Robert was hospitalized for a more intensive assessment. In the hospital, he did not pose the behavior problems that were anticipated. Instead, he was quiet and easily engaged by play with toys. What was striking about his behavior was his active seeking of nurturance from total strangers. He greeted adults he had never seen with open arms and requested hugs and kisses from them. It became clear that only during visits with his mother did the risk taking and recklessness become pronounced.

Robert's lack of major impairments in social relatedness, his normal cognitive abilities, and his sophisticated language and pretend play ruled out autistic spectrum disorder, language disorders, and mental retardation. The major consideration for differential diagnosis was a disruptive behavior disorder, especially Attention-Deficit Hyperactiv-

ity Disorder. The situational specificity of his disruptive behavior, which was observed and confirmed by more detailed history, made it clear that an attachment disorder explained the problems.

Perhaps a more common presentation of Indiscriminate Attachment Disorder is the subtype we call Socially Promiscuous, which occurs in young children who have had repeated changes in caregivers without the opportunity to develop a preferred attachment figure. In these children, there is no risk-taking behavior, but only indiscriminate sociability.

Case 3. Sarah was a 14-month-old girl who was referred for evaluation by her foster mother, Ms. Glynn, who was concerned that she was depressed. She had been in the foster mother's home for about three months, and the foster mother noticed that she was not like other foster children she had had. Sarah sat by herself for long periods of time, and she rarely smiled or vocalized. Although she did not seek comfort when she was distressed, she was easily settled by anyone when she became upset. This was Sarah's third foster home in 6 months since her removal by child protective services from her mother's home at age 8 months because of neglect.

Sarah was her 16-year-old mother's second child. The mother and her two children had moved out of the maternal grandmother's home because of ongoing conflict when Sarah was 3 months old. Sarah's mother had voluntarily placed the children in a temporary foster home while she entered an inpatient alcohol treatment unit; the children were returned to her upon discharge. Sarah's father was arrested and convicted of assaulting Sarah's mother soon thereafter. When Sarah was 8 months old, she and her brother were placed in separate foster homes. For reasons unrelated to her or her problems, Sarah was moved to another foster home within a month, and 2 months later she was moved into the home of the foster mother who brought her in for evaluation. For 3 months prior to the evaluation, Sarah had had regular supervised visits with her birth mother.

During the initial evaluation session with her foster mother, Sarah seemed comfortable. Nevertheless, she behaved just as familiarly with the interviewer as she did with her foster mother. She tended to wander aimlessly around the playroom, unable to focus on play with toys or social interaction for long. She was a bit clumsy, and when she fell and bumped her head during the session with her foster mother, she cried quietly without look-

ing at her foster mother or reaching out to her. When her foster mother picked her up, Sarah quieted, but her back remained stiff and her expression somewhat blank.

In the subsequent session with her birth mother, Sarah arrived somewhat late. When she entered the playroom, where her mother was waiting for her, she responded to her mother's call and open arms by hesitating before seeming to approach for a few steps. Then she stopped suddenly and busied herself with the toys without ever looking at her mother. This maneuver was not lost on her mother, who cited it as an example of Sarah's aloofness. During this session she also wandered around a bit aimlessly, and again was as willing to sit in the lap of the interviewer as that of her birth mother. Throughout the evaluation, her affective range was a bit constricted, and she did not exhibit toddler exuberance; nevertheless, she seemed more sober than sad. History from both mothers and subsequent home visits confirmed that Sarah had no preferred attachment figure and consistently demonstrated indiscriminate sociability.

Type III: Inhibited Attachment Disorder

At the other end of disturbances in the balance between attachment and exploration are children who are unwilling to venture away from their attachment figures to engage in age-appropriate exploration, at times when it is expected for them to do so. Two subtypes, Excessive Clinging and Compulsive Compliance, illustrate the different manifestations of this type of attachment disorder.

In the Excessive Clinging subtype, the child may be identified primarily at times when normal exploration is anticipated. The clinging goes well beyond initial shyness or slowness to warm up. In addition to extremes of clinging, the child also exhibits affective constriction, characterized chiefly by an anxious mood at times when around unfamiliar people.

Case 4. Kay was a 28-month-old girl who was referred for evaluation by a child psychiatrist, who had seen her following surgery for a congenital cardiac malformation. The surgery was successful, but it was only one of a large number of operations that Kay had required, and there were more scheduled in the future. The psychiatrist had been consulted because after surgery Kay had appeared extremely frightened and had remained mute for several days. Her mother said about her when she was in the intensive care unit and mute, "You could see the fright in her eyes." Kay was diagnosed

with Post-Traumatic Stress Disorder (PTSD), and her mother was encouraged to seek treatment for her after discharge.

In the initial evaluation session, Kay never once moved from her mother's lap when the interviewer was present. She could not be enticed to interact, even by toys that she eyed longingly, although she played with them eagerly when the interviewer left her alone with her mother and observed them through a one-way mirror. Her mother reported that she had always been inhibited around unfamiliar adults and children.

The mother was not especially concerned about Kay's inhibition, and seemed largely unaware of the effects of her overprotectiveness on Kay. The evaluation made clear that Kay's mother had also been terrified about her—not only in the immediate postoperative period, but also since her initial diagnosis as a newborn. This had led the mother into a much closer (and also a different kind of) relationship with Kay than with Kay's older sister, whom the mother saw as strong and capable.

Further history made clear that there was little to suggest an Overanxious Disorder, as the child did not exhibit generalized anxiety or PTSD, as there were no current symptoms, and as the clinging had preceded the traumatic hospital visit.

The Compulsive Compliance subtype is a manifestation of the child's response to maltreatment or at least excessive punitiveness. The child appears to have learned to comply with the caregiver immediately and unquestioningly, in order to avoid physical abuse. Therefore, symptoms and signs (such as hypervigilance, subdued but wary affect, and lack of spontaneity) are most apparent when the child is in the presence of the attachment figure.

Case 5. George was a 30-month-old boy who was referred for evaluation because of extreme reactions to visitation with his natural mother. He had been removed from her when he was 20 months old and placed in his current foster home. There he was noted to be somewhat boisterous and active, but he was generally easy to care for.

The problem leading to the referral was that George had begun protesting violently when he was picked up by the caseworker for weekly visits with his natural mother. The clinician conducting the evaluation observed George playing in his foster home prior to the pickup. He seemed comfortable and at ease, although he was loud in his play and somewhat noncompliant with his foster mother. When the caseworker arrived and he saw

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her, George screamed in a terrified manner and attempted to hide. He was carried kicking and screaming into the caseworker's car.

As part of the evaluation, the clinician followed George and the caseworker to his natural mother's house in order to observe him in that setting as well. Although he had cried profusely on the way to his mother's apartment, when he reached the door he stopped crying. He looked soberly at his mother when she opened the door, but he did not greet her in any discernible way. Instead, he walked in silently and stood in her living room. George's 15-month-old brother, who was placed in a different foster home, had arrived a few minutes earlier. The natural mother told George to sit down, and he did so immediately. Although George's brother toddled freely and contently through the apartment, vocalizing often, George did not move from where he sat down initially unless his mother directed him otherwise.

In a 45-minute observation, George never spoke once. He merely nodded or shook his head when asked questions by his mother. He watched her constantly, maintaining a vigilant and anxious expression on his face. He cringed slightly whenever she spoke to him, but he always complied immediately with her directives. A laboratory evaluation session revealed this same pattern of interaction. The relationship specificity of the symptoms made the diagnosis clear.

Type IV: Aggressive Attachment Disorder

Some attachment relationships are suffused with anger and frustration. When anger is a pervasive feature of the relationship, and when the child's aggression toward the attachment figure and/or the self exceeds transitory expressions of frustration, the child may have Aggressive Attachment Disorder. Children begin to use anger instrumentally at about 12 months of age, and this type of attachment disorder becomes more common toward the latter part of the second year and beyond.

Children with Aggressive Attachment Disorder frequently have symptoms of anxiety that may be overlooked by parents, teachers, or treating clinicians because of the prominence or even dangerousness of the aggressive symptoms. Separation anxiety or sleep disturbances, for example, may be interpreted by the parents as defiance.

A child's anger and aggression may not be limited to the attachment relationship, but they should be more apparent in this context than in other contexts. They also clearly exceed age-

appropriate expressions of ambivalence. Aggression may be directed toward the self, in the form of head banging or scratching; may be directed toward the attachment figure, verbally ("I hate you") or nonverbally (hitting, kicking, or biting); or may be expressed in the form of severe and prolonged tantrums in response to minor frustrations. The child's world is generally violent: Being a witness and/or a victim of domestic violence is a frequent accompaniment of the child's symptomatology.

Case 6. Dante was a 26-month-old referred for evaluation because he was "out of control." His parents referred to him as a "holy terror." According to his parents, when he was told "no" he threw himself on the floor kicking and screaming, and he hit his mother when she tried to contain him. He also responded to his father's efforts to discipline him by lashing out at him. When he became very upset, he tended to bite himself and banged his head on the floor.

In the initial session of the evaluation, Dante played quietly at first, but became more active and boisterous as the session continued. When his mother attempted to settle him, he hit her and then began to throw a tantrum. A short time later, his mother left the room without saying goodbye to go to the bathroom; Dante cried and banged on the door angrily, trying to follow her. He hit the therapist when she tried to console him, but he calmed down when she told him that he could not hit and that Mommy would be right back.

History revealed considerable violence at home between the parents, which Dante often witnessed. The parents frequently threatened to abandon each other and him. Dante was cared for inconsistently by a large number of family members, friends, and even casual acquaintances. Discipline was inconsistent but usually involved spanking.

Type V: Role-Reversed Attachment Disorder

Although the fifth type of disordered relationship has long been noted by clinicians, empirical support for the construct has become available from attachment research with school-age and preschool-age children (Greenberg, Speltz, DeKlyen, & Endriga, 1992; Main & Cassidy, 1988). Main and Cassidy (1988) described a pattern of reunion behavior that they designated as "controlling" in 6-year-old children separated from their parents for 1 hour in a laboratory paradigm. Two major forms of the controlling pattern have been described: "controlling/care-

giving," in which the child is overly nurturant and solicitous toward the caregiver, and "controlling/punitive," in which the child behaves in an overly bossy, punitive, or rejecting manner toward the caregiver (Main & Cassidy, 1988). Home observations of 6-year-olds who exhibit controlling reunion behavior in the laboratory have confirmed that these children and their mothers engage in role-inappropriate behaviors (Solomon, George, & Ivins, 1987).

The controlling pattern has also been described previously in a clinic-referred toddler who was in a role-reversed relationship with his mother (Zeanah & Klitzke, 1991). In this case, the caregiving and punitive forms of controlling behavior were observed to co-occur in the same dyad.

Case 7. Beth was a 24-month-old girl who was referred to an infant mental health clinic for evaluation of a sleep disturbance that had been present for over a year. Her mother reported that she had not slept in her own bed since she was 10 months old, which was about 2 months before she and her husband had separated.

The most striking features of the intake session were Beth's mother's depressed mood, frequent crying, and psychomotor retardation. Although toys were available, Beth played with them only in the first 20 minutes of the interview, when her mother seemed more animated. Her mother looked sadder and began to cry as she described her frustration and hopelessness about a number of stressors. Beth walked over to her and signaled to be picked up. She remained in her mother's lap for almost the entire remainder of the session.

As her mother continued to tell their story tearfully, Beth began to stroke her mother's hair gently. She continued caressing her mother's hair and back intermittently for about 20 minutes. At times, however, she pulled her mother's hair vigorously and provocatively.

In subsequent sessions, this controlling pattern of interaction reappeared. History confirmed that Beth's mother had tended to look to her for comfort and support for a long time, and that Beth bore an excessive amount of the psychological burden of the relationship.

Other Diagnostic Considerations

To be meaningful, a diagnosis must enable the clinician to communicate to others meaningful information about the disorder. The dis-

orders proposed above need to be validated. Even then, other types of disordered attachment may need to be described. For example, the present typology does not address attachments characterized by extremes of avoidance, resistance, and disorganization. If these types of defensive processes and their correlates can be identified in naturalistic settings, then we may have a fuller description of attachment disorders.

Ideally, from a diagnosis one can infer etiology, pathogenesis, prognosis, and treatment. For attachment disorders, as for many disorders, all the relevant data are not yet available. Nevertheless, diagnosing an attachment disorder can enhance the clinician's understanding of the individual, and can also help to focus and direct treatment.

Having to consider attachment disorders in the differential diagnosis can help the clinician make the attachment system an important focus of the assessment of the parent-infant dyad. How the infant uses the caregiver as a safe haven and secure base from which to explore is a useful way of understanding infant behavior during clinical assessments. By analyzing the pattern of the balance between the attachment system and the exploratory system, the clinician may be guided to look at the caregiver-infant relationship in a more informed way. For instance, an infant's showing signs of Nonattached Attachment Disorder (Type I) should suggest an emotionally, if not physically, unavailable caregiver. The Compulsive Compliance subtype of Inhibited Attachment Disorder (Type III) ought to suggest physical abuse or extreme punitiveness in the caregiver-infant relationship. On the other hand, the Excessive Clinging subtype of Type III should guide the clinician into inquiry about the caregiver's feelings about the infant's exploring. In summary, considering a diagnosis of attachment disorder may help to focus the clinician's attention on factors that contributed to the symptoms and signs of disorder in the infant.

Relationship of Attachment Disorders to Other Disorders

Attachment may also contribute to the development of disorders in children other than attachment disorders. Conduct Disorder (Greenberg & Speltz, 1988; Speltz, Greenberg, & DeKlyen, 1990; Greenberg et al., 1992), Major Depression

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an infer etiological treatment. For attachment disorders, all treatments are available. Nevertheless, a disorder can be diagnosed on the basis of the history and direct

disorders in the clinical setting. An important focus is the infant dyad. A safe haven is a use of behavior during the patient's attachment with the clinician. The clinician-giver-infant way. For infants who are nonattached, it would suggest an available caregiver (subtype of type III) ought to be punitive. On the basis of the subtype of the inquiry into the infant's diagnosis, the focus is the contribution of the disorder in the

the development of attachment disorders. Greenberg, DeKlyen, and Depression

(Cicchetti & Aber, 1986; Cummings & Cicchetti, 1990), and disorders of social inhibition (Rubin & Lollis, 1988) have been particularly implicated.

Zeanah and Emde (in press) have proposed several possible ways in which insecure attachment may contribute to these disorders. First, insecure attachment may be a necessary but not a sufficient cause of the other disorder. In other words, attachment may make a *specific* and *independent* contribution to the disorder, along with other etiological factors. Second, attachment may *not* make a specific contribution to these disorders; instead the children affected may be deviant on a large number of measures of adaptation, including having insecurely organized attachment. Third, extremely insecure children who have attachment disorders may also have other disorders. Comorbidity is particularly difficult to demonstrate when the disorders in question are not well validated. The task for clinicians is to distinguish between attachment disorders per se and disorders in which insecure attachment is a contributor, specific or non-specific.

ASSESSMENT

Zeanah and Emde (in press) have delineated several principles of assessment of attachment disorders. First, assessment should focus primarily on a child's relationships with attachment figures, rather than on the child's social behavior in general. It is important to remember that the child's symptoms may vary from one attachment relationship to another. Second, both history and direct observation of the child and the attachment figure(s) should be included in the assessment. Observations of the use of an attachment figure as a secure base in early toddlerhood and of the goal-corrected partnership in later toddlerhood are weighted especially strongly. Third, structured research methods of assessing attachment should be used sparingly if at all to make a diagnosis. The focus of attention should be attachment relationships as they function in naturalistic settings rather than in the laboratory.

The first question for the clinician is whether the child has or is expected to have an attachment to a particular caregiver. For example, a child recently placed in a foster family may be difficult to evaluate for attachment disorders with either her natural or her foster parents. Once the child's attachment relationship has been demonstrated, the child's specific behav-

iors are of interest in determining whether an attachment relationship is disordered (Table 22.2). These behaviors should be assessed by direct observation whenever possible, with history used to supplement impressions from direct observation.

MANAGEMENT

The question of whether severe early deprivation can be overcome (and, if so, how) has been enormously controversial. Rutter's (1972) suggestion that the degree of reversibility depends on the duration and severity of the privation, the age when the privation ceases, and the completeness of the change of environment is still valid today.

Infants are most likely to become attached to emotionally available, sensitive caregivers. If an infant is deprived of that opportunity, as with repeated changes in foster care, the first effort at intervention should be provision of a stable and consistent caregiving adult who is or is likely to become emotionally invested in the infant. Infants are born with a strong biological propensity to form and to maintain attachments, so that the introduction of an emotionally available attachment figure is the initial treatment of choice.

Perhaps more common problems for clinicians are infants who have disturbed primary attachment relationships rather than no attachment relationships. Although no studies have been conducted attempting to intervene with infants suffering from attachment disorders, several investigations have attempted to intervene with insecurely attached infants in high-risk populations.

Globally supportive interventions with mothers in high-risk samples have not improved infant attachment when SSP classification has been the dependent variable. This has been demonstrated in samples of infants with adolescent mothers (Osofsky, Culp, & Ware, 1988), of preterm infants (Beckwith, 1988), and of infants with socially isolated mothers (Barnard et al., 1988). Several of the investigators speculated that the effects of the intervention might not have become apparent as early as the infants' first birthday. On the other hand, it is clearly possible that these interventions were neither intense nor specific enough to affect infant attachment, at least as reflected in SSP classifications.

Lieberman & Pawl, Chapter 28, this volume; Fraiberg, 1980). Pretreatment assessments with the SSP divided the sample into three groups: insecure intervention ($n = 29$), insecure control ($n = 23$), and secure control ($n = 30$).

Sessions lasting 90 minutes each were conducted weekly for 1 year. The focus of the home-based psychotherapy was on the emotional relationship experiences of mothers and their infants. The therapists emphasized the importance and legitimacy of the mothers' needs for protection and safety, both as children and as mothers. They encouraged the mothers to explore their negative feelings of anger and ambivalence toward others. They also addressed the mothers' perceptions and interpretations of their infants. The design of the intervention was to help the mothers use their relationships with their therapists to change their relationships with their infants. In other words, by changing mothers' internal representations, the therapists hoped to change the mothers' behaviors with their infants, and thereby to change their infants' internal representations of attachment.

Results of the intervention were evaluated when the children were 24 months old in naturalistic and laboratory settings. There were significant increases in more desirable maternal and child interactive behaviors, and an enhanced goal-corrected partnership, in the intervention group as compared to the control groups. Unfortunately, the mothers' own representations of attachment were not assessed in this investigation, leaving the most direct focus of the intervention unassessed. If similar interventions in the future produce similar results, the question for future research will be whether interventions change a parent's perspective on attachment or whether the intervention improves parental behavior without changing the internal representations.

A more intense intervention that provided demonstrable beneficial effects was conducted with recently immigrated lower-socioeconomic-status women and their infants in San Francisco (Lieberman, Weston, & Pawl, 1991). The clinicians in this investigation were bicultural, bilingual women with master's degrees in psychology or social work, who received special training and ongoing supervision from clinicians experienced in infant-parent psychotherapy (see

In this chapter we have emphasized the salient role of attachment in the parent-infant relationship. We have summarized some of the literature on the deleterious effects of insecure attachment on child development, and on the relationship of security of attachment to real experiences rather than fantasies. We have noted that disorders of attachment in current nosologies are not fully informed by developmental research on the construct of attachment. We

have outlined the criteria for the proposed previous requirements (1990) and have proposed a management decision health criteria for exploratory attacks, assessing the attacks. M attempts through criteria.

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have outlined the basic assumptions that underlie the classification of attachment disorders proposed in this chapter. Drawing on the previous reports of Lieberman and Pawl (1988, 1990) and on our own clinical experiences, we have proposed criteria for five types of attachment disorders. We hope to direct infant mental health clinicians' attention to the attachment-exploration balance and to the organization of the attachment relationship when they are assessing disturbed parent-infant relationships. Most importantly, we look forward to attempts to validate disorders of attachment through critical evaluation of these and other criteria.

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Chapter One

Introduction: Reciprocity, Attachment, and Effectance: Anlage in Early Infancy

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This volume brings together many of the pioneers in affective development research. They represent the fields of pediatrics, child development, psychology, psychiatry, and psychoanalysis. Much of the current emphasis in research about infants has been based on a model of cognitive development (Piaget, 1953, 1955). Cognitive milestones and processes have been the easiest to document so far, and outcome measures for infants are heavily weighted in motor and cognitive lines. But we are all aware that physical and psychological development is dependent on emotional growth. We have not had clear indices for measuring emotional or socio-affective stages of development. We need them to balance the present trend in professional and parental minds with the indices for cognitive development.

When does emotional development begin? Our own bias is that anlage or precursors of emotional experience are being amassed in the uterus. Certainly, there are clear behavioral indices of sensory experiences being locked to motor and state responses in the last half of pregnancy. Fetuses can now be studied in the last months of gestation for their ability to respond to auditory and visual stimuli. They seem to prefer certain stimuli to others as registered by their behavioral responses. They can shut out or "habituate" to unpleasant ones and become increasingly attentive to preferred stimuli (Brazelton, 1981a). The fact that they can make such choices implies the presence of a mechanism in fetal life that differentiates certain kinds of experiences. The opportunity for learning and storing experiences in utero exists. Thus, we must reconceptualize

our ideas of the beginning effects of early experience to include the fetus (Rosen & Rosen, 1975).

We can begin to conceptualize how experience can be represented in the memory of infants and how it can shape them toward future responses (Brazelton, 1981b). Early experiences—when they are repeated, and when they are accompanied by a behavioral representation of recognition in the infant—must be considered as potential anlage (or precursors) of future ego development and as precursors for cognitive patterns; these experiences shape the infant toward preferred behavioral patterns. Such early reactions are likely to become, as Greenacre says (1941), the “precursors for future response patterns.” If they are successful patterns in early infancy, the chances are they will then be repeated, learned, and eventually become preferred patterns in the older infant. In this way, the behaviors that represent reactions in the infant can be seen as precursors for future development. With this in mind, the study of prenatal and neonatal behavior may become a way of predicting the baby’s future style and preferred patterns of behavior.

Since a parent has invested in, and is likely to be deeply affected by, the newborn’s behavioral reactions, an assessment of the infant’s behavior becomes a window into the reactions of the parent’s responses to him or to her. Thus, an infant’s early behavioral reactions become important in understanding the infant as well as the parent’s reactions to the infant.

An understanding of the infant’s development within any particular developmental line—such as that of affect or emotional development—must include the interaction between this and other developmental lines. The immaturity of cognitive, neuromotor, and psychophysiological equipment of the baby limit the infant’s potential for developing clearly definable emotions in the early months. However, the ability to regulate the interaction between these developmental lines and eventually to self-regulate state is a critical base. The responses of the infant’s neurological and physical systems are at the core of any development of emotions. The immaturity of these systems place obvious restraints on development, but their experiential maturation forms the base for future emotional experience. The capacity for self-regulation may even be a marker of the linkage between the infant’s core affective displays (e.g., facial expressions) and inner affective experiences. As infants “learn” to cope with a stimulus from the outside world, they experience a sense of achievement, and the feedback system that is activated may give them an inner representation of mastery (cf. White, 1959). Although this terminology is “adultomorphic,” it seems to us that the concepts of mastery and learning fit the experiences on which the infant begins to build.

The central nervous system (CNS), as it develops, drives the infant toward maturation and mastery of self and world. Any internal equilib-

rium is tested and upset by the imbalance that is created as the CNS matures. Hence, maturation and an increase in differentiation of infant skills and potential becomes a force that drives the infant to reorganize and "relearn" control systems. Each step is a new opportunity for mastery and for learning new feedback systems.

There are two sources fueling this maturation. Feedback loops that close on completion of an experience after an anticipated performance affect the baby from within. As each step is mastered, anticipation has generated a feedback loop that closes and, as it closes, it generates energy that is available as the step is completed. In this way, a sense of mastery (cf. White, 1959) is incorporated by the developing infant, and this freed-up energy drives the infant toward the next developmental achievement.

Meanwhile, there is a second important source of energy that fuels infant development and enhances each experience. The environment around the infant, when it is nurturant, tends to register responsive behavior to the behavior of the infant. Not only do parents register recognition and approval of an infant's achievement, but they add a signal to their approval. This signal becomes positive reinforcement, and it both fuels the infant and leads him or her to match the adult's expectation. The chapter by Tronick, Cohn, and Shea links early infant experiences during parent-infant interaction with a developing sense of effectance.

These two sources of energy—one from within, the other from without—are in balance under ideal conditions, and both provide the energy for future development. The infant's recognition of each of these sources, as he or she masters a developmental step, is often unconscious, but it adds to a preconscious recognition of mastery. This internal representation, coupled with the closure of feedback loops of mastery of steps in autonomic and CNS control, must become the precursors of emotional and, in turn, of cognitive recognition and contribute to the infant's developing ego.

When either of these are deficient, the infant's development of affective and cognitive states will be impaired. This occurs when (a) an infant is too sluggish because of such influences as intrauterine deprivation, maternal medication, or perinatal hypoxia at delivery, or one whose threshold for intake of stimuli is too low and is thus overwhelmed by each stimulus; or (b) when the environment is inappropriately responsive to the infant (either under or over). Thus, the internal and external feedback systems become intertwined from the first. Since each is dependent on the infant's endowment and on his or her capacity for overt and internalized reactions, the infant's genetic capacities determine the kind of internal and external feedback systems that are available. They both fuel the infant's development and place limits on it.

Thomas, Chess, and Birch (1968) first described a baby's developing style or temperament. Temperament certainly provides an observable, quantifiable matrix for accepting, utilizing, and discharging stimuli from the surrounding environment. This matrix then becomes a predictable way for an infant to react and sets up the expectation for his or her reactions for those who must nurture him or her. They set their expectations to him and provide responses to him which are appropriate to this temperament. In contrast, parental perceptions and expectations of infants may be much less responsive and may reflect past adult experience as Cramer's chapter suggests rather than current experiences with the infant.

The remarkable capacities for attention and interactive behavior of the neonate when enclosed in the envelope of an adult interactant who is sensitive to the infant's need for regulation has led us to see the infant's dependency on a nurturing environment in a new light. No longer do we see the infant as insensitive, chaotic, or unpredictable, but rather as equipped with highly predictable behavioral responses to both positive (appropriate to the infant) or negative (inappropriate or overloading) stimuli from the outside world (Brazelton, 1973). These responses in turn shape the responses of the adult interactant to set up a mutual feedback system. Nature and nurture become inseparably entwined by the need for reciprocal feedback in each of the interactions in a relationship such as the parent-infant dyad.

Communication is a system that demands mastery at all levels—control over neuromotor and psychophysiological systems, alerting, and prolonged attention in order to attend to cognitive and affective cues. In particular, it means learning enough about oneself in order to be available for adapting these systems to the "other" member. The ability to adjust to the goals and personality of others while retaining one's own identity is basic to reciprocity. This implies the ability to control or influence others with effective but nonviolating strategies and to be reasonably influenced by the other without being totally overcome or dominated (Gottman, 1979).

Joint regulation of adult and infant, then, becomes the necessary base for responsiveness (Als, 1978; Brazelton, Koslowski, & Main, 1974). That the neonate and the adult learn about each other and about themselves within such a system could hardly be questioned after experiencing it in such a way. The feeling of mutuality, of identification with "the other," must be at the base of successful interaction between parent and infant (Brazelton, 1979). In shaping him- or herself to learn the levels of appropriate and inappropriate stimuli to offer the newborn, the parent learns about the base from which the infant operates (Bullowa, 1979).

Joint regulation of interactive systems in order to produce optimal

performance in the neonate led us to see the powerful signaling systems, the regulatory systems of state control, and the nonverbal communicative systems that are available in the first few weeks in the human infant. Yogman, Dixon, Tronick, Adamson, Als, and Brazelton (1976), Yogman (1982), Yogman, Lester, and Hoffman (1983), and Brazelton et al. (1974) have demonstrated reliable, reproducible patterns of rhythmic behavioral responses in the first two months that are already reserved for the mother and father. These responses are differentiated for each parent and are significantly different from the pattern or non-patterns that already signal the baby's responses to a stranger (Dixon, Yogman, Tronick, Als, Adamson, & Brazelton, 1981). If these patterns are shaped so early, they must be predetermined or patterned in utero, to some extent, and shaped in the first few days and weeks by important messages and cues that are offered by each parent and quickly reorganized by the infant. These allow for (a) early patterning toward individual differences in the responses of both partners; (b) the importance of individual cues on the part of important adults and individuated responses on the part of the infant; (c) rapid recognition of the important parameters of context in the environment; and (d) the ability to "control" physiologic and psychological responses in order to interact. These, then, seem to be at the base of the development of affect in the small infant (Brazelton, 1981b).

The most basic control system that is necessary to the immature organism is the homeostatic regulation of the autonomic system. It determines what is within the limits of responsiveness and tells infants when to shut off their responses in order to protect themselves. In this setting, the most important role of the adult interactants seems to be that of helping infants to form a regulatory base for their immature psychological and motor reactions.

Preverbal Communication

We see the emotional displays of the infant and adult as message-carrying displays (Brazelton & Als, 1979). Language is not yet a part of the interaction but there appears to be a lexicon of expression that conveys information to each about their partner's inner emotional state and serves to regulate the interaction. These messages have two aspects: a content aspect and a regulatory aspect. The content of the message may refer to any event or object. It is conveyed in interactions primarily by language. The regulatory aspect of a signal contains information about a communicant's acceptance, rejection, or modification of the current state of the interaction. It is expressed through the behavioral display of the communicants

with their subtlety of emotional qualities. The content portion is similar to what Watzlawick, Beavin, and Jackson (1967) call the report aspect of a message, and the regulatory aspect of behavioral signals is a *metacommunication*, that is, a communication about a communication. The messages exchanged via behavioral displays are largely regulatory in character in that they refer only to the ongoing state of the interaction and not to objects or events, so that prior to the incorporation of language into the interaction, the infant has developed and practiced the ability to regulate the pragmatic aspects of an interchange. In this process, the infant must be experiencing the feedback of successful self-regulation as well as the external feedback from the adult who is successful in synchronous interaction with the infant (Brazelton, 1981b).

States of Regulation

We have identified four stages of regulation and of learning within the parent-infant communicatory system over the first 4 months of life (Brazelton & Als, 1979).

- 1st Stage—When an infant can achieve homeostatic control over input and output systems (i.e., the infant can both shut out and reach out for stimuli and, in the process, achieve control over his or her state and physiological systems.
- 2nd Stage—Within such a learned, controlled system, the infant can begin to attend to and use the social cues to prolong states of attention and to accept and incorporate more complex messages.
- 3rd Stage—Within an entrained, mutually reciprocal feedback with an adult, the infant and parents can begin to press the limits of the infant's (a) capacity to take in and respond to information, and (b) ability to withdraw in order to recover in a homeostatic system of attention withdrawal. The mother-infant "games" described by Stern (1974) are examples of this phase as a system for amassing affective and cognitive experience at 3 and 4 months.
- 4th Stage—Within the dyad or triad, the baby is allowed to demonstrate and incorporate a sense of his autonomy. At the point where the mother or nurturing parent can permit the baby to be the leader or signal giver, when the adult can recognize and encourage the baby's independent search for and response to environmental cues—to initiate them, to reach out for and play with objects, and so on—the small infant's feeling-of-competence and of voluntary control over his or her environment becomes realized. This leads to a sense of competence. We see this at 4-5

months in normal infants during any interaction, when the infant stops to look around and to process the environment. When a mother can allow for this and can foster it, she and the infant become aware of his burgeoning autonomy. In psychoanalytic terms, the infant's ego development is on its way. This is comparable to Mahler's ideas of "hatching" (Mahler, Pine, & Bergman, 1975).

This model of development is a powerful one for understanding the reciprocal bonds that are set up between parent and infant. The feedback model allows for flexibility, disruption, and reorganization. Within its envelope of reciprocal interaction, one can conceive of a rich matrix of different modalities for communication, individualized for each pair and critically dependent on the contribution of each member of the dyad or triad. There is no reason that each system cannot be shaped in different ways by the preferred modalities for interaction of each of its participants, but each *must* be sensitive and ready to adjust to the other member in the envelope. And at each stage of development the envelope will be different; richer, we would hope.

Upon this base of reciprocity, the parent-infant relationship supports the infant's growing sense of effectance through subsequent phases of social development in infancy, as for example Sander's (1969) phases of "focalized attachment" and "self assertion." Stress and the infant's ability to cope with stress have become useful ways of assessing the fragility or solidity of the infant's affective organization. Main and Solomon's chapter builds on the classification of attachment organization developed by Ainsworth and her colleagues (Ainsworth, Bell, & Stayton, 1971) and addresses three critical issues: (a) the role of classification systems in categorizing current status vs. reflecting and predicting past and future history, (b) the intergenerational effects of disrupted attachment, and (c) the disorganization induced by the stress on children when parents continue to live with some of the "ghosts" in their past suggested by Cramer. How these infants attempt to maintain a sense of effectance as they develop will continue to be a clinically and theoretically important issue to follow in future studies. The studies of Clyman, Emde, and colleagues suggest that social referencing and social looking may be an important mechanism by which infants develop self-regulatory behavior by monitoring the affective states of their parents. It is perhaps, then, not surprising as Yarrow points out that children of emotionally impaired parents evidence significant affective problems and a lack of resilience in interpersonal relations.

Perhaps situations such as the ones Field is studying—the separations of infants and toddlers from mothers during childbirth and from

peers during nursery school class changes—will help us to understand not only the range of depressive responses to stress and loss, but will prove a useful measure of individual differences as well.

The Demos chapter gives us a beautiful example of an attempt to use sensitive observational techniques toward reaching an empirical base for qualitative assessment in the area of affective development.

In summary, developmental changes in these feedback systems allow one to see precursors for ego function, and they become the anlage for emotional experience in an older child. They can be observed in the behavior of the fetus and infant. The experience of completing an anticipated act or social communication closes a feedback cycle and it must create a sense of mastery that confirms a baby's sense of self and must fuel him or her toward further development. By capturing the adults to provide a nurturant environment, the infant provides him- or herself with an envelope within which can be learned this sense of "self" and mastery. In order to do this, the infant must "learn" about his or her own complex, inner control mechanisms as well as social response systems. Early experience thus provides the base for precursors of future emotions.

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Chapter Two

The Transfer of Affect Between Mothers and Infants

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The Mutual Regulation Model (MRM) of early infant-caregiver social interchange proposed by Tronick (Gianino & Tronick, in press) has characterized that interchange as a dyadic system in which emotional messages are exchanged between the partners functioning such that one partner achieves his or her own goals in coordination with those of the other partner (Tronick, 1980; Tronick, Als, & Brazelton, 1980). The infant's behavior in this context meets the criteria usually advanced for goal directedness: persistence, use of multiple means to the same-end state, observance of a "stop-rule" upon achievement of the goal, and appropriateness of actions (Bruner, 1971). The interactional goal in our culture is the achievement of a shared positive emotional state, mutual delight (Stern, 1974). The infant's emotional displays coordinate social exchanges. They convey an evaluation of the partner's action, the state of the interaction, and also signal the infant's direction of action. For example, smiles typically indicate a positive evaluation and signal that the infant will continue his direction of action, whereas grimaces and frowns express a negative emotional state

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and signal a change in the infant's direction of action. To do this the infant must have a repertoire of emotional displays; he must be able to appreciate the emotions displayed by his partner; and he must be able to organize his own displays in a coordinated fashion with the partner (Tronick, 1980, 1982; Campos, Barrett, Lamb, Goldsmith, & Sternberg, 1983).

From the perspective of the MRM the ability of the partner and infant to mutually regulate the quality of the interaction has a fundamental effect on how the infant feels about himself—that is, on the child's feeling of effectance: the sense of what he can and cannot accomplish (White, 1959). When the child's social interactions result in a shared, positive emotional state, the infant develops a sense of effectance. When such interactions do not accomplish this goal the infant develops a sense of ineffectance or helplessness. Effectance can be thought of as modifying the infant's social style: the amount of persistence in following a direction of action and the extent to which a varied repertoire of means are mustered by the child. And although it is during social interaction, during the *actual* interchanges that the child's sense of effectance is structured, any factor such as maternal personality or stress that modifies how the mother interacts and responds to her infant will in turn affect the infant's sense of effectance.

The MRM's formulation is straightforward: the infant, through active deployment of his emotional signals, attempts to control the social environment. When the infant succeeds, positive emotions are generated and the infant gains a sense of effectance. When the infant fails, negative emotions are generated and a sense of ineffectance or helplessness results. The infant's success to some extent depends on the sensitivity—cooperation—of the mother in responding reciprocally to him. Emotions are not magically transferred from mother to infant but rather the infant generates his own emotions as he processes the emotional input provided by the mother in relation to his own interactive goal.

The MRM applies to the mother as well. When the interaction goes well, the mother gains a sense of effectance; when it does not, she feels a sense of failure. But there is a difference as well. Because of the differences in their development, the infant's reactions are largely affected by the immediate external and internal stimuli; while the mother, obviously more developed, is not only capable of true empathy she is affected by other factors—historical and social—that modify her self-esteem and in turn her interactions with her infant. When these historical factors are positive, the mother's sensitivity to her infant is increased; if they are negative, her behavior is disrupted and less sensitive. The disruption follows directly from the formulation that increases in anxiety are likely to disrupt complicated behavioral tasks, and interacting with an infant, though "natural," is complicated indeed. Thus the success or failure of mutual ex-

change generates emotional states in the infant which reflect not only the immediate situation but the effect of historical factors that impact on the mother's behavior.

This chapter presents a set of studies of normal mothers and infants. It illustrates how infant and maternal emotionality and effectance arise out of the quality of their social interactions as well as some of the factors that affect the quality of that interaction. To examine the effect of non-reciprocal signaling between mother and infant, mothers were asked to depress their affect during face-to-face interactions with their infants (Cohn & Tronick, 1983). This was accomplished through verbal instructions and by a videotape of a woman simulating a depressed interaction. This was a useful demonstration along with the particular instruction "act as you do on those days that you feel tired and blue." Few women had trouble following these instructions. The effect was to slow them down, eliminate all smiles or bright faces, limit their to and fro movements, and restrict their touching of their infants.

It was predicted that if the mother's behavior was distorted so that she conveyed primarily sad affect and did not facilitate the normal interactive goal, the infant would detect this distortion and engage in activities aimed at eliciting her normal response. It was also hypothesized that if the infant continued to try and continued to fail to elicit his mother's normal behavior, then he would also become emotionally depressed. This depressed affect, while a mirror of the maternal affect, is a product of the infant's own active emotional processing. These effects would be indicated by an increase in the proportion of time the infant was affectively negative and in the pattern of infant behavior during the interaction.

Twenty-four 3-month-old infants and their mothers were observed while the mother acted normally and in a depressed fashion, by turn. From the videotapes of the interaction, six infant affective states were coded: Look Away, Protest, Wary, Social Monitor, Brief Positive, and Play.

Figure 1 provides a schematic representation of the organization of infant behavior in each condition. Depressed-condition infants cycled among Protest, Wary, and Look Away. They also positively elicited (Brief Positive) more often than infants in the normal condition. Normal-condition infants evidenced a more positive emotional cycle—Brief Positive, Monitor, and Play. Second, there was an order effect. Infants were more upset in the normal interaction if they had experienced the depressed interaction first than infants who experienced the normal interaction first.

These data demonstrated a clear relationship between the quality of maternal affective displays and the infant's behavior. In this specific case, when maternal affect is experimentally depressed, infants organize their

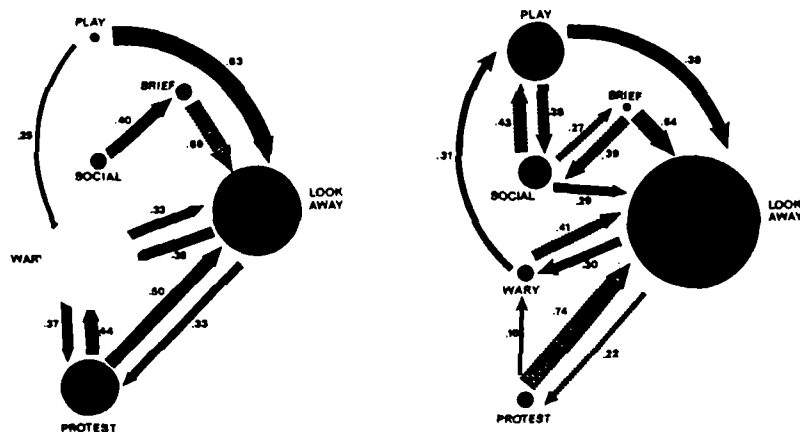


Figure 1. Diagram of the state transitions for the depressed and normal conditions. The size of the circle represents the relative proportion of time spent in each state. The relative size of the conditional probabilities of event transitions is represented by the thickness of the arrows. Numbers are the exact conditional probabilities. Striped arrows indicate transitions where the conditional probability did not differ from the unconditional probability. Only the highest conditional probabilities are shown (from Cohn & Tronick, 1983).

emotions very differently and they too begin to look depressed. Infants adapt to depressed affect on the part of the mother, and this adaptation persists into the next period of time in which the mother acts normally.

There are other examples of this process. Brazelton, Koslowski, and Main (1974), Stern (1971), and Massie (1978) have observed similar phenomena and have seen more longlasting consequences. Brazelton et al. (1974)—in their study of face-to-face play of mothers and infants using frame-by-frame analysis—found that a mother, by not pausing during an interaction and allowing the infant to respond, produced turning away by the infant. They interpreted this pattern as a violation by the mother of the basic cyclic pattern of reciprocity. Most significantly, mothers who habitually engaged in this pattern had infants who, as they developed, deployed less and less visual attention to their mother.

Stern (1971), in an observational study of the interaction of a mother and her twins, found a rule violating pattern. With one twin, the pattern was one that repeatedly resulted in his turning away and, one might suggest, being turned off. He observed that as the mother approached the infant, he would begin to turn away and then, as the infant would start to turn toward the mother, she would begin to turn away. Thus, there was a vicious cycle. The cycle was time-consuming so that the mother and this

twin interacted for longer periods of time than the mother and the other twin did, but it was an unsatisfying interaction.

This pattern was important because it constituted an important adaptive experience for the infant. It became a pattern with which the infant began to approach other situations. At 15 months this twin was more fearful and dependent than his brother. He refused prolonged eye contact and regularly performed gaze aversion in social situations. This pattern was clearly consistent with the earlier pattern.

Massie (1978) did frame-by-frame analyses of home movies parents had taken of their infants prior to the diagnosis of autistic-like psychosis. In some sense, the films were a prospective account of the early natural history of psychosis. For example in one case, Massie found a pattern of interaction in which positive approach by the infant produced turning away by her mother, followed by turning away of the infant and then turning toward the infant by the mother. At three years, when this infant was brought into a therapeutic setting, she no longer engaged in eye-to-eye contact with anyone and clearly behaved in an autistic-like fashion. This child showed normal developmental milestones during the first year and Massie attributed her aberrant outcome to this pattern of interaction.

In another study from our laboratory, Ricks (Ricks, 1981; Tronick, Ricks, & Cohn, 1982) has shown that the quality of the infant's interactive experience relates to the patterns of infant coping. Mothers were asked to distort the normal interaction by maintaining a still-face (Tronick, Als, Adamson, Wise, & Brazelton, 1978). Infants who elicited their mothers during the still-face were the infants of mothers who more sensitively interacted with them during normal interactions. By contrast, infants of mothers who were either over- or undercontrolling had infants who failed to elicit. Under- and overcontrol do not allow the infant to have control over the interaction. Additionally there was the finding that infants who elicited at 6 months were more likely to be securely attached at one year than infants who had failed to elicit. Thus at six months and at one year infants of more sensitive mothers came into a stressful situation with a sense of their own effectance, expecting that what they do will make a difference. Infants at six months and one year whose mothers have been nonreciprocal in their interactions came into new stressful situations with feelings of helplessness.

To follow up on these findings we are currently carrying out a study of the social interactions of depressed mothers and their young infants (Cohn, Connell, & Lyons-Ruth, 1984). Comprehensive developmental data are being collected on a group of 31 high-risk infants and their families. Project families are low SES (family income less than the poverty level) which have been referred by health providers or social workers because of disturbed maternal functioning. In particular, median maternal

CES-Depression Scale Scores are within the clinical range, mean scale score was 26 (SD = 7). The data presented are preliminary data on face-to-face interactions between eight 6-month-old Caucasian infant-mother pairs from the larger sample.

Mothers were asked to play with their infants for two minutes. A mirror placed at an angle to the mother permitted a single camera to record frontal views of both mother and infant. The filming of these interactions occurred in the families' homes, was preceded by 45 minutes of naturalistic observation and videotaping, and was conducted by two project staff, at least one of whom was well known to the families. Having at least one well-known observer to the mother was an attempt to reduce the stressfulness of the observation. The interactions were subsequently coded with a set of behavioral descriptors on a ¼ second time base.

Modal maternal behavior was neutral to negative (see Figure 2). Five of eight mothers were in Play less than 10% of the time. Only one mother was predominantly neutral to positive in affect expression. Mothers tended to sit back and away from their infants and either passively observe or else talk to them with relatively flat expression. One mother's paralinguistic expression, however, was frequently hostile and threatening.

Infant behavior was withdrawn and poorly regulated. Over 80% of infant time was spent in either Avert (62%) or Object Focus (20%). Attend accounted for only 13% of infant time and Play only 5%. On the few occasions when infants did direct gaze toward their mothers or become positive, these displays were attenuated. The mean durations of Attend and Play were each less than 2 seconds. Mean durations of Object Focus and Avert, conversely, were 4 and 7 seconds and both distributions were highly skewed. There was no significant variability across infants in any of these dependent measures.

A lag analysis of infant state transitions detected no sensitivity on the infant's part to his own prior behavior and at best only slight sensitivity to that of the mother. Infant state transitions were modeled adequately by a zero-order model. Inspection of dyadic state transitions yielded equivocal evidence of infant sensitivity to mother's previous state. On the few occasions when infants did become positive in affect expression it was contiguous with maternal Play.

These interactions, therefore, were characterized by little joint visual regard and few bouts of positive engagement. Mothers tended to behave in a relatively detached manner, and even when they did attempt to engage their infants they were generally unsuccessful. Infant behavior was withdrawn, and those infant state transitions which did occur could not be reliably anticipated from the infant's prior behavior. At 6 months of age, these infants are responding in a manner which mirrors their

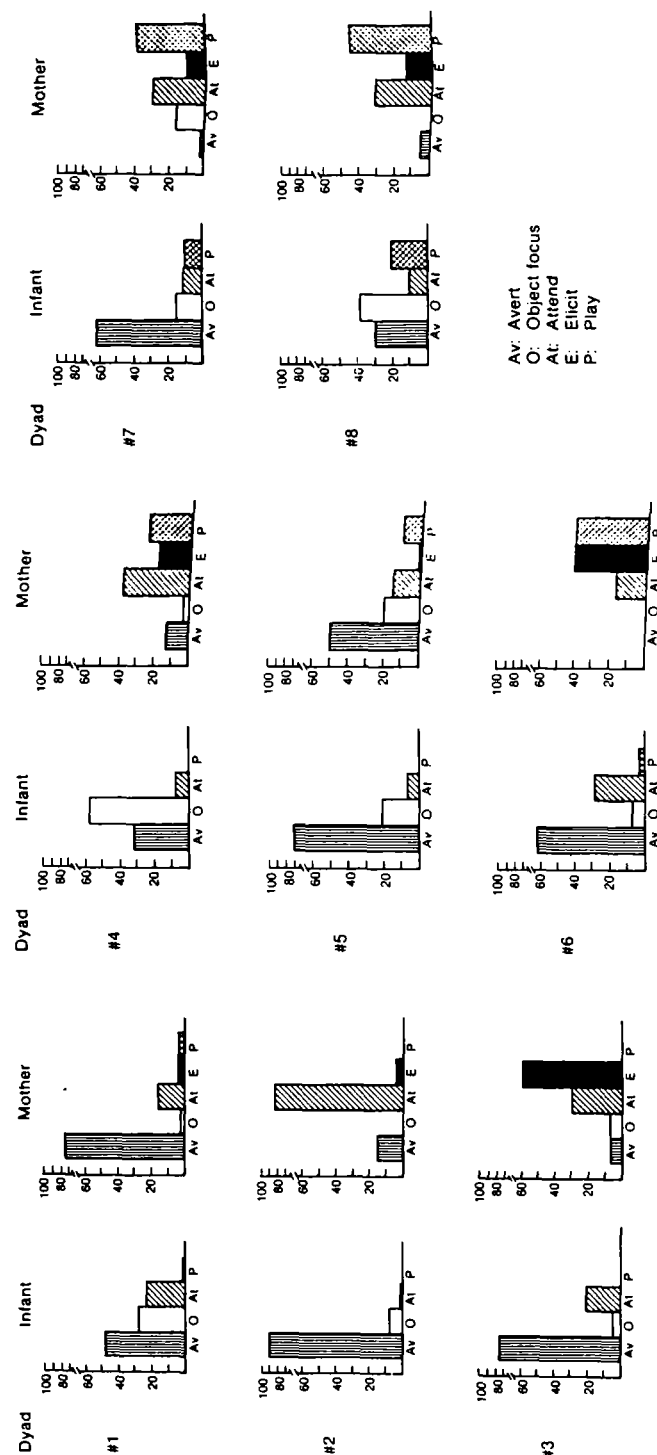


Figure 2. Percent of interaction time in each monadic phase for each infant and mother.

mothers lack of engagement and restricted range of affect expression. These data are strikingly unlike those which have been found in low-risk mother-infant pairs and suggest that the clinical antecedents of later distortions in infant development may be found in the fabric of social interactions as early as 6 months of age.

These studies support the MRM's hypothesis that the quality of the interaction between the mother and infant affects the infant's immediate emotional state and the infant's later interactions. Also the quality of the interaction affects the extent to which the infant feels either effective or helpless. One could argue that the mother's emotions are transferred to the infant. But that is too passive a view of the infant. The infant is not a mere recipient of maternal affect. The infant actively attempts to shape the interaction by processing the maternal emotional input and acting in terms of it and his own goal. When the infant is successful, when the mother's behavior conforms to his goal, the infant feels effective. During a distorted interaction when the infant's actions fail to modify her behavior the infant begins to look distressed and helpless, and while that helplessness resembles the mother's state, it is not a mirroring of that state. It arises out of an active process that has failed. The infant's goal was one of reciprocity. He appreciates the mother's affective displays and attempts to change them. When he fails he experiences distress and failure. This same process is hypothesized to account for depression in adults as well (Seligman, 1975).

These studies further emphasize that during the first year of life infants evidence patterns of emotional reactivity that reflect their cumulated social and emotional history (Spitz, 1965). Historical factors, however, are more likely to influence the mother's behavior. To investigate this we examined mothers' evaluations of their past relationships and in particular their self-esteem as it related to their infants' behavior. In an earlier study (Tronick et al., 1982) it was demonstrated that mothers who evaluated their past relationships as more positive and/or had higher self-esteem were much more likely to have infants who at one year were securely attached. To investigate this prospectively, mothers' self-esteem was evaluated during the newborn period and its relationship to the quality of their interaction with their infants and their infants' behavior at one month were evaluated. The expectation was that mothers who had higher self-esteem would interact more sensitively with their infants and that their infants would be better organized behaviorally.

Thirty mother-infant pairs were randomly selected from the normal nursery of the Baystate Medical Center in Springfield, Massachusetts. The only criteria for inclusion in the study was that mother and infant had to be discharged home from the hospital together. This made for a generally healthy sample of infants and mothers. The infants ranged from 38 to

44 weeks gestational age and included infants with no health complications as well as infants with such health complications as transient tachypnea, feeding problems, minor anomalies such as a dislocated hip, and medical interventions such as phototherapy for elevated bilirubin levels.

Mothers were administered the Maternal Self-Report Inventory (Shea, 1982; Shea & Tronick, 1982). This questionnaire is based on in-depth accounts of the feelings and attitudes of mothers toward pregnancy and motherhood that have been provided by Leifer (1977); Shereshefsky & Yarrow (1973); Greenberg & Hurley (1971); Blau, Slaff, Easton, Welowitz, Spingain, and Cohen, (1963); Schaefer and Bell (1958); Cohler, Wiess, and Grunebaum (1970); Bibring (1959); Benedek (1949); and Seashore, Leifer, Barnett, and Leiderman (1973). Their descriptions of maternal feelings and attitudes were derived from years of observations, clinical interviews with mothers, and data from questionnaires designed to identify and assess the critical factors comprising maternal adjustment toward motherhood. From these reports, seven dimensions of maternal attitudes and feelings which comprise maternal self-esteem were identified. These dimensions have been found to be related to successful adaptation to motherhood, and to infant development. These seven dimensions are: (1) maternal caretaking ability; (2) general ability as a mother; (3) acceptance of the baby; (4) expected relationship with the baby; (5) complications during labor and delivery; (6) parental influence, and (7) body image and maternal health. About 15 questions for each dimension, a total of 100 self-report items, were written to measure how a mother rates her own feelings on each. These questions were compiled in a self-report questionnaire on maternal self-esteem entitled the Maternal Self-Report Inventory (MSRI).

All items were written in the first person. Mothers were requested to indicate on a 5-point scale how accurately each statement described how she felt. Items from the seven dimensions were randomly intermixed throughout the scale and an equal number of positive and negative items were written for each dimension and randomly interspersed throughout the questionnaire in order to avoid response sets. This questionnaire was completed by the mothers two days after delivery. Reliability and validity analyses of the scale demonstrated that the MSRI is a highly reliable and valid measure of maternal self-esteem (Shea, 1982; Shea & Tronick, 1982).

All infants were examined using the Brazelton Neonatal Behavioral Assessment Scale (Brazelton, 1973). The Brazelton Examination assesses the newborn's neurological intactness on 20 reflexes and the newborn's interactive behavior on 26 items. The interactive behaviors assessed include the infant's need for and use of stimulation, alertness, consolability, irritability, cuddliness, motor maturity, and ability to organize states.

These interactive behaviors are summarized by four a priori scoring dimensions labeled interactive processes, motoric processes, state control, and physiological response to stress (Als, Tronick, Adamson, & Brazelton, 1976). Each dimension is scored such that high scores reflect poor performance and low scores reflect optimal performance. In the present study, the scores from the four dimensions were totaled to produce a summary score.

The quality of maternal and infant interaction at one month was assessed using a teaching task, designed by Spietz and Eyres (1977). In this assessment the mother is asked to teach her infant two tasks, an easy and a hard task. The easy task for the 1-month-old infants was adapted from the Bayley Scales of Infant Development and involved teaching the infant to turn to look at a small shielded flashlight, and to follow the light as it is moved through several excursions from left to right. The hard task, also adapted from the Bayley Scales of Infant Development, involved teaching the infant to follow a red ring for at least 30 degrees to each side. Mothers were not given any instructions as to how to engage their infant in the tasks and if they asked, they were told to do what they felt would work best for their baby. The two tasks were presented in succession but the length of time spent on each task was determined by the mother and recorded by the investigator. The following standard instructions were given to each mother by the investigator: "I have two tasks I would like you to help your baby to learn. You may position your baby in any way that you like and take as much time as you wish. Just let me know when you are finished with the first task and then I will take a few notes and give you the second task." Following the second task, mothers were reassured that the second task was a difficult one and asked to do it with their infants.

At the end of each task, maternal and infant behaviors were rated using the manual and scoring sheet designed by Spietz and Eyres (1977). Two observers were present on more than 80% of the visits in order to check on inter-rater reliability. Inter-rater reliability across both teaching tasks ranged from .65 to .90, with a mean of .81.

Scores on these tasks consisted of a total maternal score, referred to as the Maternal Interactive Score, with higher scores reflecting more positive and optimal maternal behaviors, and an Infant Interactive Score, with lower scores reflecting more attentive and responsive infant behaviors. In addition, specific dimensions of the Maternal Interactive Score were analyzed including Maternal Sensitivity and Techniques. Maternal Sensitivity scores reflect the degree to which the mother appears tuned into her infant's communication and task performance, and the frequency with which she responds to the infant's various cues, whether potent or subtle, during the task (Spietz & Eyres, 1977). The techniques score reflects the success of various techniques such as infant positioning,

task handling, and timing used by the mother to teach her infant the task. For both of these variables, a high score reflects more positive and optimal maternal behaviors.

Observations of the teaching task demonstrated that mothers who had higher self-esteem during the newborn period had a higher quality of interaction at 1 month with their infants (see Table 1). Maternal Interactive Scores for the easy and hard tasks were significantly related to MSRI at 1 month with correlations of .34 ($p < .05$) and .24 ($p > .10$), respectively. Maternal Sensitivity Score on the easy task was significantly related to MSRI score ($r = .40, p < .001$) but not on the hard task ($r = .20, n.s.$). Maternal Techniques score was significantly related to MSRI on the easy task ($r = .34, p < .05$) and on the hard task ($r = .36, p < .05$). There was no significant relationship between Infant Interactive Scores and MSRI, although the correlations were in the appropriate direction. There was no relationship to infant behavior as measured by the Brazelton and the MSRI though the relationship was in the predicted direction.

Figure 3 summarizes these studies and the MRM. It shows how a multiplicity of factors find their expression in the quality of the social exchanges that infants engage in. The entry-point into the figure is the interaction—the *actual* behavioral exchange between a mother and her infant.

Mother and infant engage in social exchanges. When these engagements go smoothly with well-fitted together positive and negative cycles of behavior, positive emotions are generated. This produces an incre-

Table 1. Correlation of Maternal and Infant Behavior at 1 month to Maternal Self-Report Inventory (MSRI) during Newborn Period

	Correlation to MSRI
Maternal Interactive Score	
Easy Task	.34**
Hard Task	.24*
Maternal Sensitivity Score	
Easy Task	.40***
Hard Task	.20
Maternal Techniques Score	
Easy Task	.34**
Hard Task	.36**
Infant Interactive Score	
Easy Task	-.19
Hard Task	-.17
Brazelton Total Score	-.18

* $p < .10$

** $p < .05$

*** $p < .001$

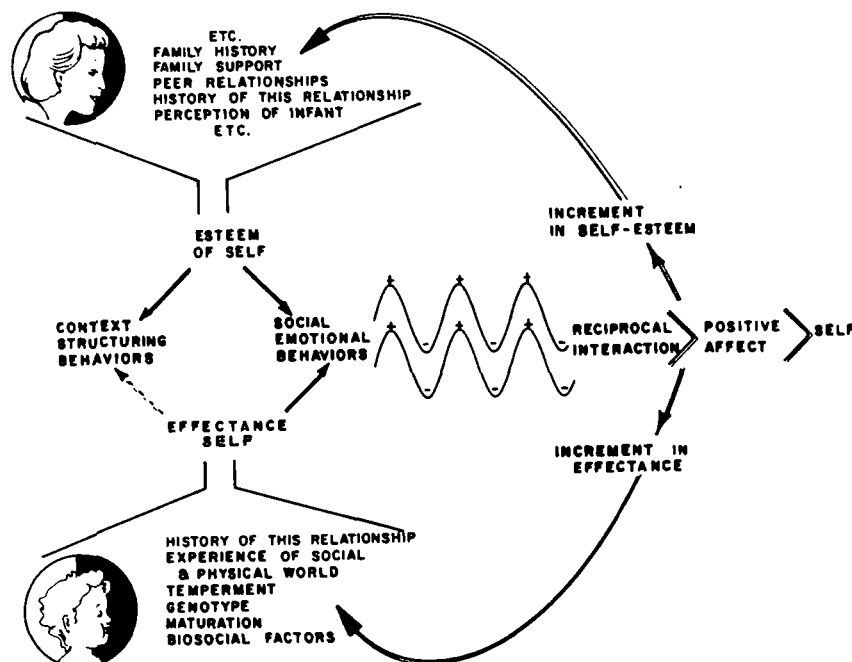


Figure 3. A diagram of the Mutual Regulation Model representing the relationship of infant effectance and maternal self-esteem to the quality of the interaction and other factors.

ment in self-esteem for the mother and in effectance for the infant. In the study where mothers acted depressed the reciprocal interaction was disrupted and negative affect was experienced by the infant.

To further substantiate that argument we showed that mothers who were more sensitive to their infants during normal interactions had infants who at 6 months and at 1 year made strong and persistent efforts to overcome an interactive stress. On the other hand, infants whose mothers were either over- or undercontrolling during normal interactions had infants who failed to effectively cope with the stress. Such over- or undercontrolling patterns prevent the infant from having an effect on the interaction and produces a sense of ineffectance.

Other factors—not explored here—such as temperament, biosocial factors, experience in the inanimate world and such modify the infant's sense of effectance and emerging self. Such factors affect the mother as well but some which are especially relevant at her developmental level have to do with her familial history and sense of self-esteem. Each of these, as was found, affect her behavior with her infant.

Emotions then are transferred during the interaction through the form and quality of the social interaction of the mother and child. It is not a passive process for either but an active social engagement on both their parts.

It is our view that from the emotions generated during social exchanges an emotional mood and interactive patterns become internalized in the child. They become part of the infant's affective core or prerepresentational self (Emde, 1983). Any specific interchange makes a trivial contribution to that stabilization. Spitz (1965) has emphasized it is the cumulation and reiteration of the positive and negative emotions generated in the daily social exchanges that is significant. But this should not be taken to mean that the interaction must always go smoothly. Far too often, we romanticize the mother-infant relationship and expect it to always be reciprocal. Rather from the model of effectance one can see that some amount of dissynchrony varying with the child's developmental level can have positive effects. It provides the child with the opportunity to renegotiate the interaction. When that renegotiation is successful the child will experience an increase in his sense of effectance. This formulation of the MRM is much more specific than the idea that some frustration or stress is necessary for development (Spitz, 1965). Of course if the dissynchrony is too great, occurs too often, or is intractable to the infant's efforts, then a sense of helplessness is generated in the child.

The affective core biases the infant's evaluation of a new situation and his interactive patterns even before the information arising from the situation has been processed. The infant whose affective core is one of depression or possibly anxiety is biased to evaluate a new situation fearfully and to disengage from it even before confronting it. For the infant who regularly interacts with a depressed mother there will be a particular poignancy to the affective core that is internalized. The infant with a depressed mother will find that positive emotional displays are repeatedly greeted by negative displays, sadness, and anger by the mother. Even if the infant repeatedly attempts to elicit a positive maternal response they will be met by failure and the infant will become sad himself. What is poignant here is that the infant comes to internalize an interactive pattern as part of the affective core in which his positive displays become related to sad feelings. Thus when the infant feels positive within himself those positive feelings lead to sad feelings and withdrawal. When interacting with others his withdrawal leads to their withdrawal. Thus he becomes trapped by his own depression both from inside and from outside. This affective core acts as the infant's initial adaptive system. It structures the "meaning" of a situation for the infant and so regulates his interactive behavior.

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Chapter Three

Assessment of Parent-Infant Relationships

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Relevance of Interaction Studies for Clinicians

It is interesting that several of the principal investigators who study interaction have a clinical background, often along psychoanalytic lines (Sander, 1979; Stern, 1983; Emde, 1980). Much of their research efforts is aimed at objectifying behaviors that contribute to the development of relationships. We are now at a point where we know a great deal about the observable features that characterize interactions: gaze exchange, voice characteristics, rhythms of interactions, affective signals, and several other parameters which have been recorded and described. At a higher level of conceptualization, definitions of rules of communication and of role exchange have been proposed.

When these data are observed together in an assessment of the total interaction, one can arrive at formulations that capture more general characteristics of interaction. Such issues have been described with terms such as the following: contingency (Greenspan & Lieberman, 1980), attunement (Stern, 1983), emotional availability (Emde, 1980), reciprocity or mutuality (Brazelton, Tronick, Adamson, Als, & Wise, 1975).

These concepts, while they remain closely attached to observable data, are already one step removed from purely objective data. They imply a judgment from the observer and a reference to complex interpersonal issues.

The point I wish to clarify here is that when we use such terms, we are already in a field that has clinical implications, namely that refers to issues that distinguish normal from pathological. If we can describe contingent behaviors, it implies that we can detect noncontingent behaviors as well. If we see attunement, it allows us to perceive its failures. If we see how reciprocity develops, that means that we can describe its derailment.

This point is worth stressing, because most workers in infant social interaction studies have focused on *normal* development; they have tried to document how adaptation is expressed—from birth on—by the modalities of interactions. Historically, this was indeed necessary, since most of our knowledge on early relationships had been derived in the past from psychoanalytic data revealed from reconstructive accounts during regressive states of patients. While psychoanalytic reconstructions revealed conflicts, anxieties, and the predominance of distorted thought processes, interaction studies sought to reveal the adaptive processes that foster the establishment of relationships and to do this concurrently *at the time* of their development.

Two parallel questions arise then: Can implications for normal development be based on data stemming from treatments of pathological cases? Can we use data from normal interaction to define pathology and to establish clinical therapeutic programs?

I will argue that such cross-fertilizations are possible, but first, certain issues of methodology must be addressed.

Observing and Listening

Infants do not talk: This represents the major impediment to a traditional clinical assessment which might follow a model from dynamic psychiatry. In an effort to assess a mother–infant interaction, one must therefore necessarily turn to observational methods that focus on the physical properties of social exchange: the timing, the duration, the direction, and the modalities of interactions, as has been illustrated in many recent studies. It is not a surprise that what is thus revealed is what is *observable* and that the main channel of perception used by the research is the *visual* one, magnified and refined through extensive use of microanalysis of videotapes. This research, following the lines of natural science, attempts to describe objective characteristics of social exchange, without referring overtly to meanings. As far as intentions are concerned, the researcher only identifies these in general terms—as those that make maintenance of interaction their goal.

Clinical practice that follows dynamic, psychoanalytic principles, while it uses observable data (as Mahler, Pine, & Bergman, 1975, have shown, for example), will inevitably refer to underlying motivations. These are often latent (because they are unconscious), not directly visible, and need to be inferred on the bases of overt signs (affective signals for example), on verbal reports (anxiety, depression) and, most of all, on mental representations of relationships, fantasies, and wishes.

In order to obtain “data,” a therapist tends to use methods that will unveil psychic contents, and to do so, he or she sets up a climate that favors processes of *listening* to verbal reports.

At this point, we thus need to stress methodological differences between research in interaction and clinical practice: *In summary*, interactive research focuses on physical properties of social exchange in an attempt to describe them objectively, relying mostly on the visual modality. What is observed is a normal, adaptive interaction.

The clinician, on the other hand, is called to intervene in cases of deviance, crisis, or pathology. While he or she does observe, the tendency is to favor the expressivity of *subjective* experience. Beyond the overt interaction, the clinician seeks to unearth the fantasies, anxieties, and conflicts that form the unconscious basis of relationships.

One needs to acknowledge these differences, in order to see if these two fields of inquiry can provide points of encounter, exchange, and cross-fertilization.

While we may have to admit that information from one of these two fields has no relevance for the other, it is tempting to imagine ways in which data from interaction studies and from clinical work could profitably complement each other.

An Example of Complementarity

Stern (1977) described interactions between a mother and her twin boys at age 3 months. The main point of this remarkable microanalytic study is the description, in objective measures, of major differences in interactions between the mother and each of her twins.

Stern had the clinical impression that the mother was more controlling and hyperstimulating with one of her boys, Fred. He then proceeded to describe the modalities in which this intrusiveness was mediated. The initiation, maintenance, and termination of gaze exchange followed markedly different rules with each boy. For example:

1. Mark holds the “en face” position five times longer than Fred.
2. When Mark and mother are facing each other, either of them is likely to terminate the mutual position and look away. Fred, on the other hand, terminates the “en face” position with mother nine times more often than *she* does.
3. Simple face aversion by Mark acts on the mother as a signal to avoid further contact and to leave him alone. The same signal by Fred brings the opposite with Fred; gaze exchange is not a tool for communication;

it appears rather that it is used for mutual control, in a way that makes interaction nongratifying.

There is a failure of interaction, with a predominance of control over the partner rather than a free-flowing visual exchange. Thus, a detailed study (he analyzed frames that correspond to 1/24 second) of the time distribution of gestures and glances indicated the physical correlates of the clinical impression of maternal intrusiveness (related to irritation and fussiness in Fred). This provided a picture of the "mechanics" of an intrusive interaction; it showed the "how" of this particular form of exchange. This in itself is highly instructive. Behavioral data can thus be used to diagnose a problem of maternal intrusiveness.

But the clinician needs to go beyond the "how"; the clinician seeks to get hold of an explanation of the "why," in order to reach a causal force that may be modified through therapeutic means.

It was this curiosity that motivated Stern to use also another method than the purely observational descriptive one. He interviewed the mother and encouraged her to verbalize her mental representation of each child, and then a revelation of the "why" of the mother's different interaction with each child emerged. She reported that Mark, with whom she had an easy relationship, reminded her of herself, while Fred reminded her of her husband, especially of certain characteristics of him that she did not particularly like.

We may presume then that it was this representation of her husband-in-Fred that interfered like a screen in her interaction with him, creating forces that caused the mechanics of gaze exchange to derail.

While the observational part of Stern's study described the modalities in such a derailment, listening to her verbal report provided the "why" of this disturbance, allowing, secondarily, for the possible remedy of this problem.

This is a good illustration of complementarity between two methods, one based on observing behaviors, the other on listening to verbal reports of subjective experience. It also proves that such a combination provides a much broader base of understanding a phenomenon than using one approach only.

Clinical Assessments of Mother-Child Relations

Let us see now how this complementarity can be used in clinical situations.

In practice, the child specialist is often consulted because a problem, or a symptom, has been found in the child. In very young infants, the most common problems affect functions such as eating or sleeping.

The mother, or sometimes both parents, bring in the child expecting the specialist to focus his attention on the baby. But, in fact, what happens from the first contact onward is that any clinician will pay attention to what goes on *between* the child and the familial environment, by picking clues that stem from both methods I outlined before. The clinician will observe what goes on between parents and child, looking for gestures, glances, distance or proximity, body contact, and so on. The clinician will try to size up the characteristics of contingency, mutuality, and attunement, and will use overt signs of interaction to assess its functioning.

But at the same time, the clinician will be very attentive to *what parents say*, how they see the child, how they react to the child's symptom, what in the child's behavior produces anguish or pleasure, and so on. In other words, the clinician will also capture the subjective content of parenting and the mental representation these parents have built of their child.

The essential point here is that the clinician has to set up the consultation in such a way that makes possible this bifocal vision of the interaction and the relationship, in order to be able to see what goes on in the "overt" interaction and to be receptive to what goes on "underneath" at the level of "imaginary interactions."

To do so, there are some basic guidelines to follow. The opportunity has to be offered for free interaction between parents and child, and for a free flow of verbal reports about the child. To achieve this, parents and infant have to be seen together, in a setting conducive to play and talk.

An example will illustrate these guidelines: A mother brings her 22-month-old girl because she is not eating; the mother is frightened about the possible effects of this anorexia. While the mother talks about this problem, the child starts playing with a doll next to the mother's feet and starts feeding it. As soon as this play starts, the mother—while she keeps talking to me—takes a bottle out of her bag, shoves it into her child's mouth, thus interrupting her play.

This maternal behavior was uncalled for toward the child; it was initiated in the mother's own motivational realm and, therefore, is considered not contingent to the child's needs or signals. This noncontingent behavior could be also described as intrusive.

As it turned out, this little piece of behavior was important to observe as it helped to make understandable the child's symptom. If we had only listened to the mother's reports about the child, or if we had examined the child alone, this highly relevant interaction would have not been seen. Observation here serves a crucial role in eliciting highly meaningful interaction, providing the clinician with a hypothesis about the child's anorexia.

As the joint session continued, the child again started feeding the doll, and the mother again mechanically pulled a full bottle out of her bag

ready to shove it in her child's mouth. I intervened then, asking the mother to refrain from completing her "feeding compulsion." The mother then put the bottle back in the bag but then replaced her feeding gesture by a highly revealing activity: She reached again in her bag, pulled a candy out of it, and put it . . . in her *own* mouth.

It was this reversal that became the starting point of the second aspect of my clinical investigation. I pointed out to the mother that as she could not feed the child, she fed herself, which suggested that when she felt compelled to feed her nondemanding child, she was really catering to her own hungry needs. She force-fed her child in a noncontingent way, because in reality, it was she who needed then to be fed. She thus used the child to represent a hungry baby (i.e., herself) that she experienced as constantly starving. At that point, we were moving from the observation of a noncontingent feeding interaction to the level of her own psychic representation of herself which she confused with her child. Indeed, she started to talk then about herself, about her deep feelings of frustration in relation to her own mother in her childhood and how she had reported these feelings in the present relationship with her daughter, fearing now that *she* would experience distressing fears of starvation if she did not force-feed her. We came then to understand that this particular set of frustrations and of nostalgia for a close, feeding relation with her mother produced the force-feeding of her child, resulting in anorexia and food refusal in the child.

In this short vignette, I have tried to demonstrate the usefulness of the dual use of observation of interaction and of unravelling the mother's subjective experience, in a way that allows for assessment of faulty interaction coupled with an understanding of its causes.

This example illustrates what I think is a basic principle in understanding affective disorders in infancy: In this field, *we need to rely on a dual or bifocal approach*; first, we need to pay equal attention to observational data (revealing the modalities of overt interaction) and to verbal reports (revealing the characteristics of "imaginary interaction"); second, we need to pay equal attention to what is produced by the parents and by the child, leading to an assessment of interactions, both overt and imaginary.

Parental Contributions to Imaginary Interactions

We must now modify what was just posed as a basic principle. In practice, it is impossible to pay equal attention to the parents and the infant. There is a fundamental discrepancy between them: Parents are able to report verbally their subjective experience; they convey very meaningful links between their representation of their child and their own personal

history. The infant can do no such thing: The symbolic tools at his or her disposal are so weak and immature that we have to rely on gross behavioral signs observable in behavior (affective signals, gaze aversion, motor behavior, and so on) to infer what the subjective state may be. We are even more at a loss if we attempt to imagine what the child's mental representations may be; here we may rely on two sources. First, some work on early communication indicates that infants have a representation of basic rules of social exchange. Bruner and Sherwood (1983) suggested that infants develop a sense of rules about making rules; this would suggest a very early capacity for some form of mental representation and even of symbolic activity.

Second, psychoanalysts, most of the Kleinian school, have postulated the existence since very early on of basic fantasies representing the parents, their sexual activities and their body parts (Klein, 1952). Many of these ideas may remain at the level of hypothesis since we have no access to reports by infants of such mental activities.

In the field of infant psychiatry, the clinician is much better equipped for grasping the parental side of imaginary interaction than that of the infant. We know a great deal about parents' fantasies and anxieties concerning their children; we can only imagine what the infants' representations of relationships are.

In view of this, our formulations concerning imaginary interactions rely much more on the parent's fantasies and thoughts than on what we can postulate of the infant's contributions. In clinical work, what we rely mostly on, in our effort to assess parent-infant relationships, is the mental representations parents have made of their child. To reach this layer, we simply need to listen to the formulations parents propose of their child's characteristics and problems. We let them uncover a series of threads that lead from the present child to past relationships of the parents.

In this process, we also discover that the child is the recipient of unconscious forces that the parents cannot keep within the realm of their own psyche and project (or transfer) onto the child.

It is inevitable that when parents talk about their child, this will lead them to talk about their own parents, their past, their griefs, anxieties, and pleasures. If we know how to favor the unearthing of these private thoughts and memories, we will start to perceive that parents create an imaginary (or fantasized) interaction with their child.

What the parents relate to is precisely this imaginary construct of their child, who is embedded in a network of past relationships, frustrated hopes, and expected gratifications of all sorts.

Their "overt interaction"—the one that can be directly observed—will necessarily be influenced by these imaginary underpinnings, and my

main thesis is that we will gain a much deeper knowledge about the development of relationships if we take into account simultaneously the data from these two forms of interaction.

Meaning Attribution and the Issue of Context

Many researchers in the field of interaction have acknowledged the powerful role of the parents' inner, mental representations. Some have used the term "meaning attribution" to describe how the parent adds meaning to the infant's behavior (which may be perfectly normal "per se"). What the parent does automatically is to *interpret* the child's behavior according to the parent's own store of values, intentions, repulsions, and so on. By doing so, the parent will either reinforce or discourage certain behaviors, thus affecting the modalities of interaction. This is an essential ingredient of normal development. Bruner and Sherwood (1983) have described how the meaning that mothers add to the infant's utterances is an adultomorphizing process, indispensable for the acquisition of language. Some authors even suggest that the infant learns "how to intend" through the same process (Dunn, 1982).

In clinical work, we see how parental interpretations of the infant's behavior may correspond to distortions due to projective mechanisms in the parent. Robson reports the case of a mother who, when her 3-week-old son attempts to capture her gaze, declares "He looks daggers" (Robson, 1967). Obviously, she is the one who reads hostility in her baby's gaze, and this is projected from inside her; needless to say, such fantasy will interfere with the establishment of eye-to-eye contact.

The contribution of the parents' values and cultural background to the style that interactions will take has also been recognized under the term of "context." As Hinde (1976) suggested: "What a person thinks about a relationship may be more important than the interactions that actually occur." Transcultural studies have shown that the reinforcement of such infant behavior as vocalizing, smiling, and motor development may be highly dependent on the cultural meaning of such behaviors (Brazelton, 1977).

Clinical Variations of the Parents' Representation of the Child

There are many different types of fantasies about children, each revealing the parents' past history and present psychic functioning. In what follows, I will outline some themes that are frequently found in practice.

1. *The child represents an important person in the parent's past.* In the context of an interview, the parent will be talking about the child and then

suddenly find the resemblance to his or her mother, father, brother, or sister. This former relationship will be replayed in the present with the child as a new partner.

It is likely that the child will be parentified (coming to represent the mother's mother or father, for example) or may become the target of feelings (aggressive and/or loving) originally directed toward another person. This displacement process was well described by Selma Fraiberg (1980), who talked about "ghosts in the nursery," thus referring to the return of buried relationships. This ghost is between the parent and the baby, and the parent is addressing the ghost while interacting with the baby.

For example, a mother had been unable to get herself to visit her premature newborn in the neonatology unit. She was sure he was the object of medical experiments and that she would only see him again dead. We could understand this irrational conviction only when she reported that when she was a child she had taken care of her baby brother with great passion until he became sick, and was taken away by a doctor who performed emergency medical procedures to no avail—she only saw him again when he was dead.

With the present baby, she was sure that the same scenario was being replayed, all the more because her baby, like her little brother in the past, suffered from pulmonary pathology.

What was unique about this case was that she was really relating to the remaining image of her baby brother and transposed each detail of this past relationship into the present one. Contingency is then not possible with the real baby as a ghost is interposed, dictating the form of the relationship.

In all normal relationships between parents and children, such old scenarios are always at work; children always become the new link of a long chain of attachments. In fact, in many "primitive" societies the child is seen as a link to the ancestors, as in a reincarnation. In certain cases, this becomes the source of problems, because the parent may reproduce—in too realistic a way—the conflicts and ambivalence related to the former attachment. The new child is then embedded in a network of resentments, jealousies, death wishes, and feelings of all sort that belong somewhere else. These former relationships may act then as a screen that interferes with attunement to the real child, with contingency to the child's real needs, and with emotional availability to the child's real feelings. It is then that we see derailments of dialogue and interaction. The parent will be worried about the child's behavior because it reminds the parent of similar behavior of a past relationship; or the parent may resent such a characteristic because, in fact, it originally belonged to a hated person from the past. Such a theme is extremely common. It often expresses itself in resentment mothers have about their child who, they feel, is too

demanding or spoiled. In fact, this resentment is an old one, addressed, say, to a younger brother who provoked the original jealousy in the mother, now displaced onto her child. When the child expresses signs of hunger, it sets off the mother's resentment and this interferes with the feeding situation and can even lead to feeding problems.

2. *Reincarnation.* In some cases, the child actually is supposed to take the place of a dead relative (most often of the parent's own parent). The new child is given the name of the deceased and, at the level of "imaginary interaction," the child is expected to fill the void left by the departed loved one, offering the parent a replica of the dead parent. Such "scenarios" may lead to important derailments of interaction as the baby will, necessarily, fail in reproducing another person.

3. *The child represents a repressed part of the parent's own self.* In this imaginary interaction, the parent reacts to behaviors of the infant that are really parts of the parent's own unconscious forces projected on the infant. The baby thus becomes essentially the support of the parent's inner conflicts.

For example, a mother complained that her 9-month-old baby masturbated too much and she worried that he might be sick. In fact, it appeared that she remembered painfully her own bouts of masturbation as a child during periods of intense excitement. She was very worried about this and now feared that any sign of excitement in her baby would reveal a form of masturbation, potentially harmful to him. Minor signs of excitement are used as proof, supporting the mother's projection of her own sexuality.

These projections are frequent. But they become a source of noncontingency when the parent distorts the messages of the infant as they come to represent, in the infant's mind, the evidence of "bad" behavior while, in fact, they only serve as a support for the parental projection of "bad" aspects of *themselves*. A baby who eats well thus becomes dangerously voracious; an active baby is seen as hyperactive and destructive; a calm infant becomes a source of anxiety; being seen as depressed; in parents who had had some form of mental disease, even minor signs or symptoms may thus become magnified, being seen as signs of madness.

Imaginary Interaction and Real Interaction

What I have just described are some variants of fantasies, memories of old relationships, and inner thoughts and feelings that all become the matrix on which the relationship to the infant is based.

A baby is never born in a psychological vacuum. A baby's first birth is in the parents' heads, in their past histories, and in their psychological makeup.

My central thesis is that in order to assess and understand the development of relationships, we need to take into account two aspects of interactions: the objective behavioral interaction as well as the unconscious psychological forces that have prompted parents to wish to have a child. We discover that *at birth already* each particular child is shaped by the parents' expectations, conflicts, and old relationships. This is how the parents' innermost psychic forces are transmitted to each child. The parents then interact with their child through the mediation of an imaginary field of forces, where one finds "ghosts," old loyalties, and former sources of pleasure and anxiety. This imaginary interaction is, from the very beginning, in dynamic interplay with the "real interaction," the one that reveals the details of what can be observed.

Just as the presence of a "ghost" will orient the real interaction along a very particular field of forces, the modalities of observable interaction that seem preprogrammed in mothers and infants will influence the imaginary interaction. A good example of this is the remarkable effect that the baby's behavior has on eliciting the mother's, until-then latent, maternal feelings. These social "elicitors" allow in most cases to overcome the mother's feelings of ambivalence toward the baby.

It is the mutual interplay of these two fields of forces that needs to be studied in any evaluation of the parent-infant developing relationship.

While clinicians are skilled at tapping the inner psychic forces of parents, they need to complement this approach by the systematic study of observable interaction, using such parameters as contingency, attunement, and emotional availability as has been described in recent research studies of interaction.

Conversely, studies of interaction may benefit from taking into account the parental psychological forces that will orient the style of the interaction. The study of this interplay is a most challenging and instructive aspect of infant studies. It holds promise for an understanding of both normal and pathological infant-parent relationships.

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lesson3

"Kids don't come with instructions"--Mothers Network [IDENTIFY MOTHERS NETWORK - ALSO, I KIND OF PREFER "BABIES" OR "INFANTS" BECAUSE THIS IS ABOUT THE FIRST WEEKS OF LIFE, BUT DO YOU WANT TO KEEP "KIDS" BECAUSE THAT'S WHAT THEY SAY?]

My brother, ^{Hugh,} told me a story about how, at the first session of spring training, a well-known professional ~~[OK? OR COLLEGE?]~~ coach stands before his players, holds up a football and says, "Gentlemen, this is a football."

I like that story, because it reminds us that in too many areas in our lives we assume that people know too much. But while ignorance on the football field can be ^{embarrassing} devastating, ignorance about childrearing is tragic. Yet somehow we assume that knowing how to care for children is supposed to come as naturally as having them.

Nothing I learned in college or law school or anywhere else prepared me for the joy, the mystery, or the uncertainties of motherhood. And it's true that there are aspects of being a parent that no amount of instruction *can* prepare you for. I remember Chelsea crying her heart out one night soon after Bill and I had brought her home from the hospital. Nothing either of us could think of would alleviate her wailing. Finally, as I held her in my arms, I looked down into her little bunched-up face and said, "Chelsea, this is

new for both of us. I've never been a mother before and you've never been a baby. We're just going to have to help each other do the best we can."

But much about parenting can be taught, and there is a serious lack of attention given in our country to what ought to be our highest priority: educating parents and empowering them to get the information and assistance they need.

Margaret Mead, in her classic book *Coming of Age in Samoa*, noted that a Samoan mother was required to give birth in her own mother's village, even if she had moved to her husband's village upon marriage. The father's mother or sister had to attend the birth as well, to care for the newborn while the midwife and the mother's relatives cared for her. In addition to tending to the new mother and infant, the relatives were experienced parents in their own right and could help ease the transition into parenthood by showing how it is done.

In our own culture, [ADD DESCRIPTION OF HOW IT USED TO BE -- EXTENDED FAMILY WAS AROUND TO LEARN FROM AND HELP CARE IN THE FIRST WEEKS AND MONTHS -- PLUS IN LARGE FAMILIES PEOPLE GREW UP WITH MORE CHILDCARE EXPERIENCE AS SIBLINGS.]

Good written information on newborn care is helpful, and more parents should seek it out. [GIVE SOME SOURCES, HERE OR AT END OF CHAPTER?] But even people who have access to such information may lack the wherewithal to apply it, especially if they also lack the kind of hands-on ^emedical attention I got. There need to be other ways of delivering parenting education to a wider audience. Public service announcements on radio and television -- during prime time, not at two A.M. -- are an obvious avenue; so are television series and videos. [ANY INSTANCES OF WHERE THESE KINDS OF EFFORTS HAVE BEEN ATTEMPTED?]

PC/JK x
Diana
Elisbeth
Brown

Every new parent should be encouraged to attend childcare classes sponsored by hospitals, medical associations, nursing organizations, businesses and volunteer groups [SUCH AS?]. Businesses are in a perfect position to make such instruction available, but few have made it a serious comitment. [OK?] When a local bank in Little Rock offered a series of lunchtime parenting classes to its employees, the classes were oversubscribed, but no other business followed the example and the bank did not continue its offering. [WHY?] It's generally hit or miss as to who gets what instruction is available. Even Lamaze and other privately sponsored birthing classes rarely go beyond the basics of early infant care. [INSTANCES OF WHERE QUALITY

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INSTRUCTION IS BEING PROVIDED AND IDEAS ON HOW WE CAN EXPAND IT?)

Instruction shouldn't be optional, it should be required. It would be nice if doctors would write a prescription for parents to receive it as they would prescribe a needed medicine; it's that important. But lacking a system like that of the French, who provide allowances for children in exchange for mothers meeting a set schedule of prenatal and infant care, such a system would be difficult to enforce. But at a minimum, starting right now, we could require mothers receiving any form of public assistance to attend parenting classes, as a condition of continued assistance. [ANY INSTANCES OF WHERE THIS KIND OF VILLAGE-BASED PARENT TRAINING, OPTIONAL OR MANDATORY, HAS BEEN TRIED AND SUSTAINED SUCCESSFULLY, HERE OR ELSEWHERE?]

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Elsmth
Brown

Nothing, however, replaces hands-on instruction, and the cost of providing it doesn't have to be exorbitant. On a recent ~~QX49~~ visit to the Philippines, I visited a hospital in one of the poorest sections of Manila. For the past five years, the hospital has kept newborns with their mothers, not in a separate nursery. In the maternity ward, I saw dozens of new mothers lying in beds facing their babies. Across from each of them was another mother and her baby, so there was always another mother available to help

watch every baby. The doctors and nurses were patiently helping mothers learn to breastfeed. To my astonishment, I saw some one- and two-day-old infants sipping from cups. I learned that the hospital had started training mothers who couldn't breastfeed to use cups, when they realized how much harder it is for poor mothers living in unsanitary conditions to sterilize and clean bottles and nipples than to keep a baby's drinking cup clean.

The doctor running the hospital explained that closing the nursery saved enough money that he could hire more nurses to work directly with the mothers to teach them about good nutrition, proper handling and disciplining of children, and other parenting skills. In the years since the hospital made these changes, reports of child abuse in the area have dropped and more mothers are choosing to use family planning to space their children so they can give each sufficient attention and care.

Even without introducing radical change into our current health care system, there is much that can be done to insure that new parents go home equipped to cope with the demands of parenthood. Mothers should be encouraged to breastfeed and patiently shown how to do so. If, for whatever reason, she is unable, however, she should be sent home with instructions on adequate bottle feeding, not a load of guilt. No mother should leave the hospital without being given the opportunity to ask every other

question she has about proper baby care. She should receive a wallet-sized card listing the immunizations a baby needs, where to get them and how much they'll cost. If she doesn't already have a good pediatrician, she should be given the name and number of one whom she can easily *reach*.

Finally, new mothers should be given the number of a hotline, either at the hospital or a doctor's practice, where she can get answers twenty-four hours a day. Any community without at least one hotline to answer parents' medical questions should start one. Many hours of anxiety and millions of dollars of cost in emergency rooms could be avoided if mothers had someone to call to talk through a baby's problem instead of showing up at the only place they know they can find help -- the emergency room. I visited a Medicaid clinic in the South Bronx in New York City in 1994 that had given every mother such a card. Nurses answered the phone, discussed problems and advised mothers whether they were serious enough to require either emergency care or an appointment at the clinic ~~OK~~. In just a few months of operation, the hotline had cut dramatically the number of visits to the local hospital's emergency room.

Families with either private insurance or public coverage like Medicaid should insist on the help and information they need, but so should uninsured families.

Childbirth is one of the few medical needs that has to be met somewhere, by law, and it is consequently one of the few times uninsured families use the system.

No hospital should permit a baby to leave until somebody has evaluated the parent-child relationship to decide whether additional advice and help will be needed. This is especially important for teenage mothers. Hawaii has such a program, called Healthy Start. Its goal is to help new parents by intervening early with personal support for families identified as being at risk for abuse or other difficulties. The program's workers visit new parents at the hospital after the baby is born, screening more than half of the 20,000 babies born in the state each year and providing services to more than 3000 families. They talk to the parents only with their consent to look for warning signals from their current situation and past history. "We look for parents who were abused or neglected as children," explains Gail Breakey, one of Healthy Start's founders and the director of the Hawaii Family Stress Center. "We know from research there is an intergenerational pattern." Healthy Start has been successful in reducing child abuse in Hawaii to less than 1% among the group helped, far lower than the national average of 4.7%. [WHAT HAPPENS IF FAMILIES APPEAR TO BE AT RISK BUT DON'T WANT TO BE SCREENED?]

PC/JSK

Pam

X

But none of this instruction or screening can take place if mothers are pushed out of the hospital at the earliest conceivable instant, in accordance with current hospital and insurance practices. Sending babies home before problems like jaundice can even be seen, let alone treated, is dangerous to the baby's health. But mothers are equally in need of time to recover from the strain of childbirth and to adjust to a new sleeping schedule and other dramatic changes that arrive along with the baby. In the aftermath of childbirth her hormones may be upside down and working overtime [EXPLAIN MORE PRECISELY WHAT HAPPENS TO HER BIOLOGICALLY AND WHAT ARE THE "SYMPTOMS"].

X
PC/JK
Lisa Simpson

In the face of pressure to control health costs, patients have to become more knowledgeable and demanding about their care. [WHAT DOES CURRENT PRACTICE PROVIDE AS A PROTOCOL FOR DISCHARGE - CAN PATIENTS SUCCESSFULLY APPEAL OR MAKE THE CASE THAT THEY NEED MORE TIME?] But discharge shouldn't be left to the sole discretion of the patient either. In the dizzying aftermath of childbirth, some mothers may decide that they're ready to leave prematurely; others would choose to stay for weeks if they were permitted. What's needed is a clinical protocol for discharge decisions, developed by physicians and nurses, not insurers. If federal or state legislation is required to put the decision back in

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PC/JK
Lisa S.

the hands of the professionals, if should be ^{passed.} ~~drafted~~. [ANY EXAMPLES OF WHERE X
THESE PROTOCOLS EXIST, HERE OR ELSEWHERE?] PC(jk
LISA S.

There is another reason for giving mothers adequate time with newborns, both in the hospital and at home, in the weeks that follow. Mothers -- and fathers -- need to bond with their infants. [EXPLAIN WHAT BONDING IS, AND A TASTE OF THE PC(jk
RESEARCH THAT BACKS UP THE THEORY] Ann Lowwater

In his book *Touchpoints*, Dr. T. Berry Brazelton talks about how new mothers are treated in other cultures. He describes the practices of the people of the Japanese Islands of the Goto Archipelago. The new mother stays in bed for a month after delivery, wrapped in a quilt with her baby and all her female relatives in attendance. Her only job is to feed her newborn. She is considered a child during this time and is addressed in a sort of baby talk.

I could do without the baby talk, and a month might be a little long to be wrapped in a quilt, but the crucial rite of passage this ritual not only allows but celebrates is the mother's recovery from childbirth and initial bonding with her newborn.

Innovations such as the mother-infant ward I observed in Manila promote bonding as well as allowing hands-on instruction. American hospitals have instituted other changes in recent decades, like allowing fathers to room in [OK?] and encouraging them to be present at the birth [WHAT ELSE, ESPECIALLY WHAT IS SPECIFICALLY GEARED TOWARD MOTHERS?], in recognition that encouraging parents, particularly mothers, to bond with their babies is among their most important responsibilities. [WHAT ELSE DO WE NEED TO BE DOING IN THE HOSPITAL TO PROMOTE BONDING?]

PC/JK
Ann L.

PC/JK
Ann L.

Bonding doesn't stop with discharge from the hospital, of course. [WHAT NEEDS TO TAKE PLACE IN THE FIRST FEW WEEKS AT HOME?]

PC/JK
Ann L.

Men need to bond with infants too, and to be made part of the process of integrating the newborn into the rhythm of the household. I remember how tentative my father was about even holding my baby brothers at first. Women need to relinquish some of the initial fussing and hovering and allow their husbands to grow comfortable with the newborn. If they seem timid or reluctant, women can help the process by going out for an hour or two and leaving the men to learn for themselves how to decipher a "wet" cry from a "hungry" one, to change a diaper without fear, to develop their own unique relationship with their child. [ADD THAT THIS MEANS THINGS WON'T ,

ALWAYS BE DONE MOTHER'S WAY?] Like anyone else in a new and unfamiliar situation, a new father needs positive reinforcement.

But the obligations of the village to the new family don't stop with hospital discharge any more than bonding does. In most European countries the public health system sends nurses to visit new mothers and babies at home. This may seem like a luxury until you've been a new parent. An American friend of mine living in England when her baby was born turned away the visiting nurse when she called during the pregnancy because she was sure that all the books she was reading would explain everything she needed to know. If that wasn't sufficient, she expected to rely on her mother, who planned to arrive as soon as the baby did. But her mother turned out to be too sick to travel when the baby came, and my friend found herself alone at home with her new baby. When the nurse came knocking on the door a second time, my friend pulled the startled woman inside and began babbling questions at her.

Some American insurers and hospitals have begun to send out visiting nurses.

pc13k
✓ *
Jen
[WHAT EXACTLY DO THEY DO? SPECIFIC EXAMPLES] Women ^{who} don't need or want the help are free to decline it, but many -- especially single and teenage mothers -- welcome it. We shouldn't leave it entirely up to parents' initiative, either. We need to

identify mothers in the hospital whose history, condition, or attitude suggests potential problems and follow up with home visits.

Insurers are finding that the opportunities for sensible intervention that such services afford outweigh the costs of physical and mental problems that might otherwise develop. Home visits are the centerpiece of Healthy Start's success, helping families to cope with poverty, homelessness, substance abuse and unemployment. Healthy Start projects now operate in communities in more than 20 states, but it ought to be operating nationally because it turns around lives and saves money.

But for many American families, home care of any sort -- by themselves or by the "village"-- in the weeks following childbirth is a necessity they can't afford. Economic pressures outweigh less visible needs like bonding, forcing them back to work too soon. [WHAT IS THE MATERNITY AND PATERNITY LEAVE SITUATION LIKE FOR MOST PEOPLE?]

PC/JK
Kaven

It is impossible to complete the bonding process when mothers rush back to work at two, four, or six weeks, and the damage goes beyond the sheer loss of time for mothers and infants to be together. In order to deal with the inevitable guilt and anxiety that come with leaving a baby in someone else's care too soon, women build walls around their emotions. How else can they steel themselves to go off and type memos all

day, or work in a factory all night? Inevitably mothers forced into such circumstances will send out signals of tenuousness to their children. And no matter how small children are, they are alert to such signals and will feel less secure.

Contrary to the claims of government bashers, the village can do much to encourage parents and businesses to invest the first weeks of children's lives in establishing their well-being. The Family and Medical Leave Act -- the first bill my husband signed into law, on February 5, 1993 -- enables working people to take unpaid leave from their jobs (of up to twelve weeks) in order to care for a new child, a sick family member, or their own serious health condition, with any health benefits maintained during the covered leave period. For workers at companies with more than fifty employees, FMLA guarantees leave without the risk of being fired. [ARE OTHER NOT COVERED BY IT, OR NOT OFFERED JOB SECURITY?]

pc/jsk
Karen

The French have an exemplary maternity leave policy. According to a 1994 report issued by the French American-Foundation, "wage-earning mothers are entitled to sixteen weeks maternity leave (six weeks before and ten weeks following delivery) with payment of 84 percent of their base daily salary (subject to a ceiling), extended to twenty six weeks for the third child and subsequent children. Employers are encouraged to (and do) reduce the work and stress load for women who have risky

pregnancies, with full job security in any case. Employers are forbidden by law to refuse work to women because of pregnancy."

Other European countries similarly provide generous leave. [WHAT ARE THE RESULTS? HOW ARE THESE MEASURES FINANCED?]

PC/JK
Karen

Again, men ought to be equal beneficiaries of such policies, and equal participants. But even in Sweden, where leave is available to both mothers and fathers, few fathers take them. [WHY? WHAT DO THEY SAY? WHAT ABOUT HERE-- HOW PREVALENT IS PATERNITY LEAVE AND WHAT ARE THE RESULTS WHERE IT HAS BEEN TRIED?]

PC/JK
Karen

The situation is unlikely to change until gender roles become more flexible. More than legislative change is required; no matter what the law says, men perceive that they are penalized at work [AND ELSEWHERE?] for putting children first. A few fathers, like Bill Galston, the President's former domestic policy advisor who left to return to academics [EXPLAIN FURTHER -- RETURNING TO ACADEMICS MEANT MORE TIME FOR KIDS? A NEW FATHER WHO CHOSE TO STAY HOME OR TAKE LEAVE FOR AWHILE WOULD BE A BETTER EXAMPLE] are setting an example, but I doubt many fathers either can afford in these economically anxious times

PC/JK
Karen
Sabrina

to follow suit or, even if they could, feel comfortable doing so. How can we persuade men that time spent with children is an investment in their own futures?

[LET'S DISCUSS HOW TO CONCLUDE CHAPTER AND LEAD INTO BELL CURVE - SOMETHING ABOUT HOW THE INVESTMENT WE MAKE IN THE FIRST FEW WEEKS OF LIFE PAVE THE WAY CRUCIALLY FOR THE ALSO CRUCIAL DEVELOPMENT OF THE NEXT FEW YEARS?]

Jen/Liz-

This chapter is 46 pages -
4 other pages to follow from
other chapters. BF

LESSON 4

8/27/95 bf p.m.

Health Caring

Have you spent some time lately in the emergency room of a large urban hospital? Or have you ever watched the hit television series that dramatizes what goes on in one? If so, you've seen dozens of children from infants to teenagers without any visible injury that suggests a medical emergency; instead, they are there with fever, earaches, stomach upsets, aches and pains that may turn out to be life-threatening, but are more likely the kind of ailment better treated at a doctor's office or public health clinic. But, doctors cost money and, even with insurance, many policies do not cover routine preventive services for children; and public health clinics are not typically open twenty-four hours a day, seven days a week for the convenience of working parents. With rising costs of medical care and more attention to profitability by many hospitals, the emergency room doors are also closing to families that cannot pay.

During the year and a half I spent traveling the country talking about the

need to assure that quality health care is available and affordable for all Americans, I heard and verified countless stories of children turned away from emergency rooms solely because their parents had neither insurance or enough cash to get past the receptionist. The clearest case I know of the different treatment children receive based on money - not medicine - concerns one family with three cousins, who lived together in a multi-family home with their parents and grandmother.

In September of 1993, two year old Shantelle became ill with a high fever in the 103-104 degree range. Her parents took her to the emergency room of their local hospital where she was diagnosed with spiral meningitis and admitted. Her father, a roofer, had insurance.

Two days after Shantelle went to the hospital, her three year old cousin, Nora, also developed a high fever. Her mother who cleans apartments for a living, had no insurance. She took Nora to the Children's Hospital in their city but was turned away. She then went to the same hospital where Shantelle was being treated. Nora was seen by someone in the emergency room and sent home with instructions to take aspirin. Nora later died after going into spasms. The day after Nora was buried, her cousin Shantelle was discharged from the hospital, recovered.

Shortly after Nora's funeral, her seven year old brother, Trace, also began

running a high fever and his mother took him to the hospital. The hospital, knowing what had happened to Nora, told his mother they would provide Trace free medical care and admitted him.

This is not a unique story. I could tell you hundreds about the disparate health care children receive, not because of their symptoms, but because of their parents' income. Is this the kind of health care system our children deserve? Hospitals don't turn away older Americans over 65, because their care is guaranteed by Medicare. Why can't we guarantee care for children?

[BECKY: HRC SAYS WE EITHER NEED TRANSITION OR MOVE THIS ELSEWHERE IN CHAPTER] The American Academy of Pediatrics recommends that each newborn be examined and, if a baby is discharged from the hospital within forty-eight hours of delivery, that the baby be seen again between 2 and four days to check for problems like jaundice. Babies should be examined and receive appropriate immunizations at 1, 2, 3, 4, 6, 9, and 12 months during that first year. Between 1 and 4 years, children should be taken for a preventive check up at 15, 18, and 24 months and at 3 and 4 years. In middle childhood, checkups should occur at 5, 6, 8 and 10 years old. And during adolescence, when health care is neglected by the kids, who can't be bothered and even ignore their own

symptoms as long as possible, and parents who don't want the hassle of telling their teenagers one more thing they should do.

Yet, by nearly every measure, American adolescents have the worst physical- and mental health--profiles of any segment of our population. Ideally, according to the Academy, young people between the ages of 11 and 21 should have a yearly checkup. Now all of these recommendations by pediatricians seem like just good common sense, but there are two problems: anyone who has ever cared for a new baby knows how hard it is to think about anything beyond the immediacy of a wet diaper. And, few insurance policies still cover the costs of this schedule of preventive care. So what to do?

I don't want to replay here the health care reform efforts except to say that the main reason I worked on an alternative to what we have now is because I could not stand the fact that there were more than 10 million children in working families, without health insurance; the number is even greater today. The increasing number of uninsured working families, coupled with cutbacks in government insurance for poor children, will force even more people into overworked emergency rooms where clerical staffs will be forced to turn away even more little Noras. Even when a family could afford to pay a reasonable cost for private

insurance, a child may be denied coverage if she has a pre-existing condition which leaves the family both financially and emotionally at risk. I met a couple in Cleveland, Ohio, who had two daughters with cystic fibrosis and a healthy older son. The father was a self-employed professional who provided health insurance to his employees and their families. His wife also worked in the family business whenever she could. The parents told me they were able to afford private insurance for themselves and son and would have bought it for their daughters but could find no one who was willing to sell them a policy because of their daughters' pre-existing conditions. The last broker they'd spoken to had said something I can't get out of my mind: "What you don't understand is that we don't insure burning houses."

I can't begin to imagine how I would feel if my daughter had a chronic medical condition and someone wrote her off that way. What kind of message does that send to hardworking people who love their children and are willing to invest in them but cannot protect them? And if we are willing to write off this family, who's next? That's a very real question for all of us because as research in genetics continues to advance and scientists will discover the genes which predispose us to cancer or diabetes or any other disease. We will learn most of us have some kind

of "pre-existing condition" that, under current private insurance practices, makes us uninsurable.

That broker both spoke the truth and was prophetic about how we continue to deal -- or fail to deal -- with health care in this country, as well as so many other issues that build or tear down our children's lives.

The fact that we don't deal with health care as an issue, is illustrative of how we deal--or don't deal--with so many other issues that build or tear down our children's lives. I wish every American knew Ryan Moore.

Looking at Ryan Moore, age 7, son of Maria and Brian Moore, of South Sioux City, Nebraska, one would not know he has undergone so many health care hardships. Ryan was born with SED congenital syndrome, which produced multiple birth defects. **[BECKY: HRC SAYS WE NEED PERMISSION TO USE REAL NAMES]** The family had good health insurance until Ryan was 1 year old through Mr. Moore's job, but then the company went out of business. Mr. Moore searched for work but was unable to find a job because companies were wary of his son's health care coverage needs. "It's like they looked right through me and only saw my son. I have a lot to contribute," continued Mr. Moore, "and I couldn't even get work as a janitor." Ryan's extreme medical

needs have taken a toll on the whole family. The upside is, Ryan has become a local celebrity, working with the Children's Miracle Network and doing lot of fundraising to help support his high medical and travel costs and help others. He quotes Piglet from Winnie the Pooh, "It is hard to be brave when you are such a small animal."

The lack of adequate health care for all Americans forces us into an emergency situation on every level, and is the cause of so much unnecessary suffering and expense. People are forced to use emergency wards as clinics, we end up with illness and sickly infants because we don't invest in preventive care, toddlers don't get their immunizations on time; school age children don't get the school lunches they need to feed their growing minds and bodies; parents like the couple from the Boston area I talked to tell their kids they can't engage in sports because the family has no health insurance to pay for any injuries that might happen; the list is endless and frustrating for those, like myself, who care about children--all children-- mine, yours, and ours.

One young boy whose little brother, Mike, had suffered all his life from bad health which his parents could not get insured privately to handle and could not afford to care for without going on public assistance told me that he thought every

kid should get the health care he needs and he thought of a slogan named after his brother, M.I.K.E.: Medical Insurance for Kids Everywhere! **[JEN/LIZ: NEED NAME OF BROTHER FROM WHITE HOUSE EVENT AND DETAILS ABOUT MIKE'S CONDITION] [BECKY: HRC THINKS WE SHOULD GET PERMISSION TO USE NAME]**

To make the distinction between my child and your child or between Ryan or Mike and our children is to miss the point, which is that what affects my child, affects yours, that like it or not, we are all in this together. To think otherwise, to act otherwise, is to burn down not just a single house, but to set fire to the entire village.

There is much that we can do in our own homes and communities to improve the health of our children. But taking care of a child's health is a lot easier for some parents than others. Lack of access to medical care and lack of education about health needs can cause or exacerbate medical problems, but the real obstacle to children's health in our country is cost. The irony about that, of course, is that most children who become ill or injured are eventually treated somewhere, even if it's too little or too late at a greater cost than they--or we--would have paid if we'd made sure their symptoms had been treated earlier. But

until we are willing to take a long, hard look at our health care system and commit ourselves to making affordable health care available to every American, the village will continue to burn, house by house.

When it comes to the health of our children, you have to start from the beginning with the health of the mother before and during pregnancy. And on that count our country doesn't do as well as it could if it really made mothers and children a priority instead of a rhetorical debating point.

The United States ranks 24th among nations in the world in infant mortality. That means 23 countries do a better job than we do in assuring that their babies live until their first birthday. Nearly one quarter of all pregnant women in America, many of whom are teenagers, receive little or no prenatal care. We know that women who receive prenatal care, especially in the first trimester, are much more likely to deliver healthy, full-term normal-weight babies than women who do not. Because of the numbers of pregnant women who do not receive that care, we have higher rates of low birth weight infants, who weigh 2500 grams or less, and more preventable physical and mental birth defects including congenital anomalies, respiratory tract infection, and learning difficulties. In 1988, babies born weighing fewer than five and a half pounds represented about 7 percent of

all births, but over 60 percent of all infant deaths. Babies weighing less than five and a half pounds were over 20 times as likely to die before their first birthday as babies born weighing five and a half pounds or more. According to a national survey of women giving birth in 1988, women who received inadequate care prenatal care (starting care late and/or having too few visits) were over twice as likely to give birth to low birth weight babies. Women who reported not receiving complete prenatal advice on alcohol and drug use, smoking and proper nutrition were over one-third more likely to give birth to a low birth weight baby.

We spend billions of dollars on high tech medical care saving the tiniest of those babies now, and trying to treat the problems of others. In 1988 each child born at low birth weight (below five and a half pounds) cost \$15,000 more in the first year of life than a child born at normal birth weight. [source: Lewit et al, "The Direct Cost of Low Birth Weight," The Future of Children, 1995.] The good news is that we are able to save thousands of babies, who would have died in the recent past, and that we help thousands more to develop normally; the bad news is that many of the problems those babies suffer could have been avoided if their mothers had received--and followed good prenatal care.

For some pregnant women in America, prenatal care is neither accessible

nor affordable. They live in isolated rural areas or medically underserved urban ones; they are ineligible for public assistance because they are working but do not work for employers who offer insurance or make enough money to buy it on their own; they have insurance, but believe they cannot afford the deductible or copayments until they must pay the costs of labor and delivery. A couple I met in Las Vegas had decided to insure their children and breadwinning father, but not the homemaker mother. When the mother became pregnant again, they had to save up their money to pay the hospital bills and had decided to forego both prenatal care and related expenses, like anaesthesia during labor and delivery, to afford the hospital bills for their new baby.

For other pregnant women, even if they have public or private insurance, they may be teenagers trying to deny a pregnancy or hide it from their families; or they lack the support of a husband or other concerned adult who could assure that they received prenatal care, or, at the very least, stopped smoking, drinking or doing drugs during the pregnancy. Women whose lives are already disorganized, and whose babies are most at risk, often need assistance in seeking out the services their pregnancy requires but many avoid contact with authorities until the latest possible moment.

One of the starkest examples of the difficulties encountered in bringing some women to the care they and their babies need concerns the debate over whether to mandate AIDS testing for all pregnant women or try to persuade women who may be HIV positive to be tested voluntarily. This debate became even more complicated when scientists discovered that if the drug AZT were administered to a mother during pregnancy it reduced the risk of transmitting the infection from a 1 in 4 chance to a 1 in 12 chance.

When I first heard about AZT's effects, I believed we should require all expectant mothers to be tested for HIV so we could possibly save their babies. In the course of further study, however, I learned that the testing, which would turn up mostly negative results, would be very expensive. I then decided that pregnant women in certain high risk categories or from areas where AIDS is concentrated should be tested mandatorily. When I discussed this idea with several doctors and scientists who treat AIDS patients or study the spread of the disease, they told me that based on their experience and research, the very women one wanted to treat would evade mandatory testing by avoiding medical care as long as possible. They urged instead that voluntary programs of persuasion be established aimed at women living in areas and lifestyles where AIDS is most prevalent. Johns Hopkins

Jon

Jen/ LIZ - Sorry BF

University in Baltimore, Maryland, **[LIZ-NEED DETAILS FROM JOHNS HOPKINS]** ran a successful program that excelled 90% compliance in persuading women to seek prenatal care in the first place, then agreeing to AIDS testing and having babies treated if they turned out to be HIV positive. (Jen)

Using prenatal care to confront the danger of AIDS is at the extreme end of a continuum of care which poses greater or lesser difficulty in guaranteeing good prenatal care by and for the mother. Ultimately, women have to take responsibility for themselves and their own health care, but many--particularly during pregnancy--need the support and encouragement of their village. Peer pressure for good prenatal care can play a big role. I've seen family and friends of a pregnant woman badger her into foregoing even the occasional drink or cigarette during pregnancy. But, relying on such informal means of providing care will never work as well as the formal systems in other countries that include all women in a national health care system and provide services, and even monetary incentives, for insuring good medical care to those who become pregnant. The 23 countries ahead of us will continue to have better outcomes for mothers and babies among all socioeconomic groups in their societies, and spend less money, getting those better results. **[JEN: WHICH ARE THE 23 COUNTRIES AHEAD OF US]**

**[JEN: HRC WANTS TO REPLACE THE FOLLOWING PARAGRAPH
ABOUT THE FRENCH WITH ANOTHER COUNTRY WITH SIMILAR
POLICY REGARDING CHILD ALLOWANCE]**

The French, for example, see in their children's well-being the future health of their country, and believe that, in order to raise future generations of healthy, productive citizens, it is crucial to start at the beginning of the life cycle. Among many different programs to ensure healthy babies and mothers, France's "young child allowance" of approximately \$145 a month is given to all expectant mothers residing in France, regardless of income, from the fourth month of gestation to a child's third month of life. In exchange for the allowance the pregnant woman must file a request before the end of the 14th week of pregnancy; undergo six physical exams during pregnancy; follow her doctor's prescriptions for medications and tests, like sonograms. After the birth, the child must undergo three well-baby exams in its first week, during the 9th or 10th month, and during the 24th or 25th month. The mother is given a booklet with forms that the doctor completes after each exam; then, the mother returns the completed form to the proper government agency. If she fails to fulfill the requirements or to send in the form, she may lose her allowance.

Since it is unlikely our country will in the near future adopt a prenatal

(Jen)
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system like [France] or have our own sensible, cost- effective health care system for all Americans, there is much that parents and the village have to do right now to give our children a positive start toward a lifetime of good health, starting before birth.

Some states, health care plans, community groups and businesses have already tried to create their own system of organized incentives to encourage women to obtain prenatal care. They have worked with local merchants to offer coupons for goods and services to pregnant women who showed proof that they were receiving their necessary medical checkups. For example, one state I know well, Arkansas, as part of its "Campaign for Healthier Babies," has a booklet--called the "Happy Birthday Baby Book"--that offers monthly coupons for goods to pregnant women who can show proof that they have received monthly pre-natal check-ups. The booklet includes one coupon per month for goods (such as milk, rice, diapers, etc.) at reduced or no cost. A number of local businesses, like Walmart, Harvest Foods and Pizza Inn, have donated coupons to the booklet.

The booklet includes coupons for all nine months of pregnancy, up through the first six months of a child's life, when a mother can redeem the coupons for well-baby exams. In order to be redeemed, each coupon must be signed by the

health care provider who performed the pre- or post-natal exam.

The Arkansas Department of Health is running television and radio ads with an 800-number that women can call to obtain a booklet. I helped establish the program in 1990 [?] and more than 50,000 booklets have been distributed. **[JEN: CHECK ALL FACTS]**

[NEED ALL FACTS ON ARKANSAS HEALTHY BABIES PROGRAM; LIZ--TALKED TO CONNIE FAILS BUT NEED TO CONFIRM WITH DEPT OF HEALTH]

Some insurance companies, particularly those offering managed care plans, are also recognizing the bottom line benefits in covering all prenatal care. They are paying for classes on healthy lifestyles; encouraging women to participate in baby care training by offering incentives, such as free car seats or diaper supplies, if a woman completes the training; and pairing pregnant women with nurse midwives or nurse practitioners to answer questions throughout the pregnancy.

Some are instituting 24-hour-a-day hotlines that a pregnant woman or new mother can call to ask questions. Others have nurses call pregnant women and mothers to talk about physical changes and to answer questions. Also, each pregnant woman is sent booklets with subjects like, "What to Expect When You're

Expecting," and each new mother is sent "What to Expect in the First Year."

A program called Resource Mothers in South Carolina, links pregnant teenagers with experienced mothers who live nearby who help the girls learn skills they will need and obtain necessary services. They also lend sympathetic ears that may not be available from the girl's own family. The visits before and after the baby is born address such basic topics as the effects of smoking and alcohol on a newborn and basic care of a baby like bathing, changing, and feeding the newborn as well as child safety and health issues; verbal and non-verbal interaction with an infant; and child development. These home visiting services have improved the health of the babies, reduced child abuse and saved money.

In San Antonio, Texas, a program called Avance, founded in 1973 to help new mothers, started with fifty mothers, and, by 1994, was serving 5,000 individuals largely in the Mexican American community, but also reaching out to African Americans in Houston and the Rio Grande Valley. Avance operates in public housing projects, elementary schools and through its own family service centers. Its staff, many of whom are former participants, conduct home visits as well as additional classes in child development, English and employment training. Avance also involves fathers and encourages them to become active with their

children and to seek job training and attend parenting classes. Evaluations of Avance have consistently shown that the program helps provide a more nurturing and stimulating environment for children and positively influenced a mother's childrearing attitudes and skills.

The importance of programs like Resource Mothers and Avance come home to you if you visit an intensive care nursery and see babies barely larger than your hand lying hooked up to ventilators, IVs and other lines. What a heartbreaking sight they are. Creating a health care system that removed cost as a barrier to prenatal care and then reaching out to those women whose babies were most at risk should be a national priority not only because it will save lives and money but it will as well give those babies--and their mothers--a greater stake as citizens in our country.

But, as any resource mother could tell you, a baby who is born healthy, does not come with a set of instructions about how to water and feed him and how many hours of direct sunlight he needs to bloom. Beginning parenting, no matter how much help you receive, inevitably includes trial and error.

I've already told you how lucky I was to have a fully supportive village clustered around when I gave birth to Chelsea. I remember, though, lying in my